The effects of Social Networking Site (SNS) use on college students’ friendship and well-being

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ABSTRACT

The present study was conducted with two goals in mind: (1) to examine the influence of using different types of SNS use on users’ well-being, and (2) to examine the mediating roles of online self-disclosure and friendship quality in the relationship between types of SNS use and well-being. Participants were from two large 4-year undergraduate universities in Southwestern China. The study was conducted during Spring semester, 2013, using advertisements that described the nature of the research and indicated that compensation for participation was ¥10 (about $1.5 U.S.). Of the 402 students approached, 337 completed the survey (i.e., response rate was 83.83%). Structural equation modeling showed that “social” type SNS use was positively related to users’ well-being, whereas “entertainment” type SNS use was not. In addition, online self-disclosure was a significant predictor of users’ friendship quality. However, there was an inverse relationship between “social” SNS use and online self-disclosure, and no relationship between friendship quality based on SNS use and well-being. It should be noted that generalizations of our findings should be made cautiously. The cross-section design and self-reported usage of SNS would also be limitations. Experimental and longitudinal studies should be conducted to provide stronger evidence of causal relations among variables examined in this study.

Keywords: Social Networking Sites (SNSs) Subjective well-being Online self-disclosure Friendship quality

1. Introduction

The exponential growth of the Internet has caused it to penetrate almost every corner of the world, and for many to impact almost every aspect of daily life. One of the most widely used Internet applications across the age span is the Social Networking Sites (SNSs). A SNS is a member-based online community where users often begin by posting basic information about themselves – referred to as “Profiles” – and then communicate with other members in a variety of ways and on a variety of topics (Mahajan, 2009; Pempek, Yermolayeva, & Calvert, 2009). In addition, SNSs provide users with entertainment opportunities such as watching videos, listening to music, playing online games, and browsing the daily news (Orchard, Fullwood, Galbraith, & Morris, 2014; Shin & Shin, 2011). Because so many youth belong to SNSs these sites have the potential to significantly impact the social and psychological development of youth who use them (e.g., friendship quality and well-being; Kross et al., 2013; Kuss & Griffiths, 2011; Liu & Yu, 2013; Reinecke & Trepte, 2014).

Two of the more popular SNSs in the U.S. are Facebook and Twitter. In China they are Renren and Qzone. Renren, once known as Xiaonei (inside University), is the SNS most popular among Chinese young adults. Similar to Facebook, Renren allows users to create a profile where they can post information about themselves, such as their college, company, occupation, phone number, email address, interests, and favorite music. Renren also provides functions such as public and private messaging among users, real-time instant messaging, online games, and video sharing, much like Facebook. Qzone was created by Tencent in 2005. It allows users to create blogs, keep diaries, send photos, listen to music, and watch videos. Users can set their Qzone background and select accessories based on their preferences so that every Qzone is customized to the individual member’s taste. However, most Qzone services are not free; only after buying the “Canary Diamond” can users access every service without paying extra.

Given the large number of SNS users and the potential impact of SNS use on social and psychological well-being, it is important to
understand the underlying mechanism whereby SNS use influences these outcomes. The few studies that have investigated the mechanism behind the relationship between SNS use and these social and psychological outcomes have produced inconsistent results (Jelenchick, Eickhoff, & Moreno, 2013; Kross et al., 2013; Liu & Yu, 2013) For example, Jelenchick et al. (2013) examined the relationship between SNS use and depression among older U.S. adolescents and found no relationship. However, a report by the American Academy of Pediatrics suggested that using Facebook may lead to depression (O’Keeffe & Clarke-Pearson, 2011). Findings of a more recent study suggested that the overuse of SNSs may lead to SNS addiction, although the meaning of “overuse” in this context is ambiguous (Andreassen, Torsheim, Brunborg, & Pallesen, 2012).

In contrast, other studies have reported a positive relationship between SNSs and psychological well-being (Kim & Lee, 2011; Valkenburg, Petter, & Schouten, 2006). This inconsistency may be attributable to the ambiguity of the term “overuse” and the direction of causality of these variables. Does “overuse” of SNSs lead to depression or does depression lead to the “overuse” of SNSs, perhaps to escape depression?

