"People Are Reading Your Work,": Scholarly Identity and Social Networking Sites

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ABSTRACT

Purpose

Scholarly identity refers to endeavors by scholars to promote their reputation, work, and networks using online platforms such as ResearchGate, Academia.edu, and Twitter. This exploratory research investigates benefits and drawbacks of scholarly identity efforts and avenues for potential library support.

Design/methodology/approach

Data from 30 semi-structured phone interviews with faculty, doctoral students, and academic librarians were qualitatively analyzed using the constant comparative method (Charmaz, 2014) and Goffman’s (1959, 1967) theoretical concept of impression management.

Findings

Results reveal that use of online platforms enables academics to connect with others and disseminate their research. Scholarly identity platforms have benefits, opportunities, and offer possibilities for developing academic library support. They are also fraught with drawbacks/concerns, especially related to confusion, for-profit models, and reputational risk.

Research limitations/implications

This exploratory study involves analysis of a small number of interviews (30) with self-selected social scientists from one discipline (communication) and librarians. It lacks gender, race/ethnicity, and geographical diversity and focuses exclusively on individuals who use social networking sites for their scholarly identity practices.

Social implications

Results highlight benefits and risks of scholarly identity work and the potential for adopting practices that consider ethical dilemmas inherent in maintaining an online social media presence. They suggest continuing to develop library support that provides strategic guidance and information on legal responsibilities regarding copyright.

Originality/value

This research aims to understand the benefits and drawbacks of scholarly identity platforms and explore what support academic libraries might offer. It investigates these topics comparing perspectives of faculty, doctoral students, and librarians.
KEYWORDS
Social media, social networking sites, scholarly identity, qualitative methods, user studies, impression management, academic libraries, online presence, interviews

INTRODUCTION

This exploratory study empirically investigates the opportunities, benefits, drawbacks, and challenges of scholarly identity work in virtual environments. It also considers the role of academic librarians in supporting academics in this endeavor. Scholarly identity work represents the activities through which scholars promote their reputation, research, and networks. The notion of identity work is derived from Goffman (1959, 1967) who viewed the formation of personal identity in terms of the social process of impression management. Goffman proposed that identity is something that is made through the choices that are made in one’s attempts to manage the impressions others have of us. As an extension of this idea, scholarly identity work can be seen as an impression management activity carried out by scholars and researchers for an audience of their peers. For example, how scholars choose to present themselves at a scholarly meeting, or in service and committee efforts, or in their writing, could all be considered in terms of their effectiveness to manage the impressions others may form of their competence as scholars and valued members of the research community.

Scholarly identity work is increasingly occurring online and academic networking sites are increasingly seen as a part of scholarly life (Kjelberg, Haider, and Sundin, 2016). Scholars are using digital tools like ORCID and networking sites such as Twitter, Academia.edu, and ResearchGate to manage the impressions their peers might have of them and their scholarship.

\[\text{An earlier and shorter version of this paper was published in [redacted for blind review].}\]
(Akers, Sarkozy, Wu, and Slyman, 2016; Nicholas et al., 2015; Ovadia, 2014). For example, Academia.edu has been described as the “Facebook for academics” where users are able to create a scholarly face to present to a specified audience of other academics. Like Facebook, Academia.edu allows users to create a profile page describing their research interests. They are encouraged to upload examples of their research as in progress or completed papers which can then be accessed, read, and downloaded by scholars interested in the same or similar topics.

But curating a profile on a site like Academia.edu also requires time and the formulation of appropriate strategies to ensure that this scholarly identity work is appropriate and effective. Scholars often do not have the time or the knowledge to do this productively. It is here that the academic librarian may have a significant role to play in assisting the researcher to create and maintain an effective scholarly presence online. Based on their familiarity with academic networking sites and their commitment to a variety of issues overlapping with scholarly identity, such as copyright and open access, academic librarians are well-positioned to develop relevant services for universities and faculty (Reed et al., 2016).

Given these considerations, this paper addresses the following research questions:

RQ1: What are the perceived opportunities, benefits, drawbacks, and challenges of online scholarly identity work use among Ph.D. students, faculty, and academic librarians?

