“I’m an Open (Face)Book”: Gender and Self-Disclosure on Facebook

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Abstract

Social networking sites, such as Facebook, easily allow users to share information about themselves on their profile. This study investigated differences between male and female college students with regard to self-disclosure behaviors on Facebook. Forty participants (20 males and 20 females) who used Facebook completed a questionnaire that assessed how many friends they had, along with status updates, and other information that they disclose about themselves on their Facebook profiles. Results showed significant gender differences, with males updating their Facebook status more than females did, and females self-disclosing more than males. In addition to identifying limitations of the study and suggesting directions for future research, these findings are discussed in terms of their potential significance to communication scholars, practitioners, and the general public, particularly with regard to privacy-related and other important issues that characterize the rise of the internet age.
“I’m an Open (Face)Book”: Gender and Self-Disclosure on Facebook

Scholarly research and popular discourse both have focused significant attention on differences between males and females with regard to face-to-face and mediated communication. Given the advent of social networking sites (SNSs), online platforms that focus on and facilitate the building of relationships among people, research is needed about whether differences that have been found for face-to-face and other forms of mediated communication generalize to communication on SNSs. One particular SNS, Facebook, warrants consideration because of the frequency and volume of its use, with 845 million users frequenting the site monthly, many of whom are college students, for whom Facebook originally was designed and constructed as a place to connect online (Facebook, 2012).

This study investigates whether male and female college students communicate differently on Facebook. More specifically, the study focuses on gender differences with regard to self-disclosure, which refers to “the process of making the self-known to other persons,” which results in people learning about themselves and “the extent to which they are similar one to the other, and the extent to which they differ from one another in thoughts, feelings, hopes, reactions to the past, etc.” (Jourard, 1971, p. 159). Self-disclosure implicates interpersonal relationships because “a truly personal relationship between two people involves disclosure of self one to the other in full and spontaneous honesty” (Jourard, 1971, p. 28). Because the purpose and structure of Facebook are contingent on users’ self-disclosure, in the sense that Facebook profiles are collections of information about the self that are disclosed by users, and because they are used as platforms for connecting with other users based on mutual interests or characteristics, self-disclosure is an important communicative behavior to study in this context (see Nosko, Wood & Molema, 2010).
This study potentially is important to communication scholars, practitioners, and the general public. The study is significant to communication scholars because it extends the examination of male and female communication differences to include a relatively new communication channel. Research about gender differences with regard to communicative behavior on SNSs has not focused on self-disclosure, and research about self-disclosure on SNSs has not examined differences with regard to gender. This study links these research foci by exploring differences men and women with regard to self-disclosure on Facebook. This study also is relevant to communication practitioners who use social media as a tool for achieving their communicative goals. For instance, businesspersons or consultants who advertise on Facebook may be able to use the findings to more effectively target appropriate demographics, because self-disclosure behaviors could indicate consumer preferences. Moreover, counselors, school administrators, and others who work with college students may be better able to understand students’ self-disclosure behaviors, which may be useful in addressing issues of emotional turmoil and safety, among others. Finally, this research may be relevant to users of Facebook and other social media for reflecting on their self-disclosure behavior and its implications for their relational satisfaction, maintaining privacy, and other goals. The increasing presence of “invisible” third parties, including potential employers, advertisers, and a host of other unknown persons, using personal information gleaned from Facebook makes this research particularly relevant.

**Literature Review**

The following review of literature is organized in a deductive manner, from general studies of differences between male and female communication styles to increasingly specific studies about aspects of computer-mediated communication, culminating in several studies about
communication differences among Facebook users. This review of the literature provides the basis for the purposed hypothesis that follows.

Self-disclosure differences between men and women have been studied extensively in the context of interpersonal communication. Gorcyca (1993), for instance, studied the role of self-disclosure in building and sustaining relationships, by having men and women complete a questionnaire that compared their relationships with people of their gender and those of the opposite gender, asking questions about their communication topics, patterns, and functions, as well as their relational satisfaction. Women reported that, on an emotional level, their relationships with other women were “much better” than their relationships with men, primarily because women disclosed more than men did, especially on an intimate level. Similarly, Derlega and Berg (1987) examined self-disclosure variations between men and women by administering an instrument to 75 women and 30 men that measured their self-disclosure behaviors with their best male and female friends. Derlega and Berg found that women generally disclosed more than men did, but there were circumstances the topic of conversation and the relationship with and gender of conversational partners resulted in the opposite finding. These two studies, thus, found discernible differences between men and women’s self-disclosure, although it is not known whether these differences generalize to mediated communication forms.