Another possibility suggested by a closer inspection of the literature is that the relationship between overuse of SNSs and depression may depend to the type of SNS used (Valkenburg & Peter, 2009). Research on Internet use is consistent with this possibility. Different types of Internet use influence the relationship between use and its social and psychological outcomes (Valkenburg & Peter, 2009). Solitary forms of Internet use (e.g., surfing) appear to have no positive effect on social connectedness and well-being, while communication with existing friends may have a positive effect on social connectedness and well-being (Valkenburg & Peter, 2007a, 2009).

The relationship between SNS use and its outcomes may also depend on the type of SNS use. As established in the literature, there are at least two broad types of SNSs in terms of the primary function it serves for the user: the “social communication” type (e.g., wall postings, and exchanging comments) and the “entertainment” type (e.g., solitary games, and listening to music). Thus, measuring SNS use as time spent at the site(s) is a limited measure because it is uninformative about the type of SNS use, which may explain some of the inconsistencies in the findings (O’Keeffe & Clarke-Pearson, 2011; Valkenburg et al., 2006). One exception is a study of the social impact of using Facebook (Kim & Lee, 2001). Kim and Lee (2011) found that the number of Facebook friends and providing a favorable representation of oneself to others was positively related to the user’s well-being.

Early in the study of SNS effects, Valkenburg and Peter (2009) proposed that Internet use in general has a positive effect on well-being when it is used for interaction with existing friends. In a 2010 meta-analysis, Huang (2010) reported that Internet use is a positive predictor of psychological well-being when it is used for social communication, but unrelated to psychological well-being when it is used for instrument functions. Overall, previous research indicates that it is essential to take into account the different functions of SNS use in making predictions about its effects on the social and psychological well-being of the user.

Another possibility is that SNSs may affect users’ social and psychological well-being through mediators such as self-disclosure and friendship quality rather than have a direct influence on well-being (Valkenburg & Peter, 2009; Wang, Jackson, & Zhang, 2011). Because there are few, if any, audio/visual cues in SNS “conversations,” users may be more comfortable making self-disclosures than they are in face-to-face interactions or online interactions using Skype or videos. These enhanced self-disclosures are vital for the formation of high quality friendship (Valkenburg & Peter, 2007b). Research has well established that increases in self-disclosure facilitate the formation of intimate personal relationships and improves their overall quality, although this will undoubtedly depend on the nature of the self-disclosure, its appropriateness in that context, the timing of the self-disclosure and how comfortable the partner is with the nature, depth and timing of the disclosure (Valkenburg & Peter, 2009). Therefore, in the present study, we included self-disclosure and friendship quality to examine relationships among SNS use for its social communication function, online self-disclosure, friendship quality, and well-being.

Overall, by investigating the effects of using the social functions of SNS use on users’ well-being, we extend previous research which has focused primarily on time spent on SNSs as the predictor. Moreover, the possible mediating roles of online self-disclosure and friendship quality on the association between SNS use and social and psychological well being will be examined. So far as we know, few studies have addressed this issue by considering different types of SNS use and examining the possible mediating and moderating mechanisms between SNS usage and social and psychological well-being.

2. Research framework

2.1. SNS use and social and psychological well-being

Two of the most important incentives for engaging in SNS use are: (1) social communication and (2) entertainment. With regard to the relationship between computer-mediated social communication and well-being, two conflicting hypotheses have appeared in the literature. The displacement hypothesis maintains that Internet use can reduce the quality of existing real-world relationships, particularly friendships, and thereby reduce the user’s well-being. Early studies tended to support this hypothesis. Computer-mediated communication reduced real-life friendship quality and consequently the user’s well-being because SNS relationships, which often begin with total strangers, tend to be superficial, shallow and short-lived. More importantly, they take time away from developing and nurturing real-world relationships (Kraut et al., 1998). However, more recent research provides some support for the augmentation hypothesis, which maintains that using media that promotes online friendships can also facilitate real-world friendship quality and consequently increase the users’ well-being (Morgan & Cotton, 2003; Shaw & Gant, 2002; Valkenburg & Peter, 2007a).

