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Using Social Networking for Educational and Cultural Adaptation: An Exploratory Study

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ABSTRACT

This study investigates how an innovative technology, social networking, can be used in the process of building and maintaining social capital and exchanging knowledge in an educational setting. We employ a qualitative methodology, autoethnography, to examine how social networking can help students learn from other classmates and professors, exchange knowledge, and adjust both to a new program of study and to living in the United States. Using the theoretical foundation of social capital (Jacobs, 1960) and a social support framework created by Drentea and Moren-Cross (2005), autobiographical narratives are classified as instrumental support, emotional support, and community building. Our findings provide evidence that social networking sites can enhance social capital through these mechanisms in a doctoral education context, and our research serves as an important first step in addressing a gap in educational and cultural adaptation studies using social networking tools.

Keywords

Social networking, cultural adaptation, educational adaptation, Facebook.

INTRODUCTION

As with many emerging technologies there is growing interest in the use of social networking within formal education settings. In general a call has been made for educators at all levels to "explore ways in which they could use social networking for educational purposes" (NSBA, 2007, p. 1). Facebook is no exception. Because of its origin in an academic setting and because it is already used extensively among students, it has been identified specifically as a potential tool to be used among students in higher education. According to Bowers-Campbell (2008), "Facebook is student-friendly, student-centered, and student-controlled; the social nature of Facebook invites participation instead of mandating it" (p. 82). As suggested by Charnigo and Barnett-Ellis (2007), "by exploring new types of internet services such as Facebook instead of quickly dismissing them as irrelevant, we might learn new ways to reach out and communicate with a larger segment" (p. 31).

In this study, we investigate the use of a social networking tool such as Facebook to help students adapt to a new educational and sometimes cultural environment. There is a paucity of research in this area. While there are some studies that investigate this innovative tool in an educational setting, we found no studies that specifically relate to the issue of adaptation in an educational context. One of our research contributions is that we provide an initial exploratory study in this area and begin the dialogue of how social networking can help students more easily adapt to their educational setting. A second contribution is viewing social networking through the lens of an established social capital framework to better understand the process of building and maintaining social capital in an educational setting. Third, we provide a launching point for future research and suggestions on how to proceed.

SOCIAL NETWORKING

Online social networking describes participation in a type of online community that strives in some manner to represent the offline social interactions of individuals. An online social network usually refers to a particular social networking site (SNS) that utilizes the Internet to create, manage, and maintain an online community of individuals. Social network sites generally share a core set of features which include a profile (representation and/or description) for each user, the means to build and manage a personal relational network (i.e., friends, family, acquaintances, etc.), and access to creative methods to

communicate with the members of their relational network and the online community (Gross & Acquisti, 2005; Ellison, Steinfield, & Lampe, 2007; boyd & Ellison, 2008).

The birth of online social networking has been attributed to an online community called SixDegrees.com which launched in 1997 (boyd & Ellison, 2008). SixDegrees.com was the first to put together the user profile, friends lists, and the means to view the lists of friends. Since then many social networking sites have emerged and offered various instantiations of these core features for a variety of purposes. LinkedIn.com has developed a reputation as a social networking site for professional contacts, while eBay has added social networking functionality to its already established online auction format (Yen, 2007). MySpace and Facebook have developed a huge following from individuals seeking others with shared interests or similar educational status (Ellison et al., 2007). Social network sites currently enjoy internationally broad usage and seem to be increasing steadily in popularity. Through November of 2008, some social networking sites have experienced usage growth rates of 100% or more per year as measured by unique visitors (Schonfeld, 2007, 2008).

EDUCATIONAL USE OF SOCIAL NETWORKING

Although empirical studies examining the use of Facebook in educational settings are scarce at the moment, the following themes are representative in of the types of research being conducted in this area. The first theme is directly related to discussing how Facebook may help to increase self-efficacy and self-regulation among students. The second theme is focused on faculty members using Facebook and how their level of self-disclosure impacts the students. The third, although not directly related to an educational setting, is concerned with how the personality of students might impact their perception, adoption, and use of an SNS such as Facebook.

