

# The Pervasiveness, Connectedness, and Intrusiveness of Social Network Site Use Among Young Adolescents

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## Abstract

Young adolescents are quickly becoming avid users of social networking sites (SNSs); however, little is known regarding how they use these sites. The goal of the present study was to examine the extent to which young adolescents use SNSs, with whom they connect via these sites, and whether SNS use disrupts daily functioning. Among 268 middle-school students surveyed, 63% reported having their own profile page on an SNS. On average, adolescents reported having 196 SNS contacts (friends), most of whom were known peers. Young adolescents with an SNS spent most of their time viewing and responding to comments written on their profile page. Among the SNS users, 39% reported getting behind on schoolwork and 37% reported losing sleep at least once because they were visiting an SNS. As SNS use becomes embedded in young teens' daily lives, it is important to better understand how such use affects their daily adaptive functioning.

## Introduction

ONLINE COMMUNICATION TOOLS, particularly social networking sites (SNSs), have become increasingly embedded into adolescents' daily lives. Recent estimates suggest that 73% of adolescents, who go online, use SNSs.<sup>1</sup> Although older adolescents (ages 14–17) are more likely to use these sites than younger adolescents (ages 12–13), over half (55%) of young teens who go online use SNSs. Although increasingly younger youth are joining SNSs, little is known about SNS use among the youngest teens. It is critical to learn about young users because the technology was developed for college students and may be associated with particular challenges or risks among young teens. For example, this group of emerging users may connect with unknown others in ways that is riskier for them than for college students. Moreover, use of SNS may interfere with the daily functioning amongst the youngest users who have lower self-constrain.<sup>2</sup>

Among high-school and college students, the primary use of SNSs is to communicate with existing friends, rather than to make new friends.<sup>3–5</sup> This is not surprising given that maintaining interpersonal connections is an important developmental task of adolescence.<sup>6</sup> Although SNSs may offer opportunities to interact with known peers, there are also reasons to be concerned about SNS use, particularly among young adolescents. For example, young teens are more likely than older teens to communicate with strangers online<sup>7</sup> and are more likely to disclose personal information through their SNS.<sup>8</sup> Moreover, young teens' SNS use has been shown to be

associated with compulsive Internet use<sup>9</sup> (e.g., neglecting daily obligations, such as school).

The present study will examine the extent to which middle-school students use SNSs (i.e., pervasiveness), whom they connect with (i.e., connectedness), and whether SNS use disrupts daily functioning (i.e., intrusiveness). Although research on adolescents' SNS use is growing, much remains unknown about young teens' SNS use. We also examine possible gender differences within this young sample of users, because findings among older adolescents<sup>3</sup> suggest that girls use SNSs more frequently and are more motivated to use SNSs to communicate with peers. Additionally, we compare SNS users and nonusers in terms of concerns of peer approval. As SNS use becomes more normative among its youngest users, it is important to understand how peer approval concerns may vary between the two groups and whether it might be socially marginalizing not to rely on this technology. Not having an SNS profile that facilitates peer interactions may be particularly detrimental at this developmental phase when need for peer approval is heightened.<sup>10</sup> We therefore also probe whether nonusers are targets of ridicule from peers because of their lack of SNS use.

## Methods

### *Participants*

Participants included 268 students (51% girls) from two middle schools located in the Los Angeles area. One school is a large public, neighborhood school (1100 students) and the

other is a smaller (300 students) charter school. Both schools were comparable in student's ethnic diversity, academic performance scores, and socioeconomic status. The sample was ethnically diverse; 54% white, 18% Latino, 10% Multi-ethnic, 7% Asian, 7% African-American, and 4% other. All three middle-school grades were represented including 22% 6th graders, 47% 7th graders, and 31% 8th graders.

### Procedures

Students were recruited to participate during advisory period and were given informational letters and consent forms to take home. Students with parental consent were allowed to participate. Sixty-eight percent of students returned the consent form with 86% allowed to participate. Researchers were available to answer questions as students completed the survey.