This positive link between online social communication and well-being might be explained by the possibility that users’ online communication changes over time from interaction with strangers to interaction with those who become friends (Valkenburg & Peter, 2007a, 2009). SNSs make it easy to maintain friendships. All that is required are short notes (arranging times when both are available for phone calls and if the friendship develops, arranging face-to-face meetings. Thus, the use of SNSs for social communication seems to have positive effects on well-being (Valkenburg & Peter, 2009). Conversely, the link between SNS use and well-being is weak or nonexistent when SNSs are used for other than social communication purposes, such as browsing or reading the news (Huang, 2010; Selfhout, Branje, Delsing, ter Bogt, & Meeus, 2009). Therefore, the following hypotheses were formulated:

H1. The use of SNSs for social communication will be positively related to users’ well-being.

H2. The use of SNSs for entertainment functions will be unrelated to users’ well-being.
2.2. SNS use and online self-disclosure

Self-disclosure has been defined as any message about the self that an individual communicates to another (Cozby, 1973). Youth are reported to prefer computer-mediated communication over face-to-face communication for the purpose of self-disclosure (Schouten, Valkenburg, & Peter, 2007). Online communication can increase the number and depth of self-disclosures a person is willing to make because there are fewer physical and nonverbal cues which might inhibit self-disclosure compared to face-to-face communications. Thus, SNS users are less likely to be concerned about self-presentation and more likely to open to self-disclosure than when they are engaged in face-to-face interactions (Walther, 1996).

Previous research provides substantial support for this view (Joinson, 2001; Pharo, Sim, Graham, Gross, & Hayne, 2011; Tidwell & Walther, 2002). In one experiment Tidwell and Walther (2002) confronted pairs of participants with an interaction task. In one condition, the pairs interacted face-to-face, whereas in the second condition they used e-mail to interact with each other. Results indicated that participants in the e-mail condition exhibited more self-disclosure, as operationalized by number of utterances. SNS similarly facilitate self-disclosure (Ledbetter et al., 2011; Nguyen, Bin, & Campbell, 2012). For example, a recent longitudinal study found that SNS use can predict a user's disposition for self-disclosure 6 months after the SNS disclosing interaction (Treppe & Reinecke, 2013). Therefore, we put forward our third hypothesis:

H3. SNS use will be positively related to online self-disclosure.

2.3. Online self-disclosure, friendship quality and well-being

Self-disclosure is believed to play a central role in the development and maintenance of friendships because it indicates trust in the interaction partner (Draper, Pittard, & Sterling, 2008). Individuals who engage in more self-disclosure are more likely to form friendships with others (Jourard, 1971). Additionally, self-disclosure can enhance relationship closeness and communication satisfaction (Berger & Calabrese, 1975; Morry, 2005). In a meta-analysis, Collins and Miller (1994) found that who people engaged in higher levels of self-disclosure were liked more by others than those who engaged in lower level of self-disclosure. In online settings, self-disclosure has been positively related to an individuals' friendship quality and well-being (Valkenburg & Peter, 2007a). For example, people who disclose more personal and intimate information reported greater intimacy and closeness to their online friends (McKenna & Bargh, 2000). Using a sample of female bloggers, Bane, Cornish, Erspamer, and Kampman (2010) reported that self-disclosure was positively associated with number of online friends and satisfaction with online friendships. Therefore, in the present study, we hypothesized that:

H4. Online self-disclosure will be positively related to users' friendship quality.

Literature on friendship quality and well-being indicates that the two are positively related. Specifically, individuals scoring high on measures of happiness tend to have stronger social relationships than those scoring low on these measures (Diener & Seligman, 2002; Michalos, Hubley, Zumbo, & Hemingway, 2001). The positive relationship between friendship quality and well-being may be attributable to the fact that social networks promote a sense of connection and belongingness (Morrow, Ross, Crockett, & Bennett, 2010), and that social relationships increase a sense of happiness by providing love, intimacy, support and guidance from others (Goswami, 2012). For young people, quality friendships can form a powerful barrier against potential stressors (Bukowski, 2001; Grigorescu, 2010; Valkenburg & Peter, 2007a). Based on these considerations, we formulated the following hypothesis:

H5. For SNS users, friendship quality will be positively related to well-being.

