Rapid Communication

Older Adolescents' Motivations for Social Network Site Use: The Influence of Gender, Group Identity, and Collective Self-Esteem

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Abstract

This study assessed motives for social network site (SNS) use, group belonging, collective self-esteem, and gender effects among older adolescents. Communication with peer group members was the most important motivation for SNS use. Participants high in positive collective self-esteem were strongly motivated to communicate with peer group via SNS. Females were more likely to report high positive collective self-esteem, greater overall use, and SNS use to communicate with peers. Females also posted higher means for group-in-self, passing time, and entertainment. Negative collective self-esteem correlated with social compensation, suggesting that those who felt negatively about their social group used SNS as an alternative to communicating with other group members. Males were more likely than females to report negative collective self-esteem and SNS use for social compensation and social identity gratifications.

Introduction

SOCIAL NETWORK SITES (SNSs) are Web sites where users can create a profile and connect that profile to others to form an explicit personal network.[1] Young people have been in the forefront of social media use in general[2] and SNS in particular.[1] The present study investigated motives for SNS use among late adolescents with a special focus on social identity issues and gender. Social identity stems from that part of the individual "which derives from their knowledge of their membership of a social group (or groups) together with the value and emotional significance of that membership."[3] In the case of SNS, however, both personal *and* social identity cues are evidenced. Personal identity comprises the "personality attributes that are not shared with other people."[4] Therefore, SNS users may post material that relates to personal predilections but also include content that acts as a group marker. Visitors can communicate with a profile owner on an interpersonal level or on an intergroup level (as ingroup/outgroup member).

Social identity gratifications (SIG)

Mass media provide adolescents SIG—opportunities to identify with ingroup members who look and act similarly to each other as well as to compare themselves to outgroup members.[7] Identification has a role in mainstream media selection; thus it may be that adolescents also choose social media to facilitate intragroup–intergroup relationships in addition to interpersonal ones.[6] Several studies have examined adolescents' use of social media. Apart from passing time, entertainment, and information seeking, interpersonal/interactive goals are consistently identified. Valkenburg et al.[7] found that among adolescents who visited chat rooms and used instant messaging, half indicated that they did so to find out how others react to them, overcome shyness, and facilitate relationship formation. Papacharissi and Rubin[8] investigated the influence of perceptions of social presence in Internet use. Students (52% freshmen) in the study who considered the Internet a warm, social environment used it to pass time, for convenience, for interpersonal utility, and for entertainment. Interestingly, those who felt less secure in face-to-face contexts reported a preference for Internet interactions.

Social compensation

A study of undergraduate Facebook users[9] examined the formation of social capital. Similar to other studies,[10,11] par-

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ticipants mainly used Facebook to keep in touch with close friends. However, Facebook use was related to psychological well-being, and findings suggested that it may be of particular benefit to users experiencing low self-esteem. This could also relate to collective self-esteem, which denotes the aspect of identity that has to do with the value placed on group membership.[12] Individuals who experience low or negative collective self-esteem—perceiving their social group to be an undesirable/unpopular one—may wish to distance themselves from it, particularly if they believe that others evaluate the group negatively. Perhaps they feel the need to move on, and in such situations these persons may try to develop more rewarding group relationships online— a form of social compensation.

Gender differences in SNS use

SNS studies to date have not uncovered gender differences in usage. However, there are reasons to assume differences both in terms of the importance of group belonging[13] and in forms of SNS usage. Research suggests that although teenage girls and boys now appear to make equal use of the Internet, type of use differs.[14,15] Boys focus on features and entertainment; girls seem more interested the relational aspects of social media. Rainie[16] reported that girls are more likely than boys to talk with friends on the Internet about romantic relationships, secret things, and deep feelings, and recent Pew research[1] found that while girls use SNS to maintain contact with their friends, boys were more likely to use their sites to make new friends.

Therefore, in the present study, hypothesis 1 posited that among participants reporting high group identification and positive collective self-esteem, the most important motivation for SNS use would be to maintain contact with their closest peer group. Studies show that individuals who do not feel secure in face-to-face interactions may turn to social media for communication purposes.[8,17] Also, Social Identity Theory (SIT) suggests that people who do not identify with their ingroup and experience negative collective self-esteem will likely distance themselves from their group.[3] Thus, hypothesis 2 predicted that for those exhibiting negative collective self-esteem, an important motive for SNS use would be to seek a form of virtual companionship or social compensation. Hypothesis 3 proposed that participants with high group identification and collective self-esteem would be more likely to seek SIG. Research indicates that females are more likely than males to use social media for relational maintenance; by contrast, males are more interested in information seeking (and forms of entertainment such as Internet gaming). Therefore, hypotheses 4 and 5 posited that females would be more motivated to use SNS to communicate with close peer group members (H4), while males would be more motivated to use SNS for learning purposes (H5). Finally, two research questions asked: (1) What other gender differences exist for motivations for SNS use? (2) Are there interactions among gender, group identification/collective self-esteem, and SNS use?

