Bridge or Barrier: The Impact of Social Media on Engagement for First-generation College Students

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Abstract

Social media, such as Facebook and Twitter, are an integral part of communication for today's college students. This research explores whether this shift in communication functions to create more connections or whether it functions as another avenue for social reproduction of privilege for first-generation college students. Analysis on how first-generation students use social media to build and maintain social connections along with what factors most impact the formation of social capital through social media suggests that first-generation students use social media less than their peers, especially in building new relationships and in learning about events on campus. Despite this, social media use is still an important tool in making connections to peers and faculty on campus for first-generation students.

Today's college students have grown up in a world where connections are developed, maintained and expressed online. Increasingly, students use social media and social networking sites like Facebook, Twitter, LinkedIn, and Google+ to stay connected to friends and family, meet new people on campus, and connect to faculty and staff. Indeed, increased use of social media to connect students to each other and to faculty is significantly related to a number of aspects of student engagement and development (NSSE, 2012; Haeger, Rios-Aguilar, BrckaLorenz, & Diel-Amen, 2013). The connections that students make through social media can benefit them in their college experience as well as form networks that can benefit them in their future careers. The development and maintenance of social capital, the social networks that connect students to resources or advantages in college or the job market, through social media has become an important part of students' transition to college, their performance in college, and their career trajectory (Bourdieu, 1986; DeAndrea, Ellison, LaRose, Steinfield, & Fiore 2012).

A great body of research has illustrated the link between educational success and social capital along with the ways that social capital functions to recreate structures of privilege within the educational system (Auebrach, 2002; Coleman, 1992; Conley, 2005; Dika & Singh, 2002; Deil-Amen & Tevis, 2010; Horvat, Weininger & Lareau, 2003; Lareau, & Horvat, 1999; Perna, & Titus, 2005; Tierney, & Auerbach, 2005). As students build their social capital through social media, it is important to understand how this new technology functions to diminish or increase the reproduction of privilege. Social media technology has the potential to create new avenues for traditionally less connected students to interact more with other students, with faculty members and staff, as well as to learn about insider information that they would not have had sufficient access to (e.g. campus advisors posting internships on their Facebook feed). On the other hand, social media may simply serve as a new venue for already privileged students to continue increasing their social capital while still excluding less privileged students. This study will explore the role of social media in developing social capital for students who traditionally enter college with less social capital--first-generation college students. First-generation students are defined as students whose parents have not graduated from a four-year college. The specific research questions that will be addressed are:

1. Do first-generation students use social media to build social capital more or less than other students?

a. Do first-generation students interact with faculty, student affairs professionals, peers on campus, peers from home, and family through social media more or less than other students?

b. Are first generation students more or less likely to have active communication with institutional agents through social media?

2. Does increased social media use influence the development of social capital for first-generation students?

Conceptual Framework

Social media has a close relationship with facilitating the development and maintenance of social capital (Junco, Merson & Salter, 2010). Social capital has been widely used in education research to understand the reproduction of privilege (Bourdieu, 1986; Perna & Titus, 2005; Valenzuela, Park & Kee, 2009). In this paper, social capital will be operationalized as the quality of relationship students build with faculty, administrators, and peers on and off campus, along with the amount of interactions with faculty and staff. These measures along with the distinction between active and passive communication will address the quality and quantity of the social capital students develop in college.

Several studies have explored the relationship between social media and social capital among college students. Ellison, Steinfield and Lampe (2007) claimed that college students tend to use social media to maintain close connections with existing friends and their home community. Valenzuela, Park and Kee (2009) argued that a positive relationship existed between Facebook usage and college students' social capital including developing information channels. These studies reflect a positive relationship between social media and social capital.

Studies also examined the impact of social media use on college student engagement (Junco, 2011; Junco, Heiberger & Loken, 2011; Valenzuela et al., 2009). Social media sites provide students with wider access to diverse social support networks and shorten the distance between students, faculty and staff within the college community, which is important for first-year students' college transition (DeAndrea et al., 2012). In addition, Junco (2011) found a positive relationship between time spent on social media, like Facebook, and student engagement in co-curricular activities. This research will expand on previous studies by using a more recent

and larger scale dataset to examine whether social media serve as a bridge or barrier in building social capital for first-generations students.

