Twitter Activity and Scientific Collaboration of LIS Schools and Faculty Members

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SIGMET WORKSHOP–78TH ASIS&T ANNUAL MEETING
Twitter Usage by Academics

- Diffusing research to a broader audience
- Discovering colleagues in one’s field
- Connecting with people professionally
- Finding paper recommendations
- Searching for information
- Improving one’s visibility on the web

Sources
Twitter Networks of Academics

- Several studies investigated academics on Twitter and their networks
  - Haustein et al. (2014) - Biomedicine scientists
  - Haustein et al. (2014) - Astrophysicists
  - Hadgu & Jäschke, R. (2014) - Computer scientists
  - Priem & Costello (2010) - Natural scientists, Social scientists and Humanists

- Very few visualizations of Twitter networks
  - Holmberg et al. (2014)
  - Huberman, Romero & Wu (2008)
Research Questions

• How much do American Library Association (ALA) accredited schools and their faculty members use Twitter?
• How do ALA schools and their faculty members connect via Twitter?
• How does the Twitter network compare to the co-authorship network of ALA-accredited schools' faculty members?
Methods

Identification of schools and faculty members
  • ALISE 2013 Directory of Library and Information Science Programs and Faculty

Twitter
  • Manual search on Twitter
  • Twitter API (date of creation, number of tweets, followers)

Publications
  • Web of Science (2008 to present)

Network visualization
  • Gephi
Sample

- 343 Twitter accounts
  - 49 institutional accounts (on a total of 61 potential LIS Schools)
  - 294 faculty members accounts (on a total of 858 potential faculty members)

- 652 publications from 166 faculty members in WoS for the 2008-2015 period
Results
Concentration of tweets

Faculty members

Schools
## Most Active Schools on Twitter

<table>
<thead>
<tr>
<th>Schools</th>
<th>Faculty members</th>
<th>% faculty on Twitter</th>
<th>Total tweets</th>
<th>Total tweets per year</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chapel Hill</td>
<td>25</td>
<td>12%</td>
<td>54,510</td>
<td>12,644.7</td>
</tr>
<tr>
<td>Cuse</td>
<td>34</td>
<td>35%</td>
<td>55,192</td>
<td>11,455.6</td>
</tr>
<tr>
<td>College Park</td>
<td>19</td>
<td>84%</td>
<td>32,810</td>
<td>8,086.7</td>
</tr>
<tr>
<td>SHSU*</td>
<td>4</td>
<td>75%</td>
<td>42,861</td>
<td>7,390.2</td>
</tr>
<tr>
<td>Simmons</td>
<td>20</td>
<td>25%</td>
<td>27,728</td>
<td>6,662.6</td>
</tr>
<tr>
<td>FSU</td>
<td>22</td>
<td>41%</td>
<td>25,391</td>
<td>5,291.5</td>
</tr>
<tr>
<td>UIUC</td>
<td>26</td>
<td>38%</td>
<td>25,544</td>
<td>4,945.1</td>
</tr>
<tr>
<td>SJSU</td>
<td>21</td>
<td>48%</td>
<td>28,484</td>
<td>4,782.9</td>
</tr>
<tr>
<td>UK</td>
<td>15</td>
<td>27%</td>
<td>13,132</td>
<td>4,345.5</td>
</tr>
<tr>
<td>Bama</td>
<td>19</td>
<td>32%</td>
<td>13,991</td>
<td>4,152.0</td>
</tr>
</tbody>
</table>

Note: Number of tweets includes school’s Twitter account.
*No school Twitter account was found.

90% of Chapel Hill annual tweets were made by Zeynep Tufekci
96% of SHSU made by Teri Lesesne
91% of SJSU made by Michael Stephens
Co-authorship Network
## Conclusion

<table>
<thead>
<tr>
<th>Twitter</th>
<th>vs</th>
<th>Co-authorship</th>
</tr>
</thead>
<tbody>
<tr>
<td>Informal connections</td>
<td>vs</td>
<td>Formal connections</td>
</tr>
<tr>
<td>Institutional affiliation</td>
<td>vs</td>
<td>Research interest</td>
</tr>
<tr>
<td>Low investment and engagement</td>
<td>vs</td>
<td>High investment and engagement</td>
</tr>
</tbody>
</table>

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Further research

- Mentions (@account)
- Tweets’ content (# and noun phrases)
- Other social networking platforms
References

Thank you!
Questions?

Thanks to Timothy Bowman for his help with the data collection.