Bowers-Campbell (2008) examined the use of Facebook as a tool for improving academic motivation among university students enrolled in a developmental reading course. In an effort to address student self-efficacy, Bowers-Campbell (2008) suggested the use of "superlatives" or "virtual gifts" as a way to award students for their achievements in the course. Also mentioned as a way to increase self-efficacy was the utilization of Facebook to foster a sense of "connectedness" between the student and instructor; that is, even before the course begins students can familiarize themselves with the instructor via their profile. This provides the student with a level of control and may potentially create a "classroom of students who accept and support each other" (p. 80). Not only does Facebook facilitate a connection between student and instructor, it also provides a mechanism for building peer support among students. Creating groups, "poking" class members, and providing photos and profiles, are all under the control of the student providing a sense of ownership and control over their learning environment. Bowers-Campbell (2008) argued in regard to student self-regulation, that SNS technology provides a large measure of autonomy and may "reinforce self-regulated learning strategies" (p. 81).

Mazer, Murphy, and Simonds (2007) hypothesized that the level of self-disclosure on the part of the instructor via Facebook would have an effect on student motivation, affective learning, and classroom climate. Thus, an instructor perceived by the students as high in self-disclosure would lead to higher levels of motivation and affective learning, as well as foster a more positive classroom climate. This study utilized 133 undergraduate students enrolled in a basic communication course. Three experimental conditions were developed based upon an instructor with high self-disclosure, medium self-disclosure, and low self-disclosure. The results supported the hypotheses that a higher level of self-disclosure on the part of the instructor resulted in higher levels of motivation, affective learning, and a positive classroom climate. This study suggests that the use of Facebook for educational purposes is not solely dependent upon the students and their use and familiarity with Facebook, but that the approach taken by the instructor is also important to successful implementation. In fact, it might be said that to a large degree the instructor's willingness to use the features of Facebook will directly impact the student's perception of the instructor, the course, and their own willingness to use these features as well.

Although not directly related to the use of Facebook in an educational setting, Ross, Orr, Sisic, Arseneault, Simmering, and Orr (2008) conducted a study among undergraduate students to explore the personality and competency factors that influenced students' use of Facebook. The study included ninety-seven students completing a questionnaire developed by the authors. The authors utilized the Five-Factor Model which includes the following traits: neuroticism, extraversion, openness to experience, agreeableness, and conscientiousness. In addition, the authors also included issues related to competency. Ross et al. (2009) hypothesized that students high in extraversion would use Facebook and its features more often, have more friends, and belong to more groups. The authors also posed the question, "how would competency and familiarity factors be related to the functions of Facebook that participants utilize?" (p. 580). In regard to extraversion the results indicated that students high in extraversion did participate in more groups; however, number of friends, online time, and use of communicative features were not significant. Competency factors indicated that those high in CMC motivation spent more

time on Facebook per day. In sum, the authors stated, "one of the most surprising outcomes from the present study was the relatively few significant findings in relation to the personality variables" (p. 582). As stated above, this study does raise an important question about whether some students are more likely to utilize Facebook for educational purposes than others.

SOCIAL ISOLATION, CULTURAL ADAPTION, AND THE USE OF SOCIAL NETWORKING

Ali and Kohun (2006) suggested that feelings of social isolation significantly contributed to the high rate of attrition among doctoral students. Adapting to and finishing the first year, preparing for and taking comprehensive exams, identifying, submitting, and defending the proposal, and completing and defending the dissertation create a great deal of pressure and stress for the doctoral student. Combined with the fact that many of these activities take place in isolation away from peers and faculty members may serve only to increase the feelings of being left behind, overwhelmed, and without social support. Consequently, many doctoral students "silently" drop out of their programs.

