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Effects of Gender and Facebook Use on the Development of Mature Interpersonal Relationships

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Abstract

Social media is ubiquitous, particularly with today's college students. How the use of various social media platforms impacts student development remains a largely under-researched area. Little is known about how men's and women's use of programs like Facebook impact their psychosocial development; in particular, their development of mature interpersonal relationships. This study analyzed the effects of gender and the intensity of Facebook use on college students' development of mature interpersonal relationships at a large Midwestern university. Small, significant negative relationships existed between the development of mature interpersonal relationships and Facebook use intensity, with slightly more negative correlations found when only peer relationships were considered. A two-way ANOVA revealed significant effects of both gender and Facebook use intensity on the development of mature interpersonal relationships. A significant difference was found between heavy and light Facebook users, with students who use Facebook more intensely having less developed mature interpersonal relationships than those who do not. Results are discussed regarding the potential negative influence Facebook use has on mature interpersonal relationships.

Keywords: Chickering, Facebook, gender, mature interpersonal relationships, peer relationships, social media

The early 21st century saw the dawn of a new era of information sharing on the Internet: social media (O'Reiley, 2007). Rather than focusing on news or other industry-generated information, social media is focused on the generation of content created by users, more commonly referred to as User Generated Content or UGC (Lee, Miller, & Newnham, 2009). Its vitality is dependent on a continued stream of people uploading, commenting, sharing, tagging, and creating content within their portals to the Internet.

College students between the ages of 18-24 have largely accepted social media into their lives (Ellison, Lampe, & Steinfield, 2008; Strayhorn, 2012). Social networking sites such as Facebook have become ubiquitous in the college environment; likewise, many colleges are integrating social media into their classrooms and campuses (Munoz & Towner, 2009; Trescott, 2009). A concern arises whether social media is positively impacting college students, their development, and the university environment (Strayhorn, 2012).

The experience of social networking likely touches many pathways of college student development; among them is psychosocial development, an area in which gender differences are often evident (Foubert, Nixon, Sisson & Barnes, 2005; Utterback, Spooner, Barbieri, & Fox, 1995). The present study will help build a knowledge base regarding Facebook and social

media and examine the role it plays in a college student's development. Specifically, this study seeks to assess students' usage of Facebook and how it impacts students' development of mature interpersonal relationships as conceptualized by Chickering and Reisser (1993).

Chickering and Reisser (1993) offer a comprehensive theory of the psychosocial development of college students. Over time, this theory has been revised, mostly validated, and reconfigured by numerous authors (Foubert et al., 2005; Martin, 2000; Reisser, 1995). Chickering and Reisser explained development through a series of vectors, a term used to convey direction and magnitude. These vectors consist of developing competence, managing emotions, moving through autonomy toward interdependence, developing mature interpersonal relationships, establishing identity, developing purpose, and developing integrity (Chickering & Reisser, 1993; Reisser, 1995).

The developing mature interpersonal relationships vector consists primarily of being tolerant and appreciative of differences along with having a capacity for healthy, honest intimacy with others (Chickering & Reisser, 1993). Participation in Facebook helps students establish commonalities with others expeditiously (Ellison et al., 2008; Ellison, Lampe, & Steinfield, 2007). The connections students make can allow for tailored conversations or engagement tactics to best suit relationships in the physical world (O'Neill, 2011).

The mature interpersonal relationships vector is a gendered construct. For example, early research showed that relative to men, women develop a much greater capacity for intimacy (Straub, 1987). Intimacy is a major component in Chickering and Reisser's (1993) mature interpersonal relationships vector. In their updated second edition, Chickering and Reisser (1993) noted that women move along the mature interpersonal relationships vector earlier than men. Later research on this theory showed that women are particularly advanced in this vector's subtask of tolerance. In fact, women begin college with higher tolerance scores than men achieve at the end of college (Foubert et al., 2005). Thus, in the present study the authors selected gender as a key variable of interest.

Chickering and Reisser's (1993) development of mature interpersonal relationships vector has a logical connection to Facebook use. Students in high school might have had limited exposure to diverse populations, and most college environments present new types of people for the student to experience. Through the exercise of adding new Facebook "friends", a student is able to build the groundwork for new, potentially long-lasting relationships.

This study has been developed to examine the influence of male and female college students' use of Facebook on the development of their interpersonal relationships. Through the utilization of the Student Development Task and Lifestyle Assessment (SDTLA, 2010) in tandem with the Facebook Intensity scale (Ellison et al., 2007), this study will determine whether there is a connection between students' use of social media and the development of their interpersonal relationships.

Research Questions

Our study focused on two major research questions. First, we wanted to determine whether Facebook usage impacted college students' development of mature interpersonal relationships. Secondly, we wanted to determine whether there were joint effects of gender and intensity of Facebook use on mature interpersonal relationships.

