Evidence Based Library and Information Practice

Academic Social Networking Sites are Smaller, Denser Networks Conducive to Formal Identity Management, Whereas Academic Twitter is Larger, More Diffuse, and Affords More Space for Novel Connections

A Review of:

Jordan, K. (2019). Separating and merging professional and personal selves online: The structure and processes that shape academics' ego-networks on academic social networking sites and Twitter. *Journal of the Association for Information Science and Technology*, *70*(8), 830-842. https://doi.org/10.1002/asi.24170

Reviewed by:
Scott Goldstein
Coordinator, Web Services & Library Technology
McGill University Library
Montréal, Québec, Canada
Email: scott.goldstein@mcgill.ca

Abstract

Objective – To examine the structure of academics' online social networks and how academics understand and interpret them.

Design – Mixed methods consisting of network analysis and semi-structured interviews.

Setting – Academics based in the United Kingdom.

Subjects – 55 U.K.-based academics who use an academic social networking site and Twitter, of whom 18 were interviewed.

Methods – For each subject, ego-networks were collected from Twitter and either ResearchGate or Academia.edu. Twitter data were collected primarily via the Twitter API, and the social networking site data were collected either manually or using a commercial web scraping program. Edge tables were created in Microsoft Excel

spreadsheets and imported into Gephi for analysis and visualization. A purposive subsample of subjects was interviewed via Skype using a semi-structured format intended to illuminate further the network analysis findings. Transcripts were deductively coded using a grounded theory-based approach.

Main Results – Network analysis replicated earlier findings in the literature. A large number of academics have relatively few connections to others in the network, while a small number have relatively many connections. In terms of reciprocity (the proportion of mutual ties or pairings out of all possible pairings that could exist in the network), arts and humanities disciplines were significantly more reciprocal. Communities (measured using the modularity algorithm, which looks at the density of links within and between different subnetworks) are more frequently defined by institutions and research interests on academic social networking sites and by research interests and personal interests on Twitter. The overall picture was reinforced by the qualitative analysis. According to interview participants, academic social networking sites reflect pre-existing professional relationships and do not foreground social interaction, serving instead as a kind of virtual CV. By contrast, Twitter is analogized to a conference coffee break, where users can form new connections.

Conclusion – Academic social networking sites exhibit networks that are smaller, denser, more clustered around discrete modularity classes, and more reciprocal. Twitter networks are larger and more diffuse, which is more conducive to fostering novel connections. The author makes suggestions for how academic social networking sites could encourage network building and rethink how academic reputation is measured.

Commentary

This study, part of the author's PhD dissertation, looks at how academic social networking sites (SNSs) are used and conceptualized by a sample of users in the United Kingdom. Specifically, the author looks at Academia.edu and ResearchGate, the two most well-known academic SNSs, as well as Twitter, which is heavily used by academics despite being open to everyone. Previous studies in this area have examined how academic SNS uptake varies by discipline, which factors influence engagement (i.e., how many times a profile is viewed), and whom users choose to follow within the network. The author's approach is novel in that she uses mixed methods, combining network analyses with semi-structured interviews of the networks' egos. By contrast, the majority of studies to date rely on purely quantitative methods of data analysis.

The CASP Qualitative Checklist (Critical Appraisal Skills Programme, 2018) was used for evaluation. The research questions are clearly articulated and the mixed methods methodology is appropriate, especially considering the need for qualitative analysis to illuminate why users choose the platforms they choose and how they think about what to share and to whom to link. The methods are clearly explained and sufficiently rigorous. Findings are clearly explained and related back to earlier research. The author acknowledges limitations with the non-probability sampling strategy, although this is somewhat difficult to square with language earlier in the article that implies the research aim is to understand the structural characteristics of academics' online social networks *generally*. Since the sample was small and self-selecting, perhaps more care should have been taken to emphasize that the data cannot be used to make generalizations. In addition, for technical reasons, Twitter network analyses were not performed for eight participants, and these eight were excluded from being interviewed for this reason. However, what made those eight participants special is they either followed, or were followed by, over 2,000 people. It is possible that these participants would have provided a novel perspective on how they use Twitter compared to others who were interviewed, but this limitation was not considered in the qualitative analysis discussion.

This study, while largely replicating the findings of earlier work, has several

implications for how academic librarians approach their liaison work with scholars. First, academics' use of SNSs suggest their online "reach" is important to them, but the author highlights that Twitter in particular "may offer more potential for novel connections and opportunities for academics" than academic SNSs (p. 839). Perhaps Twitter could be included as a normal part of the online identity management toolkit along with, for example, ORCID registration, a personal website, and participation in an institutional repository. Second, librarians should be aware of the research suggesting that academic SNSs metricize scholarly reputation and do so primarily based on traditional measures such as the journal impact factor. Academic reputation, much like research quality, is a complex measure that is not yet reducible to a simple formula. Users should understand this and not view where and how often they publish as the primary means to succeed in their field.

References

Critical Appraisal Skills Programme. (2018). *CASP qualitative checklist*. Retrieved from https://casp-uk.net/wp-content/uploads/2018/01/CASP-Qualitative-Checklist-2018.pdf