### Measures

Students reported on demographics (i.e., grade, gender, and ethnicity) and their Internet and SNS use. Students with an SNS were asked about their general use, SNS friends, and SNS intrusiveness. Students without an SNS were asked the reasons and their feelings about not having one. To compare users and nonusers concerns of peer approval, students completed a brief measure of their worries of negative evaluation.

**Internet use.** To measure Internet use, students were asked "About how long have you been using the Internet?" with options ranging from *<6 months* to *>3 years* and "How long did you spend using the Internet at home yesterday?" with options ranging from *<30 min* to *over 3 h*.

**SNS use.** Experience and frequency of SNS use were assessed by asking students how long they have had their own SNS (responses ranging from *<3 months* to *>2 years*), how much time they typically spend on these sites during an average day (ranging from *<10 min* to *over 2 h*), the number of times they visit SNSs, and the times of day during which they typically visit them (e.g., before school and while doing homework). We asked about their most frequent SNS activities, the reasons why they care about having an SNS, and how they feel on days when they cannot visit their SNS.

**Non-SNS users.** Students without a profile page on an SNS were asked to indicate the reasons why they do not have one and whether they were made fun of for not having an SNS. They were also asked how much it bothers them to not have one and whether they ever visit SNSs even though they do not have their own.

**Connectedness.** To assess friendship factors, adolescents were asked the number of friends they have on their SNS (focusing on the one SNS they use most often) and the extent to which they know these friends. For example, adolescents were asked how many SNS friends go to their school with options ranging from *none of them* to *most of them*.

**SNS intrusiveness.** Three items were combined to assess SNS intrusiveness. Items included "In the last year, how often have you *lost sleep, come to class late, or gotten behind on*

*schoolwork* because you were visiting a social networking site." Response options included *never, 1–3 times, 4–6 times, 7–12 times, and >12 items*. Given the high internal consistency of the items ( $\alpha=0.73$ ), the responses were combined into one scale.

**Concern for peer approval.** Two items of the Fear of Negative Evaluation subscale from the Social Anxiety scale for Adolescents<sup>11</sup> were used. Items included "I am afraid others will not like me" and "I worry about what others think about me." Students rated how true the statements were on a 5-point scale labeled *Never* to *Always* ( $M= 2.48$ ;  $SD=0.97$ ;  $\alpha=0.80$ ).

### Results

Before conducting the main analyses, participants from the two schools were compared. Because *t*-tests revealed no significant differences between the two schools on the variables of main interest (e.g., Internet experience and SNS use), the participants were pooled into one analysis sample.

The young adolescents in this sample were experienced Internet users. A majority (81%) of them had used the Internet for over 3 years, 16% had 2–3 years experience, and only 3% had less than a year of Internet experience. During an average school day, 43% of adolescents reported spending 30 min or less on the Internet, 29% spent 1–2 h, and 28% spent more than 3 h on the Internet. Sixty-three percent ( $n= 169$ ) of adolescents reported having a profile page on an SNS. The following section focuses on young adolescents with an SNS; thereafter, findings regarding adolescents without an SNS ( $n= 99$ ) are presented. Given the number of tests, gender differences are described only when they reach  $p<0.01$ .

#### Social network site use

**Pervasiveness of SNS use.** Adolescents' SNS experience was limited; only 20% of adolescents reported having a profile page on an SNS for over 2 years, 32% for 1–2 years, and 48% for less than a year. On an average school day, 45% of adolescents spent *<30 min* on SNSs and 34% spent 30 min to 1 h, whereas 21% reported spending over an hour on SNSs. Independent samples *t*-tests revealed that girls spend more time on SNSs than boys,  $t(164)=3.07$ ,  $p=0.002$ . As an additional indicator of frequency of SNS use, adolescents were asked the number of times they visit their SNS profile page or someone else's. More than half (57%) reported that on average they visit SNSs once or not at all, 31% reported two to four visits, and 12% of teens visit SNSs more than five times a day. As shown in Figure 1, adolescents most commonly visit SNSs after homework (61%) and after dinner (52%). Adolescents also reported multitasking such that 37% reported visiting SNSs while watching TV and 30% while doing homework.