Also included in our research was a socio-demographic characteristic related to many of the other factors considered in this research, namely gender. Females are more likely to engage in self-disclosure in real life social interactions than are males whereas the reverse is true online (Schouten et al., 2007). The explanation for this gender difference is that males experience more inhibitions when self-disclosing in offline settings than do females. In online settings, however, where factors that might cause uneasiness in self-disclosure (e.g., audio/visual cues) are eliminated, males are more likely to self-disclose (e.g., discuss intimate topics), increasingly the likelihood and quality of their online friendships.

For both sexes social anxiety is another factor that might influence online self-disclosure. Youth high in social anxiety may be more comfortable disclosing their feelings and concerns in online settings, where they feel anonymous and safe from the potentially disparaging responses of others and are therefore less inhibited. Online settings allow and may even encourage them to disclose intimate information more frequently and effectively (Mckenna, Green, & Gleason, 2002). The absence of social status and audiovisual cues online and a physical present partner also facilitate online self-disclosure (Peter, Valkenburg, & Schouten, 2005). Therefore, in the present research, users' gender and social anxiety level were included.

3. Methods

3.1. Participants and procedures

Participants were from two large undergraduate universities in Southwestern China. Participants were recruited during Spring semester, 2013, by advertisements distributed in a variety of classrooms that briefly described the nature of the survey study and the monetary compensation for participating (~10-about $1.5 U.S. dollars). Of the 402 potential participants, 337 completed the survey (response rate = 83.83%). Most were female (76.3%). Surveys were completed in a large lecture hall during four sessions of 45 min each.

3.2. Measurements

3.2.1. Qzone usage

A pilot investigation of SNS usage was conducted using a sample of 109 Chinese college students. Participants were asked to indicate the SNS that they used most often and the features they used. Results showed that 98 (94%) students use Qzone, 18 (17%) indicated using Renren network, and 7 (6%) using both of them. Therefore, we chose Qzone as the SNS for the present study. Among the features on Qzone, 89 participants said they browsed friends' pages passively, 44 used status updates, 20 commented on content, 15 played online games, and 11 wrote blogs. Among these specific features, social communication use included status updates, commenting on content, and writing blogs, while entertainment use included browsing friends' pages and playing games. A measure of Qzone use was developed, based on items from Ross et al.'s measure (2009) combined with the results of our pilot study. Ross et al. (2009) developed items to measure the basic features of Facebook use, which share many similarities with the basic...
features of Qzone use. In the current study, participants were asked to indicate the frequency of using a specific feature of Qzone on a 5-point Likert scale, in which 1 = “almost never use it,” and 5 = “use it more than one time every day.”

3.2.2. Online self-disclosure

The Amount of Self-disclosure Scale used in a study by Gibbs (2006) was used in the present study. A sample item is “I often discuss my feelings about myself with those I meet online.” Respondents were asked to rate their level of agreement with each statement on a 5-point Likert scale, ranging from 1 = strongly disagree to 5 = strongly agree. Negatively worded items were reverse coded. The Amount of Self-disclosure Scale contained 5 items and had a Cronbach’s alpha of .69.

3.2.3. Social anxiety

Social anxiety is defined as Social Avoidance and Distress when faced with new social situations or strangers. It was measured by the Social Avoidance and Distress—New People subscale of the Social Anxiety Scale for Adolescents (La Greca & Lopez, 1998). This 4-items of this measure are rated on a 5-point Likert scale ranging from how much the item “is true for you”? item at not all, 5 = all the time). A sample item is “I get nervous when I meet new people.” Cronbach’s alpha for the scale was .76.

3.2.4. Friendship quality

A 4-item scale from Valkenburg and Peter’s (2007b) research was used to measure the quality of friendships. Sample items include “When my friends know that something is bothering me, they ask me about it” and “My friends help me to understand myself better.” This 4-item of this measure was rated on a 5-point Likert scale from 1 = strongly disagree to 5 = strongly agree. Cronbach’s alpha for the 4-item scale was .78.