Method

Sample and Participant Selection

This study surveyed 200 participants from a sample of students from a variety of different organizations on a large public campus in the Midwestern United States. This convenience sample (Creswell, 2013) was constructed through referencing the institution's database of student organizations and selecting several organizations that we reasonably hypothesized would establish a representative sample of the campus population. The demographics of participants matched the population demographics on campus for gender and for race with the exception of a higher number of African American students in the sample and slightly fewer Caucasian students than in the general population.

The sample consisted of 32 completed responses from a social fraternity (80% of those present when data was collected and 43% of 74 active members registered with the University); 31 completed responses from a social sorority (52% of those present and 19% of 161 active members); 79 completed responses from the Residence Hall Association (88% completed surveys; 79% of the total organization membership); and 17 responses from The Off-Campus Student Organization, with 17 present during survey administration and 19 registered members (100% response, 89% of total membership). Responses also came from 27 students from the African American Student Organization, with 45 present during survey administration and 31 registered members (60% response; over 100% of the number of registered members responding, including some attendees who regularly took part in organization activities but had not yet registered as members of the organization); six completed responses from graduate students in a higher education course, with eight students present and nine registered in the class (75% present response, 66% overall group response); 6 responses were from undergraduate students solicited by personal interaction with residence life staff members in a building with a 100% percent response rate, and 2 completed responses from a College of Education volunteer human subjects pool. Participants completed paper and pencil surveys in regularly scheduled organizational meetings under standard testing conditions. The overall response rate for those present during survey administration was 75% (200/268).

Of this sample, there were 91 males and 109 females; a mean age of 21 ($SD = 2.7$). Class years were 75 freshman, 43 sophomores, 47 juniors, 19 seniors, and 15 other; 119 lived on campus, 1 at home with parents, 3 at home with spouse or partner, 9 in an on campus apartment, trailer, or house (not with parents), 29 in an off campus apartment, trailer, or house (not with parents), and 37 in a fraternity/sorority house. The racial background of participants as indicated by survey responses was 70% Caucasian, 17% Black or African American, 1.5% Hispanic, Latino, Latina, or Mexican American, 2% Asian or Pacific Islander, 4% Native American, 3% bi-racial or multicultural, and 1% other. One participant was removed per specifications from the SDTLA Technical Manual (Winston, et al., 1999), due to a high response bias score. These demographics matched population demographics with the exception of more African Americans in the sample and fewer Caucasians than on the campus.

Materials

Participants completed questions from the Student Development Task and Lifestyle Assessment Mature Interpersonal Relationship Task (Winston, 1999). This questionnaire measures participants' tolerance toward others and their capacity for intimacy. This questionnaire consists of 47 questions addressing two subtasks: peer relationships and tolerance. The peer relationships subtask examines the quality of each participant's peer relationships, while the tolerance subtask questions the level of tolerance that each participant has for those with

different characteristics (race, background, beliefs, cultures, appearance, etc.) around them. Test-retest reliability of the SDTLA is .8; alpha coefficients are reported between .62 and .88 (Winston, Miller, & Cooper, 1999). The validity data specifically for the Mature Interpersonal Relationships Task and Subtasks was correlated with the total score for the Multi-group Ethnic Identity Measure (MGEIM) (Phinney, 1992). The correlations are listed in the SDTLA Technical Manual (Winston, et al., 1999).

Participants also completed the Facebook Intensity Scale, which was designed to measure how engaged participants were with Facebook, how emotionally connected the individual was to Facebook, and how much a part of daily activities Facebook was for the individual (Ellison et al., 2007). Authors report a Chronbach's alpha of .83. This portion of the survey consisted of six questions with responses on a five-point Likert scale ranging from strongly agree to strongly disagree. The seventh and eighth questions determined how many "friends" each participant had on Facebook and how much time each participant spent daily on Facebook, respectively. The overall Facebook intensity score was found by computing the mean of all items on the scale.

Procedure

The data was collected through the administration of a survey consisting of 61 items. The surveys were administered under normal testing procedures to several groups of participants. Participants were each given an instructional packet including the statement of informed consent, our survey, and a Scantron answer sheet.

Results

Correlation of Mature Interpersonal Relationships and Facebook Intensity

A small, significant negative correlation between mature interpersonal relationships and Facebook use intensity exists ($r = -.15, p < .05$). As Facebook use intensity increases, the development of mature interpersonal relationships decreases. When measuring the correlation between the peer relationships task of the Mature Interpersonal Relationships Task with the Facebook Intensity scale, a stronger relationship is evident, ($r = -.244, p = .01$). The peer relationships subtask measures open, honest, and trusting relationships with peers balancing dependence and self-assured independence (Chickering & Reisser, 1993).

Gender Differences

We explored whether there was a difference in the impact of Facebook use on the development of mature interpersonal relationships between females and males. For females, there was no significant correlation between Facebook use and development of mature interpersonal relationships, as defined by Chickering and Reisser (1993). However, there was a significant negative correlation between peer relationships among females and Facebook intensity ($r = -.234, p < .05$), such that females who had more healthy peer relationships used Facebook less intensely. The same held true with males. Mature interpersonal relationships as a whole and Facebook intensity were not related; however, peer relationships (a subset of mature interpersonal relationships) and Facebook intensity were significantly correlated ($r = -.268, p < .05$). Those who had healthier more healthy peer relationships reported using Facebook less intensely.