RQ2: What, if any, practices do academic librarians engage with to assist Ph.D. students & faculty with managing online scholarly identity work?

RQ3: How can scholarly identity-related assistance become a more substantial part of academic librarians’ services to Ph.D. students and faculty?
LITERATURE REVIEW

Benefits of Online Scholarly Identity Work

Specialized academic networking sites and other digital tools such as ORCID are designed for use by academics, and assist in creating and maintaining their scholarly identity among their peers. These digital tools and academic networking sites have several features, including author disambiguation and metrics, to promote scholarly identity efforts (Akers et al., 2016). Beyond this social and sharing capability, a site like Academia.edu allows users to collect a number of alt-metrics of those who are accessing their work, including identifying (a) the demographic and institutional profiles of users of academia.edu who have accessed their pages or papers, and (b) other authors that mention the user and items they have uploaded to the site. Such detailed feedback on the nature of the user’s readership can be used to modify their online presence, not only to attract more followers, but also to establish their relative place in that particular academic community (e.g., they may be designated a “highly cited author”). Thus, academia.edu will also compile various analytics which purport to show the “impact” of the user’s research, including: (a) the number of unique visitors who look at the user’s papers, (b) how many times the user’s papers have been downloaded, and (c) the number of pages of each paper that have been accessed and read. This information can then be used in occupational impression management within the scholar’s own institution, which, in turn, may be rewarded by professional advancement (Duffy and Pooley, 2017; Megwalu, 2015; Thelwall and Kousha, 2014).

Nández and Borrego (2012) reported that academics across disciplines generally engage in a range of activities, including contacting or following other scholars and disseminating their
research, during scholarly identity work. The authors also found that scholarly identity efforts heightened competition among academics because of their inclination to use quantitative measures to define accomplishments, including productivity (Hammarfelt, de Rijcke, and Rushforth, 2016). A majority of respondents to a survey conducted by Haustein et al. (2014a) indicated that academic networking sites affected their professional lives both negatively (e.g., encouraging procrastination) and positively, (e.g., aiding organization of research material). However, specialized academic networking sites are not the only tools scholars employ for scholarly identity endeavors; they also appropriate affordances of more general social media platforms such as Facebook and Twitter to promote themselves and their research (e.g., Priem and Costello, 2010; Schmitt and Jášchke, 2017). Activity surrounding recently published articles on academic networking sites such as Twitter may increase citations, predict citations, and compliment citation metrics with measures of social impact (Priem and Costello, 2010; Eysenbach, 2011; Haustein, et al. 2014b; Nabout et al., 2018). Research has identified differences in how scholars from various fields engage in scholarly identity work. Ortega (2015a) found that humanists and social scientists frequently used Academia.edu and connected with other researchers, while biologists chose ResearchGate and did not make these connections as often. Computer scientists may choose platforms such as Twitter for both information-oriented and professional purposes (Schmitt and Jášchke, 2017).

Extant literature also has examined how scholars behave in online environments. Shehata, Ellis, and Foster (2017) classified three types of online scholarly communication: formal “orthodox,” “moderate” blends of formal/informal actions, and multifaceted “heterodox.” Academic networking sites like Twitter may play a social role in communication that challenges academic norms (Budge, Lemon, and McPherson, 2016) and promotes professional values
(Logghe et al., 2018). Benefits such as connecting with other researchers and exchanging ideas may permit participants to increase their relational closeness with scholars in their fields (Bazarova and Choi, 2014). Scholarly communication via academic networking sites like Twitter also may take place between academics and the public (Collins, Shiffman, and Rock, 2016; Côté and Darling, 2018). For example, medical professionals may promote public learning in addition to crowdsourcing new ideas, discussing and challenging emerging research, pursuing professional development, and expanding networks (Choo et al., 2015; Panahi, Watson, and Partridge, 2016). Online scholarly discourse may promote knowledge-sharing during academic conferences (Gilbert and Paulin, 2015) and demonstrate the broader societal impact of scholarship (Jackson and Spencer, 2017; Ke, Ahn, and Sugimoto, 2017). Through activities such as posting about their academic achievements and research, participants may strategically disclose information (Bazarova and Choi, 2014) to boost their reputations or obtain other advantages related to tenure and promotion. Participants’ scholarly identity activities may allow them to control the information they reveal so they can craft particular identities that they may not be able to effectively cultivate in face-to-face exchanges (Batenburg and Bartels, 2017).