It is reasonable to believe that feelings of isolation are experienced by the majority of students at some point in their doctoral education, regardless of age, gender, ethnicity, or cultural background. However, in a follow-up study utilizing ethnography, Ali and Kohun (2008) specifically considered the influence of cultural background on social isolation as related to doctoral programs and attrition. The authors argued that students with similar cultural backgrounds had a tendency to group together, thus impeding their social integration with other students and consequently increasing their sense of social isolation. Simply stated, "students who stay with their same cultural group have a higher chance of feeling socially isolated and do less effectively in the program" (p. 2). On the contrary, the authors argued that "students who are more socially open and mix with students from different backgrounds have more of a chance to be socially integrated into the program and a better prospect for completing their doctorate degree" (p. 2).

According to Ali and Kohun (2006), "socialization, whether it would be educational or otherwise, leads to more inclusion, support, and understanding"; thus indicating that it is important to provide a "mechanism for socialization between the students themselves and with the faculty" (p. 27). Ali and Kohun (2006) suggested that by providing such a mechanism for social support that the institution may help alleviate the sense of isolation among the students and thus increase their chance for success. This is potentially a mechanism which could be provided by a SNS, such as Facebook, within an academic context to promote not only educational adaptation, but cultural adaptation as well. Through its various features, Facebook provides a forum for students and faculty to informally communicate about both educational and personal issues. This use of Facebook could extend from individual courses taken during the first two years through the comprehensive exams and proposal stages, all the way through the completion of the dissertation, where students often feel the most isolation from other students and faculty members. As such, the formation of Facebook groups for exchanging ideas, concerns, and progress may be beneficial.

Cultural adaptation research is concerned with the process and ability of people to adapt to a new cultural environment from one that has been previously ingrained for a significant period of time. Initial research on cultural adaptation described it as a process involving the relationship between environmental conditions and the behavioral resources of the people involved in changing environments, and that it was a group process and not an individual one (based on the understanding that culture and cultural change are also group-level phenomenon) (Barger, 1982). In subsequent literature, cultural adaptation has been studied and defined on the individual level as a phenomenon that occurs when an individual acquires an increasing level of fitness or compatibility in a new cultural environment (Gudykunst & Kim, 1984). In our case, we examined cultural adaptation in doctoral students by asking them questions regarding their experiences in orienting, adjusting, and adapting to the doctoral program and to the United States.

SOCIAL CAPITAL THEORY

We use Social Capital Theory (SCT) as the theoretical lens for our research. Social capital refers to the resources gathered through human social relationships (Coleman, 1988). It has been defined more precisely as "the sum of the actual and potential resources embedded within, available through, and derived from the network of relationships possessed by an individual or social unit" (Nahapiet & Ghoshal, 1998, p. 243). Generally, social capital is manifested as a positive outcome of relationships within a social network (Helliwell & Putnam, 2004).

SCT asserts that the set of resources labeled as social capital are attainable through social networks of relationships. Tangible and intangible resources such as trust, rules and norms governing social action, types of social interaction, and network resources are some of the dimensions that have been attributed to SCT (Hean, Cowley, Forbes, Griffiths, & Maben, 2003). The theory suggests that social capital significantly influences the degree to which interpersonal knowledge sharing occurs (Nahapiet & Ghoshal, 1998).

Drentea and Moren-Cross (2005) studied social capital in an online virtual community and found support for the creation of social capital within two of the aforementioned dimensions of social capital: rules and norms governing social action, and types of social interaction. Their resulting framework for social support classified each social network interaction as being one of instrumental support, which refers to support given for problem solving, emotional support, which is encouragement or assurance, and community building, which entails the development of a group of people with common interests becoming linked together. We used this framework to classify narratives related to educationally adapting to a new program of study and culturally adapting to the United States.

