

What do academics ask their online networks? An analysis of questions posed via Academia.edu

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ABSTRACT

Social networking sites (SNS) aimed at academics have the potential to enhance academic practice through developing an online academic identity and as a portal to further opportunities for collaboration and communication. This paper explores part of the communicative affordance offered by academic SNS through an analysis of the questions posed by academics via the Academia.edu website.

Categories and Subject Descriptors

H.5.4 [Information interfaces and presentation]: Hypertext/Hypermedia – *User issues*.

General Terms

Design, Human Factors, Measurement.

Keywords

Digital scholarship; Academic networking; Computer-mediated communication; Social networking sites.

1. INTRODUCTION

In the past decade, a number of online social networking sites (SNS) have been introduced [1] and rocketed in popularity with internet users. For many, the use of SNS (such as Facebook) is synonymous with internet use [2]. A distinctive characteristic of SNS is the combination of both being able to produce a profile and associated content, and to be able connect with others and explore the resulting network of connections [1,3]. SNS found their way into the academic sector by three ways (mirroring the development of generic SNS [1]): one, appropriation of generic tools for academic use; two, development of SNS specifically for academics; and three, by adding SNS functions to existing academic tools. While academic SNS have great potential to revolutionise academic work (e.g. [4]), research is required to understand the role that they play in practice. This in turn will allow academics to be better informed about the benefits of using these technologies and their utility as a valid academic activity to be recognised [5].

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This paper focuses upon one particular aspect of academic SNS: the utility to pose questions to the wider community, and examines the types of questions found in a sample from the Academia.edu platform. Previous studies have focused upon the types of questions posed via generic SNS [6], while academics' communication has been studied via Twitter [7]. The results will be discussed in relation to these studies, however no existing studies have addressed question asking on specifically academic SNS, which is worth examining given that the design of SNS has been shown to mediate the type of interaction facilitated by sites [8]. This study therefore set out to explore the types of questions academics pose to a specifically academic SNS, in terms of both the content and types of questions (using the typology described by Morris et al. [6]).

2. DATA COLLECTION AND ANALYSIS

As the study was exploratory in nature, a grounded theory approach was used [9] in analyzing the content of the questions. Academia.edu was selected as it is one of the largest and oldest academia SNS [10], and its question threads are publicly viewable (at <https://www.academia.edu/Questions>). When data collection began (June 2014), this included a total of 15,759 questions. The dataset was constructed by random sampling of questions within this. The URL and text of the selected questions were recorded to form the dataset. The sample size was not defined at the outset, but determined through the process of data analysis as the point at which theoretical saturation had been achieved [11]; questions were added in batches of 50, and stopped after 300 questions. Questions were imported into nVivo for analysis as it allows flexibility in assigning and managing codes. The data was first coded by question topic; an open coding approach was initially used, followed by axial coding, to produce an emergent coding scheme. In order to verify the accuracy of the analysis, the coding scheme was also applied to the dataset by a second coder. Cohen's Kappa [12] was calculated as a measure of inter-coder reliability, based on a random sample of 50 questions. This gave a value of 0.94, which can be regarded as almost perfect agreement [13]. Second, the dataset was coded according to question type, by applying the typology developed by Morris et al. [6].

3. RESULTS

The coding scheme which emerged from the analysis is shown in Figure 1. 36 items were not included in the coding scheme, on the basis of not including enough information to be coded (29 items) or being written in languages other than English (seven items). The coding scheme draws upon a total of 261 questions. The results of the analysis in terms of the type of questions posed is shown in Table 1, with data from a generic SNS as a comparison. A matrix coding query revealed that different types of questions

are associated with different topics: factual and conceptual questions are mainly factual (70%) or opinion (26%) type questions; finding resources questions are mainly recommendations (75%); promoting things mainly uses invitations (45%) or non-questions (36%), while research focuses upon social connections (43%) (figures shown are as percentages of each topic).

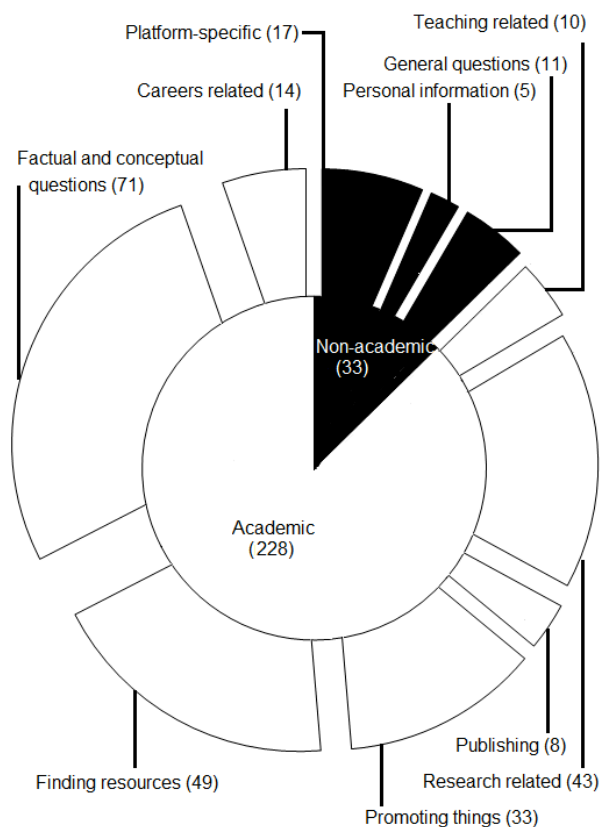


Figure 1: A visual representation of the emergent coding scheme.

Table 1: Percentage of questions per the Morris typology [6].

Question type	Academia.edu (%)	Morris et al. (%)
Recommendation	17	29
Opinion	14	22
Factual knowledge	26	17
Rhetorical	5	14
Invitation	6	9
Favor	2	4
Social connection	7	3
Offer	0	1
Not a question	19	N/A
Other languages	2	N/A

4. DISCUSSION AND CONCLUSIONS

The lack of non-academic question topics in the results suggest that the design of the website and its branding as a specifically academic-focused SNS sets a tone for the topics of questions asked. This supports research on SNS in other sectors indicating that the types of interactions facilitated by sites are mediated by site design [8]. Veletsianos [7] identified seven themes in academics' participation on Twitter: sharing information,

resources and media; sharing information relating to teaching; requesting assistance and offering suggestions; engaging in social commentary; engaging in digital identity and impression management; networking with others; and promoting their participation in other online networks. The themes do resonate with the emergent coding scheme here, although the questions posed are more perfunctory than higher-level discussions. While specifically academically focused, the types of questions asked do reflect those posed by social media users more generally, to an extent. The types of questions asked broadly reflect the typology presented Morris et al. [6], although factual knowledge-based questions are more prevalent in the academic context. The types of questions posed differs according to the topic being addressed.

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