**Drawbacks of Scholarly Identity Work**

Communication via digital tools and academic networking sites to promote one’s scholarly identity also has disadvantages and drawbacks, contributing to researcher skepticism. Potential users may consider participation to be irrelevant, or their workplace culture may not encourage scholarly identity-related practices (Greifeneder et al., 2017). Some scholars report that maintaining online profiles could harm their careers if others perceive them negatively. Additionally, research has uncovered evidence that metrics generated by academic digital tools
and academic networking sites, such as precisely measuring citation impact, may be problematic (Ortega, 2015b).

Online presences may foster “messy” identities as well as behavioral risks (Budge et al., 2016). Perceptions of Twitter’s ability to promote scholarly communication may be idealistic, particularly when bot activity is considered (Robinson-Garcia et al., 2017). Incentives emphasized by academic digital tools and academic networking sites may gamify research activities and lead to “large-scale goal displacement,” as well as dependency on often ambiguous altmetrics (Sugimoto et al., 2017, p. 2051). Additionally, interviews conducted by Costello and Priem (2011) revealed that some academics do not want their tweets to be archived given their contextual nature and privacy concerns.

Some scholars have elaborated on this “dark side” to scholarly identity activity on academic networking sites. For example, users of these tools can be unaware that sites like Academia.edu do not exist for altruistic reasons. Academia.edu procured its domain name before the .edu designation became exclusive to educational institutions, even though it is a for-profit venture. For-profit goals foster tension between open access efforts and platform values that advance stakeholder interests including industry partners, venture capitalists, and people within the company (Bond, 2017; Fitzpatrick, 2015; Ruff, 2016; Wexler, 2015). As reflected in scholarship by Huws (2014) and Newson and Menzies (2005), academics are performing work for for-profit platforms that benefit from their data. Essentially, the tools and academic networking sites, as well as academic institutions (which often require scholars’ online presences) are exploiting the “free” labor academics provide via scholarly identity work. Hall (2015) notes, “academics are laboring for it for free to help build its privately-owned for-profit platform by providing the aggregated input, data, and attention value. We can thus see that
posting on Academia.edu is not ethically and politically equivalent to making research available using an internationally open access repository at all” (n. p.). Concerns with for-profit models and work do not only apply to academic networking sites explicitly aimed at academics (e.g., Academia.edu), because there is an increased use of social networking sites aimed at a more general audience (e.g., Twitter) for establishing scholarly identity. Thus, these concerns fit under a broader umbrella of ethical issues related to social media platforms in general.

*Role of Academic Librarians in Scholarly Identity Work*

Library and Information Science (LIS) researchers have identified academic libraries as appropriate sites where scholars might receive information and help regarding some of the drawbacks and consequences of digital tools and academic networking sites for scholarly identity work (Graham, Lee, Radio, and Tarver, 2018; Moberly, Lee, Kessler, and Carrigan, 2018). Library users have expressed the desire for more guidance with scholarly identity efforts (Mikitish, 2017). Reed, McFarland, and Croft (2016) reported that academic librarians were engaged in scholarly identity practices and that some have begun to provide support for others in managing their online presence. Moberly et al. (2018) and Graham et al. (2018) assert that librarians have the ability to provide information, strategies, and practices for scholarly identity work and also to provide insight as both instructors for others and maintainers of their own scholarly identities.

Academic libraries have the potential to be key players in promoting open source and open science options, though their full potential has yet to be realized in areas such as advocacy and provision of data repositories (Ogungbeni et al., 2018). As researchers, librarians also employ these online sites as vehicles to showcase their own scholarly productivity (Brigham, 2016).
To summarize, the literature reviewed here makes two important contributions. First, it identifies opportunities, benefits, challenges, and drawbacks of online scholarly identity work. Second, it highlights the potential roles for academic librarians to leverage opportunities and benefits while mitigating challenges and drawbacks. This study contributes to a growing body of research by examining the perceptions of both scholars and academic librarians related to online scholarly identity endeavors.