Methods

In order to examine how students are using social media, data from the National Survey of Student Engagement was used (NSSE, 2012). In addition to the core survey which asks students questions about who they interact with, how they spend their time, the quality of their interactions in college, and their perception of campus environment; a set of additional questions was asked of 19,000 students at 42 colleges and universities. These questions focused on students' social media use in college and included questions such as whether or not students use social media, and how often they use it to communicate with friends, family, and institutional agents. In addition, students were asked about the types of interactions they had with various member of the campus community; specifically, students were asked if they had active (two-way, talking back and forth through social media) or passive (one-way, only reading posts from the person/office on social media) communication. Students were also asked about how often they used social media in educationally purposeful ways: to plan study groups, work on group projects, or as part of an in-class activity. Finally, students were asked how often they used social media during class (not related to class activities) to measure how often students were distracted by social media in class. Factor analysis with a Varimax rotation was used to create scales (see Appendix I for the full question set and Table 1 for scales and component items).

All students were included in the preliminary analysis on use of social media. For subsequent analysis, the sample was limited to only students who have used social media. Comparative analysis (t-test and chi-square) was used to answer the first research question about frequency of use and active or passive communication through social media. Cohen's d effect size was also computed. Ordinary Least Square (OLS) regression analysis was used to answer the last research questions on the impact of social media use on social capital. First-year and senior data were analyzed separately in order to present distinct results reflective of the first-year and senior experiences in college.

Findings

Though the vast majority of students use social media, first-generation students use social media slightly less than their peers do (89% / 92%). This difference is small but statistically significant ($p<.001$, $d=.04$). Furthermore, first-generation students use social media less often to connect to people on campus. First-generation students less often use social media to communicate with friends from college (first-year: $p<.001$; $d=.19$; senior: $p<.001$, $d=.43$), and first-generation seniors used social media less to make new friends in college when compared to other seniors ($p<.001$, $d=.18$). First-generation students are also less likely to learn about student activities (first-year: $p<.001$, $d=.19$; senior: $p<.001$, $d=.34$) or clubs (first-year: $p<.001$, $d=.19$; senior: $p<.001$, $d=.35$). First-generation seniors use social media less to learn about internship opportunities ($p<.001$, $d=.15$) or to plan study groups (first-year: $p<.001$, $d=.18$; senior: $p<.001$, $d=.25$). First-generation seniors used social media less than other students not only during class (for non-class related activities) (first-year: $p<.001$, d$=.18$; senior: $p<.001$, $d=.12$) but also in completing class project or homework assignments ($p<.001$, $d=.12$). There was no significant difference in how much students connected with faculty.

First-generation freshmen used social media more to stay connected to family though this difference was small ($p<.05$, $d=.06$), but first-generation students less often used social media to connect to friends from home (first-year: $p<.001$, $d=.19$; senior: $p<.001$, $d=.28$). The fact that first-generation students are using social media less to make friends in college, maintain relationships with peers, and learn about opportunities and activities supports the notion that first-generation students are not building the same level of capital through social media as their peers are. Nonetheless, first-generation students report being slightly less distracted by social media during class.

It is also important to examine what occurs during student interactions, namely, are students passively receiving communication or actively engaging in conversations through social media (see figures in Appendix II). In their first-year of college, there was no significant difference in the amount of interactions with faculty, but in their senior year, first-generation students less often communicated with faculty ($\chi^2 = 12.6$, $df=2$, $p<.05$). The fact that in their last year of college, first-generation students are not connecting with faculty in the same way is particularly concerning because these are the relationships that could lead to positive letters of recommendation or other connections to possible employment or graduate education

opportunities. First-generation students communicated with financial advisors more in both their first-year and senior year, in both active and passive communication (first-year: $\chi^2 = 9.5$, $df = 2$, $p<.05$; senior: $\chi^2 = 32.4$, $df = 2$, $p<.05$). This is likely because more first-generation students utilize financial aid and that they have less access to knowledge about the financial aid system through their parents. Though being able to access information about financial aid through social media is of extreme importance during college, these connections are not likely to yield lasting social capital that will help students beyond college. First-generation students interacted less with student activities advisors (first-year: $\chi^2 = 40.0$, $df=2$, $p<.05$; senior: $\chi^2 = 56.4$, $df=2$, $p<.05$) and more often had passive communication. This difference was statically significant for first-year students ($p<.001$, $d=.15$).This disparity in connecting with student activities personnel is problematic not only in the capital students are building or not with the actual personnel, but also in the missed information about ways to be involved in student activities that could lead to other social networks and opportunities to build capital. This disparity in interaction may affect students differently throughout their education. Students in their first-year of college may miss out on opportunities that could better connect them to the campus community or build relationships with their peers on campus. Seniors who are not connecting to student activities personnel may be missing opportunities to build networks that could connect them to opportunities and resource beyond college.