Materials and Methods

Participants

Eight hundred three freshman students attending a mandatory communication class in spring 2008 participated;

however, 69 respondents were dropped from the analysis for a total of 734 (they did not complete the questionnaire, identify their gender or age, or were 20 years old and over) (response rate = 37%). Of the participants, 68% were 18 years old ($SD = 0.47$), 59% female, 57% Anglo, 13% Latino, 7% Pacific Islander, 9% Asian, 3% African American. The remainder were mixed race, European, and Middle Eastern students. Fifty-four percent used Facebook, 44% used MySpace, and the rest used Friendster or other SNS. Graduate teaching assistants recruited participants via an e-mail containing a summary of the study's goals as well as Institutional Review Board informed consent information and the Survey Monkey URL for the questionnaire.

Measures

Motives for use. Participants' scores were the overall means of items comprising the scales, all items were closed-ended on a 7-point range (1, *very strongly disagree*; 7, *very strongly agree*). A combination of interpersonal, media, and computer-mediated communication motives were tapped (e.g., participants were asked how much they agree that they go to their SNS to pass away time, because they can learn about things outside school, or because it is convenient). Four items assessed motives for use related to communication with peer group (e.g., to swap news with close friends, to communicate with close friends).

Motives for SIG. Seven amended items from the age identity gratifications scale[5] measured participants' motivations for SNS use for SIG. (e.g., how much they agree that they go to their SNS to interact with people like them or identify with people like them.)

Group identification and collective self-esteem. The inclusion-of-self-in-group measure[18] assessed group identification. Prior research indicates that it is a reliable measure and highly correlated with other group identification. Twelve amended items from the collective self-esteem scale[12] were also employed. Agreement with six of these indicates high collective self-esteem (e.g., "In general, I'm glad to be a member of my group"—positive collective self-esteem). Six items indicate low collective self-esteem (e.g., "I often regret that I belong to my group"—negative collective self-esteem).

Frequency of use. Participants estimated the number of visits they make to their sites (and to their friends' sites) on an average weekday as well as on an average weekend. Next, they provided estimates of the length of time spent on their SNS on an average weekday and on an average weekend. The responses to these frequency/duration questions were summed to form a global measure of SNS usage level.

Statistical analysis

To avoid a type 1 error in interpretation, a 99% decision rule ($p < 0.01$) was adopted. To assess the validity and reliability of the scales, factor analyses were performed for motives for use and collective self-esteem (using maximum likelihood, promax rotation, factors with eigenvalues greater than 1). (Space precluded inclusion of the factor analysis tables. Interested readers should obtain these from the author).

Each resulting scale was tested for internal consistency using Cronbach alpha. See Table 1.

The factor analysis of motives for SNS use revealed six factors explaining 59.43% of the variance with factor 1 (SIG) explaining 36.5% of the variance. The next five factors were passing time, social compensation, communication with peer group, entertainment, and social learning. The factor analysis of the collective self-esteem measures unexpectedly revealed three factors explaining 60.2% of the variance. The first factor (six items) represented positive collective self-esteem and explained 41.6% of the variance. The second factor (four items) was made up of negative collective self-esteem items. These 10 items together posted a low reliability ($\alpha = 0.56$) not improved by removal of individual items. Therefore, two collective self-esteem scales were computed: positive collective self-esteem ($\alpha = 0.91$) and negative collective self-esteem ($\alpha = 0.84$). The two scales correlated with each other ($r = -0.50$) and with the inclusion-of-group-in-self measure ($r = 0.33$; $r = -.28$ respectively). The third factor contained only two items: "My group has very little to do with how I feel about myself" and "My group is unimportant to my sense of what kind of person I am." These items were fairly highly correlated ($r = 0.41$) and were analyzed separately. "My group is unimportant to my sense of what kind of person I am" correlated with gender (male, $r = -0.11$); negative collective self-esteem ($r = 0.44$), inclusion-of-group-in-self ($r = -0.27$), communication with peer

group ($r = -0.10$), and entertainment ($r = -0.11$). "My group has very little to do with how I feel about myself" correlated with gender (male, $r = -0.10$), negative collective self-esteem ($r = 0.27$), and inclusion-of-group-in-self ($r = -0.16$).] To test hypotheses 1, 2, and 3, Pearson product moment correlations were computed. To test hypotheses 4 and 5 and to answer research question 1 (other gender differences), univariate ANOVAs were computed. MANOVA was used to answer research question 2 (interactions—gender, group identification/collective self-esteem, and motivations for use). Dummy variables were constructed for the collective self-esteem scales by making the split at the median.