METHODOLOGY

Ethnography is a crucial research form employed by constructivist and relativist paradigms. In this research, we used a specific type of ethnography called autoethnography, which is a qualitative research method where the researchers use the participants' insights to obtain a more thorough understanding of, and potentially theorize about, modes of human behavior. This ethnographic genre of writing is autobiographical in that the contributing authors engage in the storyline by providing their own experiences, in this case, through personal narratives (Ellis & Bochner, 2000). The participants framed their experiences through their own lenses of personal meaning.

The contributing respondents in this research were first semester Ph.D. students from the College of Business at a large midwestern university. Five of the seven participants had been in the United States less than five years, and most of these had come to the United States just prior to the beginning of the semester. Their native countries included Viet Nam, India, China, Romania, and Saudi Arabia. The students were all members of a college-wide research methods course. The instructor created a Facebook group for the class. Each week a "Ph.D. student tip of the week" and a "Cultural tip of the week" were posted. At the conclusion of the semester the students were asked to provide narrative responses to seven questions related to their educational adaptation experiences and seven similar questions related to their cultural adaptation experiences if they had been in the U.S. for less than 5 years. Several of the questions were fairly general in nature, such as "Describe your earliest experiences orienting yourself to the Ph.D. program." Others were specific to the social networking environment such as "Discuss whether or not the [nnnn course] Facebook group has helped you adapt to living in the United States, and if so, the specific ways in which it has helped." Participation was optional, and the promise that there would be no negative ramifications if they chose not to participate was reinforced in that the questions were given after the posting of semester grades. Seven out of ten students chose to participate.

PRELIMINARY ANALYSIS

We classified the narrative responses according to Drentea and Moren-Cross's (2005) framework as either instrumental, emotional, or community building support. We further subdivided these narratives as to whether the participants were discussing adapting educationally to the Ph.D. program or culturally to the U.S.

Instrumental

One of the predominate themes of the narratives was that participants were intently seeking information. The narratives related to instrumental support showed that in most cases, Facebook tips and discussions were helpful in supplying pragmatic knowledge to the students and for providing a conceptual map that facilitated greater adaptation. For example, one narrative stated:

I think that area of the Facebook group that helped was the messages about the Ph.D. program on a weekly basis. It helped give us a picture of the entire program and what we needed to do at every step. Some of these things were not fully explained to us by anyone before.

Culturally, Facebook has the potential to provide pragmatic information that can assist foreign students to better comprehend their new environment and, when appropriate, to make changes to their understanding or behaviors to become suitable to situation specific problems. For example, one contributing author stated: "Dr. X provided lots of tips and useful information [via Facebook] for Ph.D. students living in U.S. which helped us a lot."

There were also recommendations for ways that this tool could be used more effectively:

The site will be more helpful if all students contribute: something about their culture, tradition, opinion about the course, style of teaching, etc. For example, girls from my country do not look at the face of a male and speak, even to her father. This is considered disrespectful. But in US, the contrary is considered disrespectful. So, it will take certain time for the girl to adapt to US environment. If everyone in the class

including the faculty knows in advance, they will not consider her behavior as odd. Though one cannot discuss these in classes, something like this in Facebook will surely be helpful.

Finally, not all respondents saw Facebook as a viable source for help in adaptation:

I[t] was not helpful to me. When I needed information, it was easier to look in the two offices to find someone who could help. Because most of us were here every day, we often met for lunch or dinner.

Emotional Support

The social networking tool was able to provide emotional support that was important to encouraging and assuring students in a time of great transition. For example, one contributing student stated:

Some of the questions and clarifications, though not related to the course, were helpful in removing our fear and helping us to visualize what is ahead in our journey to get our doctorates and proceed with our academic career.

While the Facebook interactions appeared to be helpful to in bolstering the confidence of both national and international students, the latter wrote more specifically about their experiences. For example, one stated:

There are postings that international students are hesitant in class discussion and... I was happy to see that my feelings were at least understood.