ANOVA Test Between Gender and Light and Heavy Users

We also explored whether heavy or light Facebook use impacted the development of interpersonal relationships. The top 25% and bottom 25% of respondents on the Facebook intensity scale were isolated for analysis of heavy and light users, respectively. Analysis of variance revealed a significant difference for heavy and light Facebook usage where $F(1, 99)$

= 6.867, $p < .01$ with a medium effect size ($d = .46$). In addition, a significant difference emerged for gender $F(1, 99) = 3.805$, $p = .05$ with a low to medium effect size ($d = .33$). No interaction resulted ($p > .05$). Thus, in both cases, heavy Facebook use yields lower scores in the Mature Interpersonal Relationships task and lighter scores yield higher Mature Interpersonal Relationships scores.

Discussion

We found a small, significant negative correlation between Facebook use and mature interpersonal relationships. Those who use Facebook more intensely report a lower quality of interpersonal relationships than those who does not use Facebook as intensely. The lower quality of relationships corresponding with higher Facebook use was particularly evident regarding peer relationships. If there had been a higher correlation coefficient, it would likely be cause for greater concern about whether Facebook has a negative association with the quality of college students peer relationships; however, a correlation of $-.150$ when the entire Mature Interpersonal Relationships Task is taken into consideration and up to $-.244$ when only the Peer Relationships Subtask does not seem to arouse concern.

Among those who use social media, the majority of their interpersonal interactions with those they know take place face-to-face, with only a lesser percentage online (Baym, Zhang, & Lynn, 2004). Previous literature and present results suggest that Facebook use may partially take the place of time spent with email, chat and instant messaging (Ellison et al., 2007; Hicks, 2010).

When examining the effect size differences between the influences of gender versus the influence of heavy and light Facebook usage, one can see heavy and light Facebook usage is associated with greater developmental difference than is gender. This finding demonstrates that although gender has an influence in mature interpersonal relationships, it is less important than some experiential factors; in this case, intensity of Facebook use.

This study supported the assertion that Facebook influences development along Chickering and Reisser's (1993) fourth vector of mature interpersonal relationships. While the results displayed a small significant, negative correlation between Facebook use intensity and the development of mature interpersonal relationships, of particular interest is the increased Facebook use yielding a significant difference in the development of mature interpersonal relationships, with a stronger effect than the gender of the student. As time unfolds and use of social media becomes further ingrained into the culture, it will be interesting to follow the trend of college students' Facebook use intensity and how such use impacts developmental variables.

This study's results were primarily based upon a convenience sample. While this convenience sample was intentionally constructed to provide a comprehensive snapshot of the institution where the study took place, it is limited by participants who were not selected from a large random sample. While the SDTLA is a reliable and valid instrument, it originated in before the advent of social media, proving to be another limitation. Had the SDTLA been developed after the insertion of social media into culture, it is likely that the instrument would have included measures of online interaction in its conceptualization. With this piece not in the current SDTLA, a significant part of student interaction is left unconsidered.

Implications for Research

This study provides a number of implications for future research. Given our finding that 6% of the variance accounted for in mature interpersonal relationships is due to intensity of Facebook use, it may be time to start taking this effect into account when considering student development. Chickering and Reisser (1993) and many other foundational theorists had few

indications of the internet and social media, let alone how these technologies would impact student development. As student populations continue to evolve, theories describing them should be written to include considerations for these new facets of students' lives.

One final consideration for future research is the inclusion of other social networks or forms of social media. Twitter has been shown to have an influence on student engagement both in and beyond the academic setting (Junco, Heiberger, & Loken, 2010), and some institutions are using LinkedIn to maintain connections with their alumni (Hall, 2011; Roblyer, McDaniel, Webb, Herman, & Witty, 2010). Studies on social media should be conducted to analyze how students might make use of various platforms and what impact each may have on developmental variables.

Implication for Practice

This research poses both opportunities and challenges for student affairs professionals and their respective departments or divisions. Because students are using Facebook more intensely, they may not be engaging with the real world as much as in the past. For college student educators, this could mean a change in tactics for reaching out to students, placing additional emphasis on social media channels as a means of engagement. Departments and divisions limiting themselves to using social media merely as a means to disseminate information are doomed to be viewed as an outdated message board (Nester & Daniels, 2011; Stoller, 2011). Institutions and departments should seek to engage and connect through these channels rather than simply using them as one-way communication devices. If there is no two-way communication occurring, information is less likely to reach desired audiences. With institutions seeking to cut costs and be more efficient than ever while maintaining effectiveness (McCaffery, 2010), using social media as a tool for engagement, education and development might prove to be one of the solutions to this difficult task. Fortunately, social media appears to be where the students are; institutions may plug in and take advantage of all of the possibilities available to them through this ever-evolving channel of communication.

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