3.2.5. Well-being

Shin and Johnson (1978) define well-being or life satisfaction as “a global assessment of a person’s quality of life according to his chosen criteria” (p. 478). Well-being was measured by The Satisfaction with Life Scale developed by Diener, Emmons, Larsen, and Griffin (1985). A sample item is “In most ways my life is close to my ideal.” Items were rated on a 5-point Likert scale ranging from 1 = strongly disagree to 5 = strongly agree. The 5-item scale had a Cronbach alpha of .78.

Among the scales mentioned above, the social anxiety and friendship quality scales were initially developed for adolescents. Therefore, we conducted a pilot study prior to developing our survey to examine the applicability of these scales for college students. Thirty college students were interviewed regarding the appropriateness of the items to their own experiences. Additionally, we used confirmatory factor analysis (CFA) to test their validities. For Social Avoidance and Distress—New People scale, the model fit statistics were $\chi^2/df = 1.73$, GFI = .98, AGFI = .96, NFI = .99, RFI = .94, IPI = .99, TLI = .96, CFI = .99, RMSEA = .06, and the factor loadings ranged from .44 to .80. For the friendship quality scale, the model fit statistics were $\chi^2/df = 1.53$, GFI = .99, AGFI = .97, NFI = .99, RFI = .96, IPI = .99, TLI = .98, CFI = .99, RMSEA = .04, and the factor loadings ranged from .46 to .78.

4. Results

Participants’ mean age was 19.56 (SD = 1.07). There was a representation at all college levels, with the greatest representation being freshman (38.3%) and the smallest being seniors (8.2%). With regard to gender, the majority is female (76.3%). Participants’ majors included literature (13.2%), mathematic (15.4%), business (13.7%), engineering (14.6%), education (18.3%), arts (5%) and other fields (19.8%).

Pearson’s correlations for all scaled variables are presented in Table 1. As predicted, social communication use was positively correlated with users’ well-being ($p < .001$). Users’ online self-disclosure was positively correlated with their friendship quality ($p < .001$). Contrary to our hypothesis, social communication use was negatively correlated with users’ online self-disclosure ($p > .001$), and friendship quality was uncorrelated with users’ well-being ($p > .05$).

<table>
<thead>
<tr>
<th>Variable</th>
<th>Sociuse</th>
<th>Enteruse</th>
<th>Selfdisc</th>
<th>Friendship</th>
<th>Socialanx</th>
<th>Wellbeing</th>
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<tr>
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<td>.41</td>
<td>-.39</td>
<td>-.09</td>
<td>-.01</td>
<td>.16</td>
</tr>
<tr>
<td>Entuse</td>
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<td>-.31</td>
<td>-.10</td>
<td>-.00</td>
<td>.10</td>
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<tr>
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<td>-.00</td>
<td>-.09</td>
<td>-.14</td>
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<td>-.13</td>
</tr>
</tbody>
</table>

Note: sociuse = social usage; enteruse = entertainment use; selfdisc = online self-disclosure; friendship = friendship quality; socialanx = social anxiety; wellbeing = well-being.

*Correlation is significant at the 0.01 level (2-tailed).
**Correlation is significant at the 0.05 level (2-tailed).
confidence level), whereas for females the relationship was negative but not significant (see Table 1).

We also created an interaction variable between social anxiety and social use of SNS to examine its effects on self-disclosure, friendship, and well-being. The interaction variable had no significant effect on any endogenous variable in the model, including self-disclosure. The estimates with standardized regression weights and p-values are shown below (see Table 2). We also tried the interaction for just male or just female cases, but there was still no effect (see Table 3).

5. Discussion

The goal of our study was to explore the mechanism whereby different types of SNS use (i.e. social communication and entertainment) influence college student participants’ friendship quality and well-being, after controlling for gender and social anxiety. Specifically, it was hypothesized that using SNS for social communication will be positively related to users’ well-being (Hypothesis 1). Using them for entertainment purposes will be unrelated to users’ well-being (Hypothesis 2). Using SNS for social communication will be positively related to online self-disclosure (Hypothesis 3). Online self-disclosure will be positively related to friendship quality (Hypothesis 4). Friendship quality will be positively related to well-being (Hypothesis 5).