Community Building

The autobiographical narratives in this study suggest that Facebook provided a mechanism for socialization between students, and also between the students and faculty. This social networking group was important in facilitating a form of interaction in which people could become linked together as a community. For example, one autobiographical author stated:

I think the most important thing about a social networking site like Facebook is that it helps you meet and stay in touch with people (i.e. networking). Therefore, this site should be used to keep Ph.D. students and professors in touch.

Another stated:

...Firstly, it helped me to communicate more easily with other classmates. We can share information, talk with each other through Facebook. Secondly, we can know more about each other from the pictures, "things doing", for international students, we can know more about American life from Facebook and we could also make new friends.

The social isolation as identified by Ali and Kohun (2006) was represented in some of the narratives, for example:

I did have some difficulties in the beginning in orienting myself to the Ph.D. program because of the new people and the new system. Some of my cultural and social factors prevented me from mingling with whoever I met.

While no one explicitly stated that participation in Facebook helped combat social isolation, this theme was clearly evident in a number of the narratives. Some students felt that Facebook interaction could be perhaps be further enhanced by encouragement of additional sharing. For example:

The social networking site like Facebook is an informal place for people to communicate. It would be more helpful if we could share what we like with others. The more we share, the more we can learn and the bigger the social network would be. We can share information, pictures through Facebook, and it would be better if we could share some documents. It would be more attractive to post some interesting articles and stuff on the website.

LIMITATIONS AND FUTURE RESEARCH

Using a social capital framework our study demonstrated that social networking sites such as Facebook can lead to valuable outcomes including the development of instrumental, emotional and community building support. Our study, however, has several important limitations. As with many qualitative studies, the sample size was small which limits generalizability. Qualitative methodologies provide rich data and are especially appropriate at the exploratory phase of researching a

phenomenon. However, future research should consider broader-based empirical studies. We investigated the adaptation of Ph.D. students to a program of study. The scant higher education research on social networking has focused primarily on undergraduate education. However, future research could investigate the unique characteristics of educational adaptation at all post-secondary levels: undergraduate, masters, as well as Ph.D.

Our study also investigated the cultural adaptation of international students, yet the number of originating countries from which the students came was small. A university-wide study would yield greater diversity in terms of differing cultural origins of students. Because our sample was small and fairly diverse, we were not able to explore the argument made by Ali and Kohun (2008) that students with related cultural backgrounds have a propensity to cluster together, thereby hampering their social integration with other students and, as a result, increasing their self-perception of social isolation. It is possible that students at different levels, such as undergraduates, would have access to a greater number of individuals at the university that come from their home country, and by sharing and becoming friends, these students might reduce their sense of isolation.

CONCLUSION

The literature review for this study revealed a gap in educational adaptation studies using social networking tools. This research is a first step in addressing that gap. We investigated how social networking sites can increase social capital. In our case, we find that a Facebook group of new Ph.D. students increases social capital during the time of greatest transition that occurs at the beginning of their programs of study. More specifically, we find that social capital operates through information-giving (instrumental support), emotional support, and community building and enhancement to aid Ph.D. students. In addition to supporting others in a variety of common experiences, support was also offered for those wrestling with problems. Such social capital mitigated the stress of these students and provided valuable information regarding expectations, workload, and coping mechanisms.