Results

H1: Group identification/collective self-esteem and communication with peer group.

This hypothesis was supported. Positive collective self-esteem strongly correlated with communication with peer group via SNS. The inclusion-of-group-in-self measure was also positively correlated with peer group communication. Adding further support, the negative collective esteem scale was negatively correlated with communication with peer group. The more negative participants reported feeling about their peer group, the less likely they were to communicate with them via SNS. See Table 2.

Group identification/collective self-esteem and social compensation

This hypothesis received support. Positive collective self-esteem and inclusion-of-group-in-self were unrelated to social compensation. However, negative collective self-esteem was moderately related to social compensation—those who feel negatively about their social group may use SNS as an alternative to communicating with other group members. Post hoc analysis revealed that for males, both positive *and* negative self-esteem were related to social compensation ($r = 0.16$; $r = 0.37$, $p < 0.01$ respectively), indicating that males sought social compensation regardless of collective self-esteem (although more likely if high in negative self-esteem). Only females high in negative collective self-esteem sought social compensation ($r = 0.36$, $p < 0.01$).

H3: Group identification/collective self-esteem and SIG

This hypothesis was not supported. Despite a weak correlation between positive collective self-esteem and SIG, inclusion-of-group-in-self and SIG were unrelated. Contrarily, the relationship between *negative* collective self-esteem and SIG was both significant and stronger than the one hypothesized, indicating that those who felt negatively about their group were more likely to seek SIG via SNS. Again, analysis revealed that for males, both positive and negative self-esteem were related to SIG ($r = 0.23$; $r = 0.27$ $p < 0.01$ respectively)—males sought SIG regardless of collective self-esteem. Only females high in negative collective self-esteem were likely to seek SIG ($r = 0.15$, $p < 0.01$).

H4: Females and communication with peer group members

This hypothesis was supported. Communicating with peer group members posted the highest overall mean as a

TABLE 1. DESCRIPTIVE STATISTICS FOR SCALES

Scale	Mean (SD)	Cronbach's α
Peer group contact		0.85
Overall	5.52 (1.20)	
Male	5.25 (1.28)	
Female	5.71 (1.11)	
Pass time		0.87
Overall	4.86 (1.18)	
Male	4.61 (1.17)	
Female	5.03 (1.20)	
Entertainment		0.85
Overall	4.53 (1.19)	
Male	4.30 (1.21)	
Female	4.69 (1.14)	
SIG		0.93
Overall	3.51 (1.37)	
Male	3.69 (1.37)	
Female	3.38 (1.35)	
Social compensation		0.82
Overall	3.24 (1.29)	
Male	3.39 (1.28)	
Female	3.14 (1.30)	
Learning		0.90
Overall	3.16 (1.35)	
Male	3.32 (1.33)	
Female	3.04 (1.34)	
Positive collective self-esteem		0.91
Overall	5.28 (1.18)	
Male	5.09 (1.24)	
Female	5.41 (1.12)	
Negative collective self-esteem		0.84
Overall	2.38 (1.12)	
Male	2.59 (1.09)	
Female	2.23 (1.13)	

TABLE 2. CORRELATIONS BETWEEN MOTIVATIONS FOR SOCIAL NETWORKING SITE USE,
COLLECTIVE SELF-ESTEEM, AND GROUP IDENTITY

	Positive collective self-esteem	Negative collective self-esteem	Group ID	Social compensation	Pass time	SIG communication	Entertainment	Learn	Peer	SNS use
Negative collective self-esteem	−0.50**									
Group ID	0.33**	−0.29**								
Social compensation	0.04	0.37**	0.04							
Pass time	0.44**	−0.09*	0.18**	0.45**						
SIG	0.11**	0.21**	0.04	0.60**	0.37**					
Entertainment	0.42**	−0.08*	0.23**	0.44**	0.64**	0.45**				
Learn	0.07*	0.29**	0.10	0.66**	0.34**	0.82**	0.41**			
Peer communication	0.56**	−0.28**	0.34**	0.27**	0.55**	0.23**	0.53**	0.18**		
SNS use	0.10*	0.07	0.15**	0.22**	0.36**	0.18**	0.29**	0.17**	0.20**	
Gender	0.14**	−0.16**	0.11**	−0.10**	0.18**	−0.11**	0.17**	−0.10**	0.19**	0.14**

*$p < 0.05$; **$p < 0.01$.

motivation for use of SNS (see Table 1); however, there was a significant difference between females ($M = 5.71$, $SD = 1.11$) and males ($M = 5.25$, $SD = 1.28$), $F(1, 732) = 26.56$, $p < 0.01$, $\eta^2 = 0.034$.