Benefits of social media use in college

To further understand how social media use by first-generation students impacts their interaction with faculty, staff and peers in college, linear regression models were created. Results suggest that social media use is significantly related to increased connections with faculty and the quality of relationships with students and staff on campus. Regression results are displayed in Table 2. Interacting with faculty about course related and non-course related topics were significantly related to increased connections to faculty for both first-year and senior students. Communicating with staff and administrators through social media had a small but positive effect on the quality of relationships with staff and administrators in general. It is probably that the benefit of communication with these institutional agents is not only in the relationships students are building, but in the information they are accessing through these interactions. Students' academic interactions with peers over social media were related to a small increase in

their quality of relationships with peers; however, interactions around socializing on campus had a stronger, positive effect on peer relationships. Specifically, finding out about school activities, learning about clubs and organizations, along with making and maintaining friendships with other students were significantly related to overall quality of relationships with peers.

Implications

The proliferation of social media on college campuses has created new avenues for students to build and maintain connections to their peers, to faculty, and to staff members. Though this technology creates a new medium for developing social capital in college, this research illustrates that this new media are subject to the same systems of privilege that have traditionally advantaged upper-class students. Though first-generation students only use social media slightly less than their peers, they are significant differences in the types of interactions they are having and the social capital they are building during college. This research illustrates that first-generation students are not making the same connections with peers on campus or connecting to information channels to learn about student activities and opportunities. Without conscious effort to make sure traditionally disadvantaged students are also connected through social media, this technology does not bridge the gap in social capital development in college. By exploring how students are using social media and how this varies by parental education, we will better understand how to use this technology in ways that promote greater equity instead of simply reproducing the same structures of privilege through a new medium.

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NSSE 2012 Social Media Extra Items

1. Do you use social networking technology (Facebook, Twitter, LinkedIn, Google+, etc.)?

2. During the current school year, how have you used social networking technology (Facebook, Twitter, LinkedIn, Google+, etc.) to communicate with the following?
Response options: I don't use social networking to communicate with them, I only read information they distribute using social networking, I interact with them using social networking

    a. Faculty

    b. Academic advisors

    c. Career services staff

    d. Librarians

    e. Financial aid staff

    f. Housing/Residence Life staff

    g. Student Activities advisors (student organizations, Greek Life, etc.)

    h. On-campus or work-study employers

3. During the current school year, how often have you used social networking technology to do the following?
Response options: Never, Sometimes, Often, Very Often

    a. Plan study groups or tutoring sessions

    b. Complete homework assignments and class projects

    c. Learn about internship opportunities

    d. Communicate with faculty or advisors about your courses

    e. Communicate with faculty or advisors about non-course-related topics

    f. Find out about school-sponsored social events and activities

    g. Find out about student clubs and organizations

    h. Meet new people at your college or university

    i. Communicate with friends at your college or university

    j. Communicate with friends outside your college or university

   k. Communicate with and remain connected to family

4. During the current school year, how often have you used social networking technology during class to do the following?

Response options: Never, Sometimes, Often, Very Often)

     a. Activities unrelated to the class

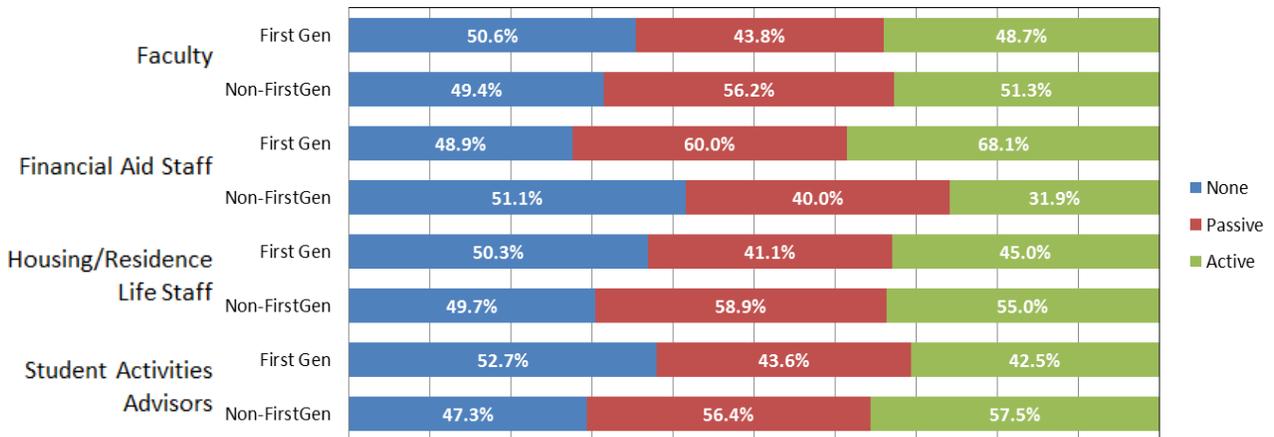   b. Assignments or activities related to the class