Relevant studies of computer-mediated communication tend to focus on either self-disclosure or gender communication differences, but not gender differences with regard to self-disclosure. For example, Ledbetter (2010) explored self-disclosure motivations and social connections in individual Facebook “friendships.” Ledbetter sampled university students, additional participants recruited through members of the research team, and invited participants from a professional organization interested in technology and communication. Participants
completed an online questionnaire that, specifically, “directed participants to complete several measures based on the first [Facebook] Friend who appeared in [the Friends from the user’s primary friend network],” (Ledbetter 36). The results showed an inverse association between online self-competence and online self-disclosure. Ledbetter, thus, framed self-disclosure as a way of displaying social competence online, as users shared different information with other users depending on their relationships with them.

Given the increased use of SNSs in recent years, and Facebook, in particular, research has focused on communicative behaviors that users employ online. Recent studies about the use of SNSs—specifically, online dating services and blogs—have focused on the goal-oriented nature of self-disclosure in strategic misrepresentation and adherence to community norms, in particular. Hall, Park, Song, and Cody (2010), for instance, looked at gender differences in strategic misrepresentation demonstrated in online dating services in terms of seven categories of misrepresentation: personal assets, relationship goals, personal interests, personal attributes, past relationships, weight, and age. Hall administered an online questionnaire to users of a large online dating site that used an algorithm, based on users’ responses, to match potential dating partners. The finding showed that each gender misrepresented certain categories of self-disclosure but that the differences among the categories were not significant.

Jang and Stefanone (2011) also investigated self-disclosure via computer-mediated communication channels, surveying 145 bloggers from 32 countries to discern patterns in self-disclosure that constitute the norms and rules, specifically, for the online blog community that was studied. Self-disclosure was measured in terms of five variables: receiving acknowledgment of other users’ posts, providing acknowledgment of other users’ posts, “personalness,” receiving equitable reciprocation, and providing equitable reciprocation. The findings demonstrated that
bloggers who expected acknowledgment and reciprocity from the community tended to engage in these types of behavior more frequently; in other words, the expectation for others to disclose promotes self-disclosure, and self-disclosure begets disclosure from others, if they share the same expectations. Hall’s (2010) results about gender and self-disclosure with regard to online dating services and Jang and Stefanone’s conclusions about self-disclosure norms on blogs may well apply to other forms of online social networking, such as Facebook.

The studied reviewed above derived an understanding of self-disclosure as a goal-oriented behavior online, whereas the following studies investigated specific behaviors associated with self-disclosure, as demonstrated by users of Facebook. Nosko et al (2010), for instance, conducted a study about three types of information shared by users of Facebook on their profile pages: general/default information (e.g., network, city, hometown, languages and sex), sensitive personal information (e.g., contact information and birth date), and potentially stigmatizing information (e.g., sexual orientation, political and religious views, hobbies and interests, and photographs). They employed a checklist of 90 pieces of information associated with these three types of information that could be disclosed on a Facebook profile. The findings showed that age, gender, and relationship status influenced the type of information that was disclosed. For instance, with regard to gender, younger, single females were more likely to self-disclose than were older males involved in a committed relationship. The greater willingness of younger users to disclose, compared to older users, suggests that their conceptions of their online and offline selves differ from those of previous generations, who tend to perceive themselves in those two contexts to be more connected. Nosko et al.’s (2010) study, thus, demonstrated that there are some important differences between men and women with regard to the information that they disclose on Facebook.
The findings from Nosko et al.’s (2010) research were supported by a study conducted by Taraszow, Aristodemou, Shitta, Laouris, and Arsoy (2010), which focused on the frequency of disclosure on SNSs; specifically, how often people disclosed on Facebook. One hundred one young people between the ages of 14 and 29 completed a questionnaire to compare the information disclosed by males and females online, such as their phone numbers, e-mail addresses, profile pictures, and birthdays. The results showed that males disclosed more “basic information” (defined as names, networks, favorites, political and religious views, sex, and languages that one speaks) than did females. However, the findings also showed that both males and females closely monitored what was being disclosed to the public and monitored their privacy by leaving particular elements undisclosed or adjusting privacy settings to make these parts of their profile available only to some users. Self-monitoring was a way for users to filter or limit what items could be seen by others online in a context that allows a multitude of information to be shared quickly and easily, which is not without consequences for users who prefer not to disclose so much.