THEORETICAL FRAMEWORK

Goffman’s (1959, 1967) key theoretical concepts of impression management center on reasons for self-presentation, perceptions of others, face work, and face threats. Reasons for self-presentation entail the variety of motivations individuals might wish to communicate their scholarly identity to others and include concepts to develop relationships, control social outcomes and resources, and clarify one’s identity for others. Perceptions of others capture the strategies through which scholars convey their identity to others, as well as their perceived success. Face work encompasses the strategies individuals take to ensure that the desired scholarly identity they wish to communicate is received and interpreted correctly by their intended audience. A key element of face work is a face threat, which is any situation that threatens to diminish scholars’ successful communication of their identity.

LIS research has applied Goffman’s impression management frame to analyze live-chat reference encounters (e.g., Radford and Radford, 2017; Radford, Radford, Connaway, and DeAngelis, 2011). No literature that specifically applied Goffman’s ideas to scholarly identity efforts was identified, although scholars have applied impression management tenants to self-disclosure on academic networking sites (Bareket-Bojmel, Moran, and Shahar, 2016; Bazarova and Choi, 2014; Buffardi and Campbell, 2008). File (2018) used Goffman’s impression
management frame to analyze a large corpus of tweets from a broad anonymous population. He also conducted interviews with Twitter users who discussed their use of posts, retweets, and likes to manage interpersonal relationships and identified six persona types that exhibited different patterns of use. Online self-presentation also has been used to study hiring practices, since individuals can choose to present themselves in positive or negative ways that affect their professional image (Batenburg and Bartels, 2017; Chiang and Suen, 2015).

METHOD

Participants

Thirty semi-structured phone interviews were conducted with 10 faculty members, 10 Ph.D. students, and 10 academic librarians. Participants were recruited from an email list of a professional organization for academic librarians, the Association of College and Research Libraries (ACRL), and a listserv for communication scholars and other social scientists, Communication, Research, and Theory Network (CRTNET). Faculty members and doctoral students were selected because they represent target audiences for specialized academic networking sites and digital tools such as ORCID or Academia.edu. A pre-screening survey selected participants who used at least three digital tools and academic networking sites such as ResearchGate, ORCID, and Twitter. 10 qualified participants in each group were selected for interviews to achieve variation in years of experience and demographic characteristics.

Table 1 displays participant demographics. Most participants were women, white, and 26-34 years of age. Faculty included assistant (n=3), associate (n=2), and full professors (n=2), as well as an assistant dean, a teaching fellow, and a special instructor. Ph.D. students were in coursework (n=4) and post-coursework (n=6). Almost all Ph.D. students and faculty participants were in the field of communication, which reflected the recruitment and sampling strategy. The
majority of academic librarians were tenured or tenure-track (n=7). Most did not have a subject
specialization (n=6), while others specialized in scholarly communication, life sciences, and
copyright. All participants were from institutions located in the United States and Canada.

[Table 1 goes here]

Table 2 presents the most frequent academic networking sites and digital tools that the
participants used. There were several additional platforms listed by fewer participants, including
SnapChat, Tumblr, WhatsApp, Linkedin, Google Profile, YouTube, VIVO, OpenVIVO,
Sympletic Elements, ISNI, Scopus, and WebID.

[Table 2 goes here]

*Interview Protocol*

The research questions, theoretical framework, and themes from prior research (Kjellberg
et al., 2016; Nández and Borrego, 2012) informed the interview protocol (see Appendix A). The
interview protocol began with general questions about the meaning of scholarly identity and
impact, then progressed to more specific questions about ways in which participants may
establish and maintain their scholarly identity. Two elicitation techniques, a) critical incident
(Flanagan, 1954) and b) magic wand (Dervin, 1983) were used to identify benefits,
opportunities, drawbacks, and challenges of online scholarly identity work. The critical incident
technique solicited specific examples of instances in which participants engaged in successful
and unsuccessful scholarly identity-related activities, whereas the magic wand question asked
participants to envision the types of support most relevant to them when engaging in scholarly
identity work.
Procedure

Interviews lasted approximately one hour, and participants were compensated with a $30 gift card. Each of the approximately 104 initial respondents were assigned a random number identifier to maintain confidentiality. Since this research is exploratory, a sample size of 30 was predetermined based on available resources and the desire to balance the number of participants from all three groups.