**Activities and motives for using SNSs.** The activities adolescents reported spending the most time while visiting SNSs were checking and responding to comments written to them (81%), editing their profile page (e.g., adding pictures; 60%), and viewing other people's pictures (46%). A less common activity was looking for new friends to add (27%). Chi-square analysis revealed that girls were more likely than boys to spend most time editing their profile page

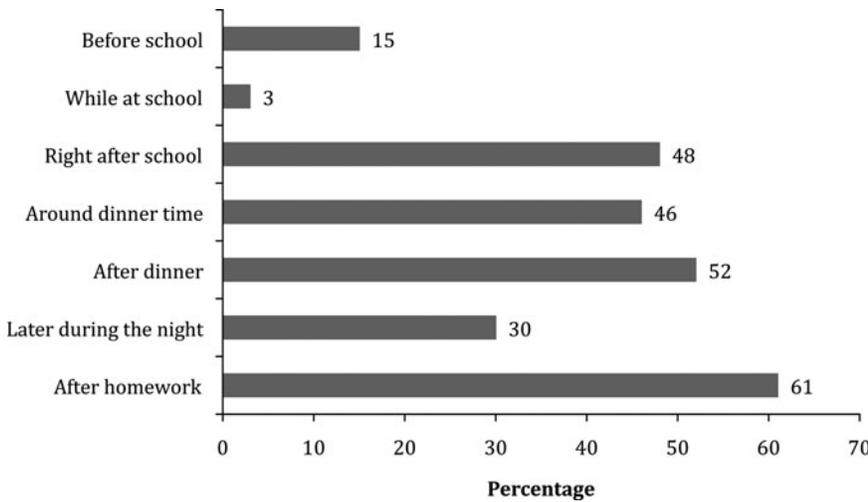


FIG. 1. Times during the day when students check social network sites.

( $\chi^2(1)=8.97, p=0.003$ ) and viewing other people’s pictures ( $\chi^2(1)=13.27, p<0.001$ ).

To understand adolescents’ motives, we asked them why it is important to them to have their own SNS. As shown in Table 1, the most common responses were that it keeps them connected with friends—those not attending their school (77%) as well as those attending their school (76%). A less common reason was to make new friends (21%). Thus, maintaining friendships, rather than creating new friendships, motivates young teens to use SNSs.

**Connectedness with SNS contacts.** On average, adolescents reported having 196 SNS contacts ( $SD= 179, MD= 150$ ), with 10% reporting that they have over 400 “friends.” Figure 2 shows the extent to which adolescents know their SNS friends. For example, when asked how many of their SNS friends go to their school, 62% of adolescents indicated “most of them,” 24% indicated “about half,” and the remaining 14% reported “less than half or none.” Simply because these SNS friends go to their school, however, does not necessarily mean they are peers whom adolescents know well. Only 42% of adolescents reported that most of their SNS friends are people they meet all the time and know very well. When asked how many SNS friends are people whom they have never met in person, a majority (59%) reported “none of

them,” although 16% indicated at least “about half of them” are people they have never met in person.

**SNS intrusiveness.** Across the three indicators of intrusiveness (i.e., losing sleep, coming to class late, and getting behind on schoolwork), 52% of adolescents reported at least one incident of SNS intrusiveness. Independent sample *t*-tests showed that girls reported SNSs to interfere with their daily lives more than boys ( $t(214)= -4.12, p<0.001$ ). Figure 3 shows the frequencies of intrusiveness at the item level among adolescents who reported at least one incident. Collapsing across frequencies, getting behind on schoolwork was the most frequent disruption with 39% of students reporting at least one incident. Moreover, 37% of adolescents reported losing sleep at least once in the last year, because they were checking an SNS. Coming to class late was an infrequent SNS disruption; only 4% of adolescents reported one or more incidents. Considering all three forms of disruptiveness, a small group (8%) reported experiencing all three types in the past year, whereas 40% reported two types of disruptions and a over half (53%) reported only one type of disruption.