REFERENCES

- 1. Ali, A. and Kohun, F. (2008) Cultural influence on social isolation in doctoral programs and doctoral attrition A case study, in Don Colton (Ed) *Proceedings of the Information Systems Educators Conference*, November 6-9, 25, 1-5.
- 2. Ali, A. and Kohun, F. (2006) Dealing with isolation feelings at IS doctoral programs, *International Journal of Doctoral Studies*, 1, 21-33.
- 3. Barger, W. K. (1982) Cultural adaptation: A model from the Canadian north. *Anthropology and Humanism Quarterly*, 7, 2/3, 17-21.
- 4. Bowers-Campbell, J. (2008) Cyber "pokes": Motivational antidote for developmental college readers, *Journal of College Reading and Learning*, 39, 1, 74-87.
- 5. boyd, d. and Ellison, N. B. (2008) Social network sites: Definition, history, and scholarship, *Journal of Computer-Mediated Communication*, 13, 1, 210-230.
- 6. Charnigo, L. and Barnett-Ellis, P. (2007) Checking out facebook.com: The impact of a digital trend on academic libraries, *Information Technology and Libraries*, 26, 1, 23-25.
- 7. Coleman, J. S. (1988) Social capital in the creation of human capital. American Journal of Sociology, 94, 95-120.
- 8. Drentea, P. and Moren-Cross, J. L (2005) Social capital and social support on the web: The case of an internet mother site, *Sociology of Health & Illness*, 27, 7, 920-943.
- 9. Ellis, C. and Bochner, A. P. (2000) Autoethnography, personal narrative, reflexivity: Researcher as subject, in N. K. Denzin and Y. S. Lincoln (Eds.), *Handbook of Qualitative Research (2nd ed.)*, 733-768, Thousand Oaks, CA: Sage.
- 10. Ellison, N. B., Steinfield, C. & Lampe, C. (2007) The benefits of Facebook "friends:" Social capital and college students' use of online social network sites, *Journal of Computer-Mediated Communication*, 12, 4, 1143-1168.
- 11. Gross, R. and Acquisti, A. (2005) Information revelation and privacy in online social networks, paper presented at the ACM Workshop on Privacy in the Electronic Society (WPES), Alexandria, Virginia.

- 12. Gudykunst, W. B. and Kim, Y. Y. (1984) Communicating with strangers: An approach to intercultural communication, Addison-Wesley: Menlo Park, CA.
- 13. Hean, S., Cowley, S., Forbes, A., Griffiths, P. and Maben, J. (2003) The M-C-M' cycle and social capital, *Social Science & Medicine*, 56, 5, 1061-1072.
- 14. Helliwell, J. S. and Putnum, R. D. (2004) The social context of well-being, *Philosophical Transactions of the Royal Society*, 359, 1449, 1435-1446.
- 15. Jacobs, J. (1960) The death and life of great American cities. Vintage: New York.
- 16. Mazer, J. P., Murphy, R. E. and Simonds, C. J. (2007) I'll see you on "Facebook": The effects of computer-mediated teacher self-disclosure on student motivation, affective learning, and classroom climate, *Communication Education*, 56, 1, 1-17.
- 17. Nahapiet, J. and Ghoshal, S. (1998) Social capital, intellectual capital, and the organizational advantage. *The Academy of Management Review*, 23, 2, 242-266.
- 18. National School Boards Association. (2007) Creating and connecting research and guidelines on online social-and educational-networking. Alexandria: National School Boards Association. Retrieved February 14, 2009, fromhttp://www.nsba.org/site/view.asp?CID=63&DID=41340
- 19. Ross, C., Orr, E. S., Sisic, M., Arseneault, J. M., Simmering, M. G. and Orr, R. R. (2009) Personality and motivations associated with Facebook use, *Computers in Human Behavior*, 25, 578-586.
- 20. Schonfeld, E. (2008) Top social media sites of 2008 (Facebook still rising), TechCrunch.com, Retrieved on February 7, 2009 from http://www.techcrunch.com/2008/12/31/top-social-media-sites-of-2008-facebook-still-rising/.
- 21. Schonfeld, E. (2007) Social site rankings (2007) TechCrunch.com, Retrieved on February 7, 2009, from http://www.techcrunch.com/2007/10/24/social-site-rankings-september-2007/.
- 22. Yen, Yi-Wyn. (2007) eBay's new friendly neighborhood, *Fortune*, Retrieved on February 7, 2009, from http://money.cnn.com/2007/10/11/technology/ebay_neighborhoods.fortune/index.htm.