Four researchers conducted the telephone interviews, taking detailed notes on participant responses, including capture of verbatim quotes. The research team then qualitatively coded the notes using the constant comparative method (Glaser & Strauss, 1967; Charmaz, 2014) and emic/etic coding (Miles and Huberman, 1994), applying high-level codes (etic) informed by the theoretical framework and literature reviewed and low-level codes (emic) inductively developed from the data. The team coded the transcripts, using NVivo software. Based on patterns found within a sample of the data, coders developed an initial typology to classify common themes. The research team refined the typology as they applied it to the remaining transcripts, expanding as needed to capture developing codes (see Appendix B). Numerical inter-coder reliability was not calculated, but the team achieved unanimous inter-coder agreement (Zhang and Wildemuth, 2005) after peer debriefing and discussion.

FINDINGS

Themes Pertaining to Benefits of Scholarly Identity Work

The themes presented below relate to the benefits of scholarly identity work based on frequency of incidence in the data and illustrated by quotations. Benefits included the ability to: (a) connect with other researchers, (b) disseminate academic activities, (c) facilitate tenure/promotion, (d) access conferences and other educational opportunities, (e) join or
participate in scholarly communities, and (f) share open access materials. For the quotes below, participants are identified as P (Ph.D. students), L (Librarians), or F (Faculty), followed by a number assigned by a random number-generator.

Connecting with Other Researchers

Participants most frequently cited connecting with other researchers as a significant benefit of scholarly identity efforts (n=27). All 10 Ph.D. students gave responses centering on this theme. For example, one experienced a feeling of belonging to an academic community when using these sites: “I can connect with people who share similar research interests with me through those academic websites. I can see their research interests and papers. Whenever I use those online tools it gives me feelings like I’m part of these people and makes me feel like I belong” (P-39).

Nine librarians indicated that they use scholarly identity tools to connect with other researchers. L-69 claimed that cultivating a scholarly identity was important “not because I want people to perceive me in a certain way, but because it allows me to choose the people I’m engaging with.” Eight faculty also reiterated this theme. F-32 claimed that he “can jump in with these other people that I respect as a scholar,” which he thinks “can set you up to do more impactful work.”

Disseminating Academic Activities

Another prominent theme related to benefits was that scholarly identity work allowed participants (n=24) to promote information about their scholarly activities. For example, one librarian stated that she was able to insert her scholarship into a relevant online conversation: “I was able to insert that publication into the conversation that was already happening and sort of
say, ‘Oh! Here’s something I did that people don’t always read,’ and so I used that to insert my
news into the conversation” (L-50).

All librarians (n=10) felt that disseminating academic activities was a major outcome of
online platform use. Seven faculty agreed; F-76 said that for online scholarly identity activities,
“the dissemination is a little wider, a little more easily accessible.” Seven Ph.D. students also
reiterated this theme, as they felt that sharing their accomplishments online made their research
more “accessible” (P-23) and “well-received” (P-25) with “a greater impact” (P-85).

Sharing and Exchanging Materials with Other Researchers

Academic and general academic networking sites facilitated sharing and exchanging
materials (n=20) with both known and unknown audiences. Eight faculty members discussed this
scholarly identity benefit. For example, one described imaginary audience members accessing
his work through ResearchGate: “Whenever I have a paper that's in press...I'll try to put it on
ResearchGate so that it's accessible...so that people can read it. People can be like, ‘There he
goes being productive again’” (F-32).

Five librarians discussed this benefit, as did seven Ph.D. students. For example, one
student explained the benefits of sharing material with a co-author on Facebook:

I read a New York Times article related to our research article and posted it to FB. He
saw the article and replied to my Facebook. The comments are very rich in terms of the
information and the context. It led to us thinking of and starting our project...posting an
article on my Facebook was helpful for us to talking about things and sharing our mutual
research interests, then agreeing to write a paper (P-39).