Appendix II

Figure 1. First-Year Students' Communication with Social Media
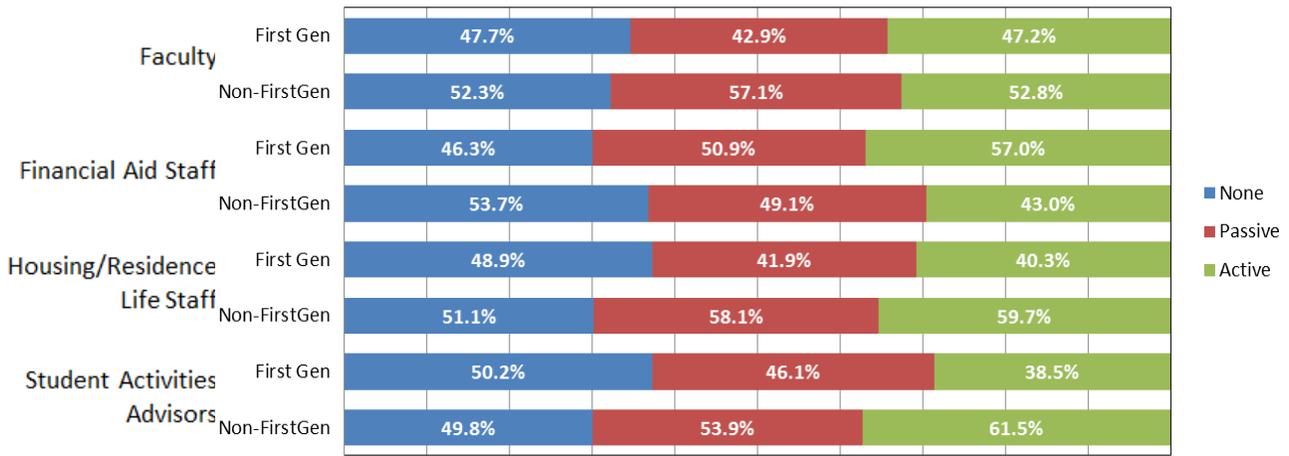
Note: The graph excluded students who never used social media.

Figure 2. Senior Students' Communication with Social Media

Note: The graph excluded students who never used social media.

Table 1

Scales and Component Items Representing Students' Use of Social Media

Scale and Item	Mean	SD
Academic Peer Interaction (α = .76)	1.89	.85
Plan study groups or tutoring sessions	1.96	1.03
Complete homework assignments and class projects	2.10	1.12
Learn about internship opportunities	1.64	.93
Interaction with Faculty (α = .85)	1.47	.80
Communicate with faculty or advisors about your courses	1.54	.92
Communicate with faculty or advisors about non-course-related topics	1.39	.80
Interaction with Staff and Administrator (α = .77)	1.56	.41
Academic advisors	1.72	.81
Career services staff	1.55	.68
Librarians	1.39	.64
Financial aid staff	1.42	.66
On-campus or work-study employers	1.74	.81
Socializing on Campus (α = .85)	2.29	.91
Find out about school-sponsored social events and activities	2.17	1.08
Find out about student clubs and organizations	2.02	1.05
Meet new people at your college or university	2.14	1.10
Communicate with friends at your college or university	2.84	1.10
Socializing Off Campus (α = .79)	3.19	.91
Communicate with friends outside your college or university	3.23	.97
Communicate with and remain connected to family	3.15	1.00

Table 2

Summary of significant findings from OLS Regressions

		Student-faculty interaction	Quality of relationships with peers	Quality of relationships with staff and administrators
Academic peer interaction	FY[b]		.069*	
	SR[b]		.065*	
Interacting with faculty	FY	.306***		
	SR	.239***	-.050*	
Interacting with staff and administrators	FY			.084***
	SY			.091***
Socializing on campus	FY		.263***	
	SR		.171***	

Note: p<.001***, p<.01**, p<.05*

[a]This table presented standardized beta coefficients from three OLS regressions measuring the impact of social media use for first-generation students on student-faculty interaction, relationships with peers, and relationships with staff. The sample is limited to first-generation students. Controls included gender, enrollment, race or ethnicity, age, self-reported grades, transfer, living on campus, major, working, international, distance education, Carnegie classification, and institutional control.

[b]FY=First year, SR=Senior