Focusing, specifically, on the effects of gender, Bond (2009) investigated differences in the type and amount of information that males and females disclosed on SNSs, which included Facebook. One hundred thirty-seven students in an Introduction to Communication class at Midwest U.S. university completed a questionnaire assessing which information about themselves they shared on their online profiles. The findings showed that women disclosed more than males did on those SNSs, and that they used the sites for different purposes, with men using them for the entertainment value of reading others’ posts and viewing their pictures, and to post about sports, whereas women used them to post more pictures and information about themselves.
Bond’s (2009) study and the study conducted by Taraszow et al. (2010) both addressed the type and frequency of self-disclosure behaviors of men and women on SNSs, and they found similar results. These studies, thus, contribute to knowledge about what information is shared on Facebook, by whom, and with what intention, but additional research is needed regarding differences between men’s and women’s self-disclosure behaviors on that particular SNS.

**Hypothesis**

The research reviewed above shows that there are significant difference between the communicative behavior of males and females across many communication channels, including differences in self-disclosure (see, e.g., Derlega & Berg, 1987; Gorcya, 1993). Other studies (Hall, 2010, Jang & Stefanone, 2011; Ledbetter, 2010, and Taraszow et al., 210) suggest different communicative goals of users of computer-mediated communication, and, more specifically, users of SNSs. Research about Facebook as a channel, although relatively recent and still developing, highlights variations in what information is communicated by whom and why. Recent studies that interpret communicative behaviors on Facebook (e.g., Bond, 2009; Nosko, 2010) as they intersect with demographic variables are helpful in determining whether and why differences between groups might exist. Those studies suggest that there may be differences between college-aged male and female users of Facebook in terms of self-disclosure, but the results are not entirely conclusive. However, given that the majority of the literature has shown that females disclose more than males do, it is probable that the same principles apply to disclosure on Facebook. Therefore, the following hypothesis was posed:

H1: Female college students self-disclose more on Facebook than do male college students.
Methods

Participants

Forty participants (20 men and 20 women) from the University of Colorado Boulder campus were nonrandomly selected using a purposive method, with respondents needing to be college students and daily users of Facebook. Each participant signed an informed consent form prior to completing the study.

Procedures

To measure the independent variable of gender and the dependent variable of self-disclosure on Facebook, research participants completed a questionnaire that assessed their gender and measured the number of self-disclosing behaviors in which they engaged on Facebook (see the Appendix). The first question asked respondents to indicate their gender. The second open-ended question asked how many Facebook friends respondents had. The third and fourth questions measured whether respondents had updated their Facebook status, and, if so, how often they did so, using a 6-point Likert-type scale (6 = More than once a day, 5 = Once a day, 4 = A couple of times per week, 3 = Once per week, 2 = Once every 2 weeks, 1 = Once a month or less). The fifth question provided nine descriptions of Facebook profile pictures (“Self and/or Relationship Partner,” “Self and/or Family,” “Self,” “Self and/or Friends,” “Activity,” “Work,” “School,” “Animals,” and “Other”) and asked respondents to check which one best described their profile picture. These descriptions were derived from Nosko et al.’s (2010) study that asked about disclosure on user profiles in SNSs. To analyze the data for this question, these categories were rated in terms of the degree to which they were self-disclosing, as determined by the researchers, by assigning a numerical value ranging from nine to one, with nine being the most self-disclosing. For the sixth question, 20 possible items that Facebook users can share on
their profiles were listed and respondents checked “Yes” in the first column if they shared that piece of information, and checked “Yes” in the second column if they blocked any Facebook friend(s) from viewing that piece of information. The column about blocking information was used to measure which pieces of information respondents restrict in terms of which Facebook friends have access to them. This blocking behavior indicates a lesser degree of self-disclosure than sharing the piece of information with all Facebook friends. To analyze the data for this question, one point was assigned to every item that respondents indicated that they shared on Facebook, and 0.5 points were subtracted for each item that was blocked. Those scores were added to obtain a total disclosure score, with higher scores indicating a higher degree of self-disclosure on Facebook.

Results

The results demonstrated two significant differences between female and male college students with regard to self-disclosure behaviors on Facebook. First, there was a significant difference with respect to how often Facebook status was updated, with males ($M = 3.50$, $SD = 1.79$) updating their status to a greater extent than did females ($M = 2.26$, $SD = 1.19$), $t(33) = 2.44$, $p < .05$. Second, there was a significant difference such that females included more profile pictures on their Facebook pages ($M = 6.90$, $SD = 1.80$) than did males ($M = 3.55$, $SD = 1.79$), $t(38) = 5.89$, $p < .0001$.