Facilitating Getting Tenure/Promotion

Over one-third of those interviewed (n=11) noted that online scholarly identity work
helped to facilitate getting tenure/promotion, including eight librarians. A tenure-track librarian
explained: “The obvious motivator is tenure. We’re in a tenure system, so our impact is a big

part of our research statement. We’re not just talking about what we’re doing, but about our impact on the profession. For tenure, I need professional reviewers, so I need a scholarly identity” (L-11).

Three faculty discussed scholarly identity’s role in their tenure process. Referring to academic networking sites for scholarly identity, faculty F-82 claimed, “if it had existed before I got tenure, I would have used it to increase those numbers.” No Ph.D. students had responses that expressed this theme; however, five claimed that maintaining an online scholarly identity may help them get a job. Per P-85, “It can definitely help. If you have a firm identity/picture it makes you easier to market yourself and make you attractive to potential people who want to hire you.”

Participants appear to utilize the “social” features of academic networking sites to enhance their scholarly identity. They also widely agree that, while scholarly identity is not all-encompassing, it is important to tenure, and can facilitate promotional processes. All participants expressed a need to create, cultivate, and maintain scholarly identity, despite their varying opinions on specific platforms and practices.

Themes Pertaining to Drawbacks of Scholarly Identity Work

Themes pertaining to drawbacks of scholarly identity work based on frequency of incidence are presented below. The themes are: (a) time constraints, (b) concern with for-profit models, (c) context collapse, and (d) confusion. Participants also raised concerns over damage to reputation and privacy. Librarians were the most outspoken group on drawbacks for four of the six themes, as described below. For two of the themes, concern over damage to reputation, and privacy, Faculty were the most outspoken.
**Time Constraints**

Time constraints posed a significant drawback to scholarly identity efforts among most participants (n=16). However, the distribution of this theme among groups varied, with all librarians (n=10) reporting this drawback, but fewer faculty (n=3) and Ph.D. students (n=3). In addition to the time it takes to update their profiles, faculty also were concerned with receiving unsolicited emails (F-42) and checking digital tools and academic networking sites too frequently, which could distract from research time (F-32, F-7). F-42 noted additional concerns with future institutional intervention over how online scholarly identity work is regulated, stating: "Once institutions get involved there will be certain rules and regulations [including format, updating] it's more work basically. Then there has to be tech support and I feel that if you have to meet certain laws, but if it's not coming from within then adding one more thing to do is more like a headache to us."

The responses of the three Ph.D. students who identified time lost to online scholarly identity work as a drawback predominately focused on profile maintenance, which P-61 referred to as “an all or nothing sort of thing.” P-61 seems to craft their scholarly identity based on their lack of academic networking sites use: “Better to be one of these people to be like, ‘I’m not really on social media and that's not my thing’ than being on social media and failing at it.”

One of the 10 librarian participants noting time constraints as a significant barrier said: “Keeping up is a full-time job sometimes” (L-10). Additionally, a majority of the librarians (n=7) reported other related nuisances of online scholarly identity maintenance. These include constant reminders from academic networking sites like ResearchGate and Academia.edu (L-50, L-33, L-101, F-42), the pressure to update profiles (L-103, F-42), and difficulty tracking passwords and usernames (L-33, L-103, F-76). L-101 referred to constant reminders, such as
email notifications, as “Cyber seduction. It sucks you in. It is not that I make the effort to get on
myself, but they are sending me teasers [like] ‘So and so has posted this.’ [It is] hard to resist
them.”

Librarians who framed scholarly identity maintenance as a nuisance also focused on the
difficulty of maintaining profiles across several digital tools and academic networking sites. One
participant inquired, “Why would I need to maintain a few online presences? Wouldn't it be nice
to have it all in one place?” (L-102). Six librarians believed that a single unified digital tool
would improve their experiences.