Correlation analyses were used to assess the validity of the intrusiveness measure. That is, if the measure is indeed tapping into intrusiveness, we would expect it to be associated with factors such as the amount of time spent on SNSs and the number of times adolescents visit SNSs. Results revealed that both average time spent ( $r=0.49, p<0.001$ ) and the number of times SNSs were visited ( $r=0.42, p<0.001$ ) were associated with intrusiveness. The more time spent on SNSs during an average school day and the more times that adolescents visited SNSs, the more likely they were to report disruptions from their SNS use.

**Adolescents without an SNS**

We initially examined whether differences exist in concerns of peer approval between SNS users and nonusers. Results revealed that the two groups did not differ from one another ( $t(258)=0.02, p>0.05$ ). Thus, nonusers are no more concerned about peers not liking them than those who use SNS.

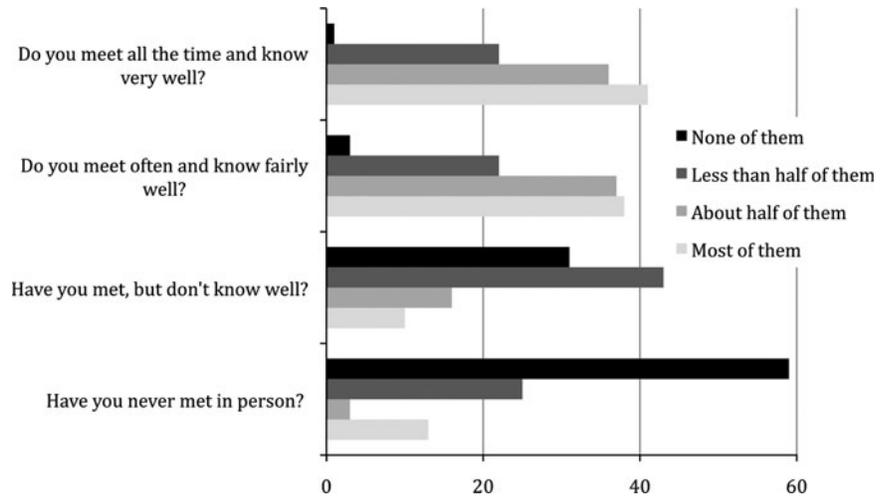
The most common reasons why adolescents reported not having an SNS included their preference for other types of

TABLE 1. REASONS WHY IT IS IMPORTANT FOR STUDENTS TO HAVE A SOCIAL NETWORK SITE

|  | Percentage |
|--|------------|
| Keeps them connected with friends who do not go to their school        | 77%        |
| Keeps them connected with friends from school                          | 76%        |
| Allows them to express themselves the way they want                    | 32%        |
| It is the best way to share their life with their friends              | 24%        |
| Ability to make new friends  | 21%        |
| If they did not have SNS they would not feel as close to their friends | 17%        |

Note: Percentages equal >100, because students were asked to check all the responses that apply.

FIG. 2. Extent to which students know their social networking site friends.



communication (47%) and parent(s) not allowing them to have one (45%). Adolescents also reported not having an SNS, because they knew people can say mean or offensive things on these sites (39%) and because they know it can be addictive (24%). No teens indicated not having an SNS because they do not have a home computer, and only 6% reported that it is because they do not have their own computer. Thus, computer access does not differentiate SNS users and nonusers. More girls than boys reported not having an SNS, because their parents do not let them have one ( $\chi^2(1)=18.44, p<0.001$ ) and because they know it can be addictive ( $\chi^2(1)=6.51, p=0.01$ ).

Are adolescents ridiculed or bothered because they do not have an SNS? Most adolescents (70%) reported that they are never made fun of for not having an SNS, and only 10% are made fun of "sometimes" or "frequently." Moreover, 63% of young teens indicate not being bothered at all by not having an SNS, whereas 13% report that it either "sort of bothers them" or "does bother them to not have one." Girls were more bothered by not having an SNS than boys ( $t(93)=-4.43, p<0.001$ ). When adolescents were asked whether they ever visit SNSs, 30% reported that they visit these sites even though they do not have their own.