H5: Males and learning

This hypothesis was also supported. Learning was not a common motivation for use of SNS (see Table 1); however, there was a small but significant difference between males ($M = 3.32$, $SD = 1.33$) and females ($M = 3.04$, $SD = 1.35$), $F(1, 732) = 7.50$, $p < 0.01$, $\eta^2 = 0.010$.

RQ1: Other gender effects

Univariate ANOVAs revealed gender differences for the following: Females posted higher means for positive collective self-esteem, $F(1, 725) = 14.07$, $p < 0.01$, $\eta^2 = 0.019$; group-in-self, $F(1, 725) = 9.91$, $p < 0.01$, $\eta^2 = 0.013$; passing time, $F(1, 725) = 25.10$, $p < 0.01$, $\eta^2 = 0.033$; entertainment, $F(1, 725) = 20.48$, $p < 0.01$, $\eta^2 = 0.027$; and frequency of SNS use, $F(1, 725) = 13.97$, $p < 0.01$, $\eta^2 = 0.019$. Males posted a higher mean for negative collective self-esteem, $F(1, 725) = 23.48$, $p < 0.01$, $\eta^2 = 0.026$.

RQ2: Interactions: gender, group-in-self, collective self-esteem, and SNS motives

To assess interactions between gender and collective self-esteem, a 2 × 2 × 2 (gender by high vs. low positive collective self-esteem by high vs. low negative collective self-esteem) MANOVA was conducted for social compensation, SIG, communication with peer group, and learning. The multivariate test indicated significant effects for gender, Λ = 0.89, $F(7, 715) = 12.11$, $p < 0.001$, $\eta^2 = 0.11$; positive collective self-esteem with gender, Λ = 0.81, F(7, 715) = 11.07, $p < 0.001$, $\eta^2 = 0.10$; and negative collective self-esteem with gender, Λ = 0.88, $F(7, 715) = 7.02$, $p < 0.001$, $\eta^2 = 0.06$. Among those with high positive collective self-esteem, females were more likely to use SNS to communicate with peers, pass time,

and entertain while males were more likely to use SNS to seek social compensation, SIG, and learning. Among those with high negative collective self-esteem, females compared to males reported using SNS to pass time and entertain; the means were *lower* than those for who reported high positive collective self-esteem. Males were more likely to report SNS use for social compensation, SIG, and learning; the means were *higher* for these variables than for those reporting high positive collective esteem.

Discussion

The results indicate that most of the participants who reported high collective self-esteem also reported SNS use to communicate with peer group members. Females were more interested in this type of communication as well as in the more habitual SNS motivations for use such as entertainment and passing time. Positive collective self-esteem was also strongly related to entertainment and passing time. Those who reported negative collective self-esteem reported more instrumental interest in SNS use for social compensation, learning, and SIG. Males were more likely to report SNS use for these reasons. To some extent, the findings mirror prior research showing that females are more likely to use social media for relational purposes and are more connected to their friends than are males.[15] Similar to Papacharissi and Rubin[8] and Ellison et al.'s[9] findings that those who felt less secure in face-to-face interaction were more likely to turn to the Internet for interactional purposes, those who reported a disconnect from their peer group were more likely to seek social compensation and SIG via SNS. Older adolescents who feel isolated and exhibit negative collective self-esteem seem to turn to their SNS for companionship. They may desire to identify with others by using their SNS because they do not have positive relationships with ingroup members in their everyday lives. These findings are consistent with SIT, which suggests that individuals who feel a sense of negative social identity and collective self-esteem are more likely to distance themselves from their existing ingroup and seek identifica-

tion with other more favorably regarded ones. Perhaps the most interesting finding is that males were more likely to seek social compensation and social identification as well as to learn about the "social" world via SNS. The transition from high school to college can be a difficult one for which some older adolescent males may be less equipped due to a lack of peer group belonging or support. This may predispose them to seek the support they need through SNS. That said, males at this point in their lives may be looking to "move on," and so these findings may not be signs of dysfunction but perhaps of maturing.

Disclosure Statement

The author has no conflict of interest.

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