**Concern with For-Profit Business Models**

Half of all participants (n=15) claimed that a major drawback to scholarly identity work
involves supporting for-profit digital tools and academic networking sites. As was found for the
time constraints theme, librarians expressed the most concern (n=9), although it was also
mentioned by Ph.D. students (n=4), and faculty (n=2). Among faculty discussing this theme, F-
20 used the public space of a church as a metaphor to insinuate that academic networking sites
should be open access: “[I] don't like Academia.edu because they charge … It's like being told
that someone has to pay for someone else to go their church.” Faculty also feel taken advantage
of when using for-profit services, reporting that strategies, like sending constant reminders and
offering enhanced profile features, can be a lure to “get you interested, [and then] ask you to pay
10 bucks a month” (F-84).

Ph.D. students questioned the effectiveness of these strategies and of for-profit digital
tools and academic networking sites themselves. For example, “I find that both ResearchGate
and Academia.edu tend to be a scam. Before I ever published anything, I received notifications
that people cited my writing, which is ridiculous. I think those two sites in particular are flawed
and so I don't know that there's much impact” (P-71). Ph.D. students also discussed the importance of access to other research and, similar to faculty, were less likely to support sites with for-profit models that charged for access and other scholarly identity services, such as impact-based measures.

Additional concerns that librarians had about for-profit business models were: pending lawsuits (L-1, L-103), advertising (L-101), monetizing researcher labor (L-102, L-69), the degree of cost to use these services (L-102, L-73), perceived competition with these services (L-11), and questionable profit motivations (L-50). One reason why more librarians may have reported this theme is because they provide many of the services researchers currently pay for, with less legal and material detriment. Per L-103:

Faculty may not be aware that third-party scholarly identity tools, like ResearchGate, may provide a platform, but don't provide any services to you. That's why they got a lawsuit. So, for us, we try to provide services [that are] similar, but we provide actual services because we ensure that what the faculty shares is legal. This is through a software the university has. We help faculty set up these profiles, but also do some training and education. Very recently, actually last fall, my office and the University office of general counsel together developed a copyright and open access presentation that we inserted into different meetings for faculty, graduate students, etc. It's about 20 minutes. We educate faculty and students about what they need to pay attention to when sharing their online identities.

**Context Collapse**

Context collapse refers to a phenomenon across social media in which people experience the flattening of “multiple audiences into one" (Marwick and boyd, 2011, p. 122). For example, in the physical environment, people’s co-workers may never meet their friends from secondary school. However, on an academic networking sites like Facebook, people from these groups might engage in political arguments across a discussion thread. Seen through the lens of Goffman (1967), context collapse leaves people susceptible to face threats, which they may guard against by imagining an audience of "nightmare readers" such as bosses, parents, and
teachers (Marwick and Boyd, 2011, p. 125), and limiting their personal discourse to topics
deemed appropriate for all readers. Within a scholarly identity context, researchers experience
difficulty in determining what to say about their presentations, publications, and service activities
on both general and academic networking sites because of an unknown audience. Context
collapse was discussed most by librarians (n=7), followed by Ph.D. students (n=4), and faculty
(n=3).

Faculty carefully managed what information they shared on each academic networking
sites based on their perceived audience. For F-57, ResearchGate and Academia.edu are “boring
LinkedIn versions of your personality,” whereas Facebook and Twitter are tools to communicate
with students. However, F-57 mentioned that these distinctions between personality and platform
could become blurry, noting that her Twitter use “sometimes leaks into my personal life.”
Keeping this blurriness in mind, F-32 consistently asks before using online platforms: "Am I
going to be perceived as posting this as an individual or a [school] representative?"  

Ph.D. students who discussed context collapse also focused on this personal/professional
divide. For example, P-39 recounted an experience in which she posted about a “weekend
getaway” on Facebook before realizing “maybe it’s not a good thing to post because my
professor might not think that I’m working hard.” She continued to describe context collapse
related to her research on HIV, which she worried might cause someone to “think I’m weird or
stigmatize me, or think I have HIV.” She worried that if her advisor saw that she took a weekend
off, or if a friend or acquaintance not familiar with her research were to see which HIV-related
Facebook groups she followed, it could cause damage to both her scholarly and professional
reputations.
Context collapse also could reflect more substantial cultural differences between various social groups with whom an individual interacts. For instance, P-34 chooses not to use Facebook because of regional differences between individuals he knows from home versus the culture of academia. He stated:

Where I'm from it's blue collar and not a lot of people go to college and very few get a Ph.D., so that's another reason I don't promote that fact on my Facebook page. I don't want to be perceived as someone who is good at college because they don't value knowledge in the same way so that's why I keep it close to the chest. And so that depends on what region you're from, you're going to be viewed a certain way.