The other three items, however, demonstrated no significant differences between male and female college students. Specifically, with regard to number of Facebook friends, there was no significant difference, $t(38) = .17$, between male ($M = 660.00$, $SD = 409.48$) and female college students ($M = 680.55$, $SD = 366.14$). There also was no significant difference between females (95%) and males (87.5%) with regard to whether they had updated their initial Facebook
status, $\chi^2(1) = 2.06$. Finally, there was no significant difference between male ($M = 12.68$, $SD = 4.30$) and female college students ($M = 10.40$, $SD = 5.16$) in terms of shared topics on Facebook, $t(38) = 1.52$.

**Discussion**

The findings revealed some important results regarding gender differences with regard to self-disclosure on social networking sites (SNSs), and Facebook, in particular. Two items demonstrated statistically significant results (how often respondents updated their Facebook status and the number of respondents’ Facebook profile pictures posted), whereas three items that measured the dependent variable demonstrated nonsignificant results (number of Facebook friends, whether respondents had updated their initial Facebook status, and shared topics on Facebook). This section discusses potential meanings of the results, identifies potential limitations of the present study and suggests directions for future research.

The present study found that female college students disclosed more through their Facebook profile pictures than did males, which may be due to normative expectations for female college students on Facebook to post more pictures of themselves, or themselves with relational partners or friends, than do males. The idea of “self-monitoring,” as discussed by Hall et al. (2010), is relevant here because “individuals who are high in self-monitoring other-directed are sensitive to the desires of others, and thus, they are more likely to modify their self-presentation to attract a potential partner” (p. 130). Facebook users self-present though their Facebook profile picture selection, and, in the present study, females engaged in this behavior to a greater extent than did males. These findings potentially point to a more stringent set of norms, rules, and expectations for females on Facebook, compared to males, that can be contrasted with previous normative ideals about gender differences in terms of self-disclosure.
However, the results were not entirely conclusive, as some self-disclosure behaviors in which male and female college students engage on Facebook were not significantly different. That finding stands in contrast to research conducted by Bond (2009), which found that “the overall self-disclosure means were significantly higher for female participants than the overall self-disclosure means of male participants” (p. 33). However, compared to the present study, Bond analyzed more items of potential self-disclosure online and the findings showed that, although women were higher than men, self-disclosure scores for both men and women were high. In contrast, in the present study, male and female college students both shared a moderate amount of information on their Facebook profiles. The lack of differences between males and females with regard to three items may be due to these items seeming “natural” in Facebook’s structure, meaning that they appear as pre-set categories that seem necessary for users to complete; consequently, users may complete them without much consideration. Nosko et al. (2010) observed a similar pattern and hypothesized that it may be that because these features are a prompted or automatic feature present in a FACEBOOK profile, less variability may result for these particular items. Alternatively, these may also be perceived as more “playful” and social opportunities to interact and may not carry any perceived threat in having them as part of the profile. (p. 416)

Male and female college students in the present study also displayed no significant difference in terms of shared topics on Facebook, including, but not limited to, contact information. This finding is in line with Ellison et al.’s (2007) study, which found that “items involving contact information did not result in any significant outcomes as a function of age, gender, network or relationship status” (p. 415). These features, too, seem like a pre-set part of a Facebook profile that users implicitly must supply. However, the overall moderate amount of
information shared by both groups (see the results for the sixth item on the questionnaire) implies that Facebook users are aware of the effects of disclosing too much, which commonly are discussed in popular discourse. This finding echoes the blocking behavior observed by Nosko et al. (2010), validating the notion that users exercise some caution in what they choose to disclose on Facebook.

There also was no significant difference between male and female college students with regard to whether they had updated their Facebook status, although of the males that updated their status, they reported that they did so more frequently than did females. Nosko et al. (2010) explained their similar findings with the idea that “unlike traditional face-to-face interactions, online social networking profiles appear to provide a means of communicating that facilitates disclosure among males to the same level as evidenced in females” (415). In other words, Facebook “levels the playing field” between males and females with regard to self-disclosure, allowing males to engage in this behavior as much as, or more than, females engage in it. Males in the present study took advantage of this medium by updating their statuses relatively frequently.