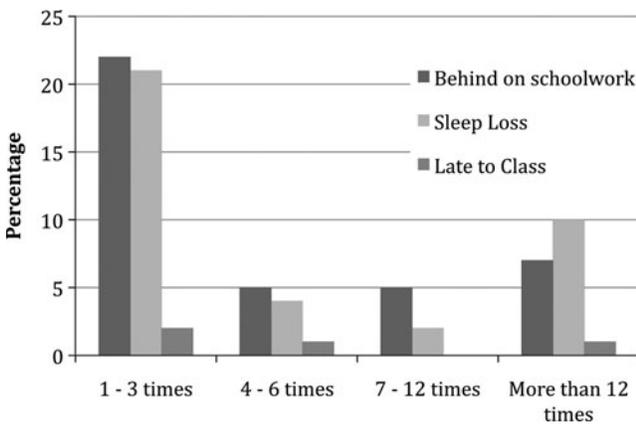


FIG. 3. Frequency of social network site intrusiveness for students who reported intrusiveness incidents in the past year.

Discussion

The present study extends our understanding of adolescents' SNS use by detailing the patterns of use among an understudied group of emerging young SNS users. Nearly two-thirds of young teens reported owning an SNS, although most were less experienced users. Despite the recency of SNS use among this age group, it is clearly a popular online context among young adolescents: One-third of adolescents without their own profile page visit these sites. Thus, simply because some adolescents do not have an SNS does not mean they are not exposed to these sites. Moreover, the results suggest that for many young teens viewing and responding to comments on SNSs is a part of their everyday routine.

Similar to studies of other online contexts<sup>12</sup> and studies of older adolescents' SNS use,<sup>3</sup> our results indicate that communication with peers is a primary function of SNSs among young adolescents. Given the large number of friends reported on SNSs, these "friendships" are likely not meaningful, but rather distant relationships (e.g., friends of friends).<sup>13</sup> It would be important to assess adolescents' reasons and motives for having SNS contacts with weak ties.<sup>5</sup> Future research should examine young adolescents' motivation for having large networks of SNS friends. For example, given young teens concerns of being perceived as "cool" by peers,<sup>14</sup> young, inexperienced SNS users may add any friends on their SNS, because a larger network makes them appear popular.

We found that a relatively small percentage of adolescents look for new friends through SNSs or have unknown others as SNS friends. Although only 16% of young teens indicated that at least half of their SNS friends are people they have never met in person, this is disconcerting given the young age of our sample. Because SNS profiles often include identifying information, additional research is needed to examine potential risks and privacy concerns associated with connecting with unknown peers.

Should we be concerned that SNS use is disrupting young adolescents' daily functioning? Slightly over half of young teens reported that SNS use interfered at least once with their school or sleep during the past year. Given that both average time spent on SNS and the number of times SNSs visited during the day were each associated with intrusiveness, increased use likely poses time constraints for other activities,

including those that might compromise school performance. Indeed, SNS usage takes a substantial amount of time<sup>15</sup> and, like any activity on the Internet, can turn into problematic use.<sup>16</sup> Thus, future research that examines factors that may alleviate the risk of SNSs becoming intrusive, such as parental monitoring of online activities, is needed. Mesch<sup>17</sup> found that parents who monitored the type of Web sites their teens visited protected them from negative online encounters, whereas simply restricting the time spent online did not protect them.

Consistent with past research<sup>3,15</sup> showing that girls tend to be interested in relational aspects of media, we found that SNS use is more central to girls' social lives. For example, a primary function of SNS is to maintain friendships; thus, it may not be surprising that girls report spending more time on SNSs. However, this may place them at greater risk of experiencing disruptions from SNS use. Indeed, girls reported more intrusiveness incidents than boys. As young adolescents continue to join SNSs, it is critical that we better understand both the benefits and areas of concern for boys and girls. This study provides important initial steps toward better understanding the pervasiveness, connectedness, and intrusiveness of SNS use among an emerging group of SNS users.

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### Disclosure Statement

No competing financial interests exist.

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