Use of Online Chat Room for a Hybrid Format Research Course in Nursing Graduate Program

Ya-Ke Wu, MSN, RN, SeonAe Yeo, RNC, PhD, FAAN
The University of North Carolina at Chapel Hill School of Nursing

Introduction

Online teaching is becoming a norm, though students come to online courses with varying preparations (Distler, 2015). How to create an interactive virtual environment on the Internet for helping student’s preparations of online courses is a challenge (Distler, 2015). Online chat room may have advantages to provide a virtual communication space similar to face-to-face modalities for promoting knowledge learning and helping student’s preparation of tests by online interactive activities (Choudhury & Gouldsbrough, 2012). The purpose of this study is to examine the association between performance of online chat rooms (i.e. total score of chat room posting, total number of posting, total number of question, total number of answer, total number of incorrect posting, and total number of posting that exceeded 140 letters with space) and three online test scores of a hybrid format research course among nursing graduate students in the southeastern United States.

Methods

• Data collection: A nine weeks chat room transcripts of a hybrid format (i.e. 80% online, 20% offline) research course for 28 nursing students in master and doctor of nursing practice programs on a southeastern United States university’s website from August 25, 2015 to November 16, 2015 were captured. The lectures of the course have been opened online every Tuesday and an online chat room has been opened for one week following lectures of the week in the week. Students earn points for posting a question about the lectures and for answering other student’s questions. In order to enhance the students’ ability to present succinct ideas in limited space, a limit for each posting is set as 140 letters and spaces. Personal background variables such as age, gender race, working status, previous experiences of any type of research course and online social media such as twitter and snapshot, number of year between registering current program and the most recent degree educational program were measured by an online survey.

• Statistics analysis: Descriptive statistics for the personal background variables were performed. Spearman Rank Correlation for all continues variables and Kruskal-Wallis Test for pairwise comparisons were performed due to the small sample size.

Table 1: Descriptive analysis of personal background variables, performance of chat room, and online tests (n = 28)

<table>
<thead>
<tr>
<th>Characteristics</th>
<th>Mean (SD)</th>
<th>Range</th>
<th>Total Number of Participant (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td>34.8 (8.8)</td>
<td>24-52</td>
<td>28 (100)</td>
</tr>
<tr>
<td>Gender</td>
<td>1. Female</td>
<td>25 (89.3)</td>
<td>3 (10.7)</td>
</tr>
<tr>
<td>Race</td>
<td>2. Male</td>
<td>23 (85.7)</td>
<td>4 (14.3)</td>
</tr>
<tr>
<td>Work Status</td>
<td>3. White/Caucasian</td>
<td>18 (64.3)</td>
<td>10 (35.7)</td>
</tr>
<tr>
<td></td>
<td>4. Asian</td>
<td>3 (10.7)</td>
<td>25 (89.3)</td>
</tr>
<tr>
<td></td>
<td>5. Black or African American</td>
<td>4 (14.3)</td>
<td>24 (85.7)</td>
</tr>
<tr>
<td></td>
<td>6. American Indian and Alaska Native</td>
<td>1 (3.6)</td>
<td>27 (93.1)</td>
</tr>
<tr>
<td>Previous Experience of Research Course</td>
<td>7. Yes</td>
<td>16 (57.1)</td>
<td>12 (42.9)</td>
</tr>
<tr>
<td></td>
<td>8. No</td>
<td>12 (42.9)</td>
<td>16 (57.1)</td>
</tr>
<tr>
<td>Experience of Other Social Media</td>
<td>9. Any, all the time</td>
<td>9 (32.1)</td>
<td>18 (64.3)</td>
</tr>
<tr>
<td></td>
<td>10. Yes, share a little</td>
<td>6 (21.4)</td>
<td>22 (78.6)</td>
</tr>
<tr>
<td></td>
<td>11. No, did not know what Chat Room was</td>
<td>3 (10.7)</td>
<td>25 (89.3)</td>
</tr>
<tr>
<td></td>
<td>12. No, Unusual about it, but never used.</td>
<td>2 (7.1)</td>
<td>36 (100)</td>
</tr>
<tr>
<td>Time Between Current Program and Last Degree Educational Program</td>
<td>13. Less than 2 years</td>
<td>7 (25.0)</td>
<td>21 (75.0)</td>
</tr>
<tr>
<td></td>
<td>14. More than 2 years but less than 5 years</td>
<td>12 (42.9)</td>
<td>17 (57.1)</td>
</tr>
</tbody>
</table>

Table 2: Correlation between age, performance of chat room, and online tests (n = 28)

<table>
<thead>
<tr>
<th>Variables</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
<th>10</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Age</td>
<td>1.00</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Total Score for Chat Room Posting</td>
<td>-1.73</td>
<td>1.000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Total Number of Posting</td>
<td>-0.83</td>
<td>-0.35</td>
<td>1.000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Total Number of Question</td>
<td>0.99</td>
<td>-0.26</td>
<td>0.73**</td>
<td>1.000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Total Number of Answer</td>
<td>0.59</td>
<td>0.27</td>
<td>0.54**</td>
<td>-0.18</td>
<td>1.000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. Number of Incorrect Posting</td>
<td>-0.34</td>
<td>-0.24</td>
<td>-0.09</td>
<td>-0.24</td>
<td>-0.27</td>
<td>1.000</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7. Total Number of Posting that exceeded 140 letters with space</td>
<td>-0.87</td>
<td>-0.82</td>
<td>0.34</td>
<td>-0.25</td>
<td>-0.18</td>
<td>-0.70</td>
<td>1.000</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Exceeding 140 Letters with Spaces</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8. Online Test 1</td>
<td>-0.64</td>
<td>-0.07</td>
<td>-0.14</td>
<td>-0.15</td>
<td>-0.15</td>
<td>-0.07</td>
<td>-0.13</td>
<td>-0.10</td>
<td>1.000</td>
<td></td>
</tr>
<tr>
<td>9. Online Test 2</td>
<td>-0.19</td>
<td>0.60</td>
<td>-0.04</td>
<td>-0.12</td>
<td>-0.26</td>
<td>-0.64*</td>
<td>-0.99</td>
<td>-0.42**</td>
<td>1.000</td>
<td></td>
</tr>
<tr>
<td>10. Online Test 3</td>
<td>0.69</td>
<td>0.45*</td>
<td>0.332</td>
<td>0.361</td>
<td>0.232</td>
<td>-0.445*</td>
<td>-0.040</td>
<td>0.392*</td>
<td>-0.577**</td>
<td>1.000</td>
</tr>
</tbody>
</table>

*p < 0.05; ** p < 0.01

Figure 1: Previous Experiences of Online Social Media

Conclusion

The results emphasized the associations between the total score for chat room posting, incorrect posting, and results of the online test 2 and 3. The results also indicated the associations between previous experiences of using online social media and the performance of chat room as well as an online test result. Early identification of students’ learning barriers by their performance of online chat room and previous experiences of online social media in online teaching may help faculty to recognize the needs of students and to maintain good teaching quality similar to face-to-face campuses.