Although the present study resulted in to some important findings, those findings need to be understood in light of some potential limitations of the study that threaten the internal and external validity of the results obtained. For instance, the questionnaire may have been problematic because the self-report format allowed participants’ responses to be potentially influenced by social pressures and other outside factors, or they may have been inaccurate or incomplete because the questionnaire required recall of specific information about one’s Facebook profile. Direct observation of Facebook users and their profiles could have been more effective, in this respect. The phrasing of some of the items and the response categories that
were provided to respondents also potentially were problematic. Specifically, the second item about whether participants had updated their “initial” Facebook status may have been confusing, as several respondents asked what this word meant in the context of the question. Similarly, the checklist format employed for the fifth item may have been limiting, as some respondents wrote responses in the margins that indicated when they shared partial amounts of this information (e.g., sharing one’s birth date but not birth year) or that they shared information on their Facebook profile but that it was meant to be sarcasm or a joke (e.g., males jokingly sharing their gender on Facebook as “female”). Finally, with regard to external validity, the relatively small, homogeneous sample and the way in which it was selected limit the generalizability of the findings.

Future research is needed to understand more fully whether there are differences between men and women with regard to the disclosure of information on SNSs. In particular, researchers should analyze differences that might occur with regard to Wall posts, comments on posts, picture comments, the content of status updates, and messages exchanged. The effects of other demographic variables on self-disclosure on SNSs also need to be investigated, based on the way that this and other studies (see, e.g., Ellison et al., 2007) suggested that more complex demographic patterns may underlie differences in self-disclosure. For instance, members of the LGBTQ community who use Facebook may disclose less or different information than do other users (e.g., about their gender and sexual orientation), or Facebook users who are in a romantic relationship might share more readily their relationship status on Facebook than Facebook users who are single. Such differences exist in face-to-face communication, as individuals can and do tailor their self-disclosing behaviors based on others’ anticipated reactions. Learning more about how demographics affect self-disclosure differences would be a logical next step to
understanding the way that this communicative behavior functions on SNSs.

Beyond extending the research conducted about communicative behavior on SNSs, particularly Facebook, the findings from the present study also potentially are significant to communication practitioners who deal with the effects of these behaviors, and to the general public. Most salient in practitioners’ discussion of self-disclosure on Facebook is the issue of privacy online. This idea lends itself to problems of online bullying, emotional turmoil, and safety issues grappled with by communication practitioners, such as school administrators and counselors. The findings from this and other studies can lead to establishing guidelines for understanding normal and abnormal behaviors in which self-disclosure occurs, ranging from chatting online to cyberbullying. Educating young people about negative consequences associated with self-disclosure in online communication is an important step in cultivating awareness of, and preventing, these problems. Increasingly, the presence of invisible third parties on Facebook and others SNSs presents a challenge. Particularly for college students, whose self-disclosures on Facebook may be visible to a wide array of invisible third parties (such as potential employers, schools, peers, and others), it is relevant to discuss the importance of privacy and which behaviors might be appropriate and inappropriate on Facebook. For instance, knowing that potential employers can view people’s Facebook profiles and photographs might compel college students to engage in less self-disclosing behaviors and more blocking behaviors on Facebook to make their profiles more appropriate for this invisible audience.

**Conclusion**

Understanding self-disclosure behaviors is fundamental to communication research, especially with regard to popular online social networking sites, such as Facebook. This study found two significant differences in the self-disclosure behaviors engaged in on Facebook by
male and female college students, and it pointed to other important patterns that extend understanding of this important topic. These findings are particularly relevant in the context of the rise of the information age and the expansion of Facebook as a social networking site, in particular. The findings suggest that users of these relatively new technologies are developing a knowledge and culture of appropriate behaviors that researchers are beginning to study. Future research about Facebook will provide even more insight about communicative behaviors that are valued within this mediated context, and what implications those behaviors might have on the development of people and society during the internet age.
References


Appendix: Questionnaire

Please answer the following questions to the best of your ability:

_____ Male  _____ Female  1. What is your gender?

_____  2. How many Facebook friends do you have?

_____ Yes  _____ No 3. Have you updated your initial Facebook status?

4. If you answered YES to Item 3, how often do you update your status? (Check the appropriate line):

_____ More than once a day
_____ Once a day
_____ A couple of times per week
_____ Once per week
_____ Once every 2 weeks
_____ Once a month or less

5. Which of the following best describes your profile picture?

_____ Self
_____ Self and/or Friends
_____ Self and/or Relationship Partner
_____ Activity
_____ Self and/or Family
_____ Animals
_____ Work
_____ School
_____ Other

PLEASE TURN OVER PAGE AND COMPLETE THE FINAL QUESTIONS
6. For each item below, please check *YES* if you share it on your Facebook profile. For any of the items to which you answered *YES* to sharing it, please check *YES* if you block any of your Facebook friends from viewing that item.

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