Social Networking Sites: An Exploration of Scale Reliability

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After their emergence, the growth of social networking sites (SNSs) (e.g., Facebook, MySpace, LinkedIn, LiveJournal) has been explosive (Boyd & Ellison, 2007). Many instructors in higher education , recognizing this new, and potentially fortuitous technology, have begun to integrate SNSs into their face-to-face, hybrid, or distance learning classrooms. Research shows that classroom use of SNSs can increase level of communication and collaboration, increase student engagement, build classroom community, and promote community of practices (Brady, Holcomb, & Smith, 2010; Hung & Yuen, 2010). Additionally, SNSs creates opportunities for students to interact beyond the classroom. Such interaction can lead to additional learning opportunities and enhance participation in face-to-face classroom (Hung & Yuen, 2010).

The current study serves to pre-test the reliability of two multi-item scales (SNS learning experience and classroom community) and to determine whether textiles students reported the same advantages using SNSs as prior literature suggests.

Despite the popularity of SNSs like Facebook and MySpace, Ning, a web-based social media platform launched in 2005, was chosen for this class based on the researchers' beliefs that social networks for academic purposes created with Ning bring about more focused learning environments with less distraction. As of March 2013, Ning was ranked in the top 15 most popular social networking sites (eBizMBA, 2013).

A survey, consisting of three parts was used to collect data from textile students during the last week of class. Section one consisted of demographic questions and one open-ended question regarding student perception of the effects of SNS on their learning experience. Section two contained 16 items (five-point Likert scale) measuring students' perceptions of learning experiences and SNS. Ten of these items were adopted from Hung and Yuen (2010) and six were created by the researcher. Section three consisted of 20 items (five-point Likert scale) that assessed students' sense of classroom community (Rovai, 2002). All confidential data (learner maintained profiles and online postings) were password protected in the private, class social network. The researcher also assigned participant codes to maintain the anonymity of participants.

Results

The pre-test consisted of 25 textile students. With regard to demographics of the participants, males represented (16%) of participants while (84%) of the participants were females. The majority of participants were between 20 and 24 years old (91.7%). In response to the open-ended questions regarding student learning experiences and class social networking sites, a high percentage of students demonstrated positive learning experience (95.8%). They

also had positive perceptions toward class social network site (95.8%). More than 60% of students would like other classes to integrate social network sites. Examples of the responses in the open-ended question are

- It was easier to connect with people in my class while outside of the classroom setting. I also felt as though I learned much more and better this way.
- The social networking site helped me become more involved in class. It also helped me keep up to date with events in class.
- Thought it was a very useful and helpful resource. It allows many avenues of learning.

Regarding classroom community, students demonstrated moderate social connectedness with classmates. The mean scores on the items range from 2.42 to3.54 with an overall mean score of 3.12, on a five point scale, where 1=strongly disagree.

The results of the reliability tests for the two multi-item scales were mixed. The SNS learning experience scale, which was a combination of items adopted from Hung and Yuen (2012) and items created for by the researchers resulted in an alpha of .947 (variance=87.489; std. deviation=9.353; mean=69.818), indicating a reliable scale, however, the second multi-item scale, measuring classroom community produced an alpha of .571 (variance=123.767; std. deviation=11.125; mean=69.695).

Rovai (2002) reported a reliability of alpha=.93, which is extremely different from the current study. An item analysis revealed that exclusion of items within the scale would not improve the overall scale reliability. This is, indeed, puzzling, especially since the wording of items was not changed, nor were items added or removed.

In summary, the reliability of the learning experience scale was quite high, and students did report advantages of using SNSs as part of their textiles class. But, because of the low reliability of the second scale, further analysis is planned, including further examination of the classroom community scale before the study is expanded to a larger sample of students.

References

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