Our results generally supported our hypotheses with a number of interesting exceptions. Participants who used SNSs more frequently for social communication reported higher levels of well-being than those who used them less frequently for this purpose, supporting Hypothesis 1 and consistent with previous research (Morgan & Cotton, 2003; Valkenburg & Peter, 2007a). Specifically, Morgan and Cotton (2003) found that increased online communication was associated with decreased symptoms of depression and Valkenburg and Peter (2007a) found that teenagers who spend more time instant messaging scored higher on friendship quality.
in online settings, self-disclosure was found to be positively related to friendship quality. This finding is consistent with previous research indicating that self-disclosure is important in the development and maintenance of friendships (Draper et al., 2008). In online settings, self-disclosure was found to be positively related to users’ friendship quality (Valkenburg & Peter, 2007a). This relationship may be attributable to the fact that disclosure of personal, private or intimate information can enhance trust and consequently facilitate the formation and maintenance of friendships.

Contrary to expectations indicated in Hypothesis 5, there was no significant relationship between friendship quality and participants’ well-being. This finding is also inconsistent with research by Valkenburg and Peter (2007a). In hindsight, the finding is not surprising when one considers that social relationships are a necessary, but not sufficient condition for high levels of well-being (Diener & Seligman, 2002). Other psychological variables such as extraversion, low neuroticism, and low levels of psychopathology are also necessary to well-being (Diener & Seligman, 2002). Issues that detract from well-being in real life may swamp any benefits that online friendship makes to it.

Although the positive effect of the social communication function of SNSs on participants’ well-being was not mediated by friendship quality in the present study, there are other possible mechanisms whereby this function may influence well-being. For example, SNSs provide users with a channel to express feelings that may be difficult to express in face-to-face contexts, which can help to increase positive affect and decrease negative affect. Another possibility is that communication on SNSs provides a source of comfort for the user that comes not only from friends but also from strangers. Similarly, it provides the user with an opportunity to provide comfort to others. Both receiving and giving comfort provide a sense of self-worth that may motivate continued use of SNSs, a question for future research to address.

Our results also indicated that social anxiety was negatively related to both friendship quality and well-being, and that using SNSs for their entertainment function was negatively related to online self-disclosure. The negative link between social anxiety and friendship quality in online settings has been reported in previous research (Tian, 2011), which found that bloggers scoring high on social anxiety tended to make fewer new friends, communicated with fewer existing friends via blogs, and had lower relationship quality with their existing friends, compared with those scoring lower on social anxiety. These findings may reflect the difficulties experienced by socially anxious individuals in real life as well. Socially anxious individuals have fewer friends and lower relationship quality offline due to their anxiety and poor social skills for social interactions offline and online. Interventions have been developed to assist the socially anxious, primarily by helping them to develop social skills. It would be interesting to develop an intervention for developing such skills on SNSs and determine whether they generalize to real world social interactions.

<table>
<thead>
<tr>
<th>Independent variable</th>
<th>Dependent Variable</th>
<th>Estimate</th>
<th>S.E.</th>
<th>C.R.</th>
<th>p</th>
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<tr>
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<td>5.81</td>
<td>***</td>
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<tr>
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<td>0.08</td>
<td>3.44</td>
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</table>

Notes:
* p < .10.
** p < .05.
*** p < .01.

than those who spent less time at this activity. Thus, the link between SNS use and well-being is confirmed in all three studies, which also support the “stimulation hypothesis,” which states that online communication stimulates users’ well-being (Alison Bryant, Sanders-Jackson, & Smallwood, 2006).

Our results supported Hypothesis 2 that SNS use for entertainment is not related to well-being. Again this finding is in consistent with previous research suggesting a that the positive relationship between Internet use and well-being is weak and disappears when the Internet is used for non-social purposes (Huang, 2010; Selfhout et al., 2009).

Hypothesis 3 was not supported, contrary to prediction, we found that using SNS use for its communication function was negatively related to online self-disclosure. This finding is also inconsistent with previous research findings of a positive relationship (Joinson, 2001; Pharo et al., 2011; Tidwell & Walther, 2002). However, participants in previous research were from Western cultures, specifically the U.S. Cultural differences between Western and Eastern cultures, such as China (i.e. individualistic vs. collectivist cultures) may explain why our findings are contrary to Hypothesis 3 and previous research in Western cultures upon which Hypothesis 3 was based. It may be that members of individualistic cultures exhibit higher levels of self-disclosure on SNSs, and perhaps in real life, than do members of collectivist cultures (Cho, 2007). Privacy is more valued in collectivist cultures. Self-disclosures are limited to a close circle of family and friends. This may account for the low self-disclosure on SNS by our Chinese participants, even when using the social communication function of these sites.

Another possible explanation for findings contrary to Hypothesis 3 is that considerable public attention has recently been given to the threat to privacy posed by online communications. It would be interesting to observe whether the increased salience of this threat to privacy online has by now affected U.S. participants. This would require replicating previous research, preferable using both the same and new measures of self-disclosure. If U.S. participants and those in other Western cultures are taking this threat seriously, then we would expect to see a decrease in online self-disclosures on SNSs, even when they are used for their social communication function (Stieger, Burger, Bohn, & Voracek, 2013). This may also prompt gatekeepers of SNSs to improve the security of their systems so that users will again feel free to express themselves, one of the motivations for SNS use.

Our Hypothesis 4 was supported. Online self-disclosure was positively related to friendship quality. This finding is consistent with previous research indicating that self-disclosure is important in the development and maintenance of friendships (Draper et al., 2008).
The negative association between using the entertainment function of SNSs and online self-disclosure might be explained by the fact that online self-disclosure only occurs during social interaction, which occurs infrequently when using SNSs' entertainment function. When individuals engage in browsing news or playing online games, social communication is less likely to happen and therefore so is self-disclosure.

This study has several implications for practice. Our results suggest that social communication on SNSs can enhance well-being, most likely because SNSs offers users a platform to express their feelings, give and received social and emotional support from friends, and increase feelings of satisfaction and self-worth by providing support to others. Therefore, SNSs have the potential to improve the quality of life if developers would design SNS interventions aimed at increasing the beneficial effects we observed in our research. As suggested earlier, developing SNSs that safeguard privacy would be helpful to all users. Adding “fictionitious” others to the site who will assist the user in developing social skills will be helpful to the socially anxious. Privacy chat functions may be a preferred method for self-disclosure.

With regard to the entertainment function of SNSs, the addition of forms of entertainment that require social communication may increase the benefits of using SNSs for this function. This has clearly been true in the video game world where the majority of players (62%) play with others and the majority of popular games are social (77%), not solitary (Entertainment Software Association (ESA), 2013). The social nature of today’s video games suggests that gamers may be learning social skills, including prosocial skills, to the extent that the game requires cooperation and mutual support to achieve desired goals (Ewoldsen et al., 2012). Similarly benefits could be obtained from SNS use for entertainment if properly designed.

6. Limitations and future directions

This study is one of the first to explore the mechanisms through which SNSs influence users’ friendships and well-being, after controlling gender and social anxiety. Different types of SNSs use and the possible mediating role of online self-disclosure were examined. Three of our five hypotheses were supported. We found that the effects of SNSs on users’ friendships and well-being depended on the type of SNS use – communication or entertainment, and the personal characteristics of the users, namely, social anxiety. There is also suggestive evidence that the mechanism by which SNS use influences users’ friendship and well-being may vary between collectivist and individualistic cultures. Despite these strengths, the results of this study should be viewed in light of its limitations. First, the sample is a homogeneous group of students from two colleges in China. Whether the results generalize to all Chinese citizens of subgroups of them is a question for future research. Second, a cross-section design was used, preventing any statements about causal relationships. Future research should address these limitations by using experimental and longitudinal designs that can establish cause-effect relationships. It should also include qualitative as well as quantitative data. Content analyses of qualitative data may reveal dimensions of SNS use that have yet to be considered in the research. Future research should overcome the limitations of self-report data by obtaining logs of SNS use. Logs would include measures of time spent/day on SNSs. As with many new technologies, there is always the danger of overuse or addiction (Andréeou & Svoli, 2012). The benefits of SNS use may be asymptotic – too much use may lead to detrimental rather than beneficial outcomes. Finally, personal characteristics of the user must be included in the design of future research since optimal use is likely to depend on such characteristics, some of which have yet to be identified.

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References


Predictors of Facebook Communication and Relational Closeness. 

Communication Research, 27–53.