Ph.D. student accounts also denote that academic networking sites and other digital contexts do not solely relegate context collapse. For instance, P-95 navigated her selection of research topics by balancing personal interests with those of individuals from her home country, Nigeria:

You talked about how scholarly identity interacts with your personal identity and your cultural identity, all of these things. Even for me right now there are things and topics in my field that I never would want to study because they challenge my cultural assumptions and beliefs, like issues around gender equality and things. There are cultural reasons why I didn't want to go into that. That's why I want to create interest areas that don't challenge my cultural values and that goes into my personal beliefs and religious beliefs that could be of potential impact to the research community, but I know that if I go into these areas, if I write an article about gender equality in Nigeria that would go to my kinsmen and family members and they would say, “Oh, so our culture is inferior?”

In this account, P-95 identifies the potential for context collapse, whether offline or online, of her research, likely because academic publishing requires visibility. Thus, this threat of context collapse has shaped her research agenda.

Like faculty and Ph.D. participants, librarians also addressed the tensions behind putting significant work into distinguishing between scholarly, professional, and personal identities. L-1 refers to this work as the “fragmentation of how I maintain my identity publicly,” and cites “not having the time to keep up with it.” Other participants view this overlap as inevitable, especially
on certain platforms like Twitter: “people are on Twitter and have personal viewpoints which may overlap with professional identities” (L-11).

Though L-11 seemed to partly embrace overlap among her online identities, other librarians framed context collapse as problematic, particularly regarding its potential to offend specific audiences. Aligned with Marwick and boyd’s (2011) claim that social media users often share the lowest common denominator of information to avoid controversy, one librarian explained, “Sometimes I try to put out something that is more about my opinions, those things don't get re-tweeted or liked, so this is a sign to me that I should keep it to myself” (L-69).

**Confusion**

Thirteen participants expressed confusion over how to use digital tools and academic networking sites for scholarly identity. Confusion was an issue most frequently mentioned by librarians (n=10), followed by Ph.D. students (n=2), then faculty members (n=1). The lone faculty member to express confusion also may have been alluding to the opacity of for-profit sites’ intentions, stating that he is “suspicious of why the help button is needed” (F-76) on certain platforms. Confusion experienced by Ph.D. students related to use of platform features. For instance, P-23 expressed confusion over how to access articles using ResearchGate: “I think it's difficult to get access to articles. I've requested articles and never heard back.”

Much like the other themes, librarians likely had more responses because they were speaking of their personal experiences as well as those of the researchers they were helping. As one example, L-101 stated: “I think it can be really intimidating for some people to try and create a scholarly identity using social media. It's not been particularly difficult for me, but the fact that I've run so many things for various organizations implies that I have more comfort than others.”

Areas of confusion that librarians both personally experienced and perceived researchers to
experience included the number, variety, and features of digital tools and academic networking sites; metrics; which digital tools and academic networking sites to use; and how to use them. For example, L-102 said: “The landscape is now so crowded that it's difficult to choose, select, and create a consistent and comprehensive identity. They're all over the place, those identifiers. There are many different data and silos, and it's difficult to combine them in one place and draw some conclusion.”

**Concern over Damage to Reputation**

Thirteen participants worried that an online scholarly identity presence could negatively impact their professional reputations or the professional reputation of their colleagues. Unlike the other themes in this section, faculty members expressed concern over reputational damage the most (n=6) followed by Ph.D. students (n=4) and librarians (n=3). Among faculty, this theme most frequently applied to pre-tenure colleagues: “Pre-tenure colleagues don't want to go on social media, they say every single sentence they write...can be perceived in the wrong light. It's not worth the risk. It's like the fear is stopping them, but my concern is that if they're in the habit of not doing it, will they convert? I don't think they'll start posting” (F-20).

Faculty members also stated that institutional policy interacts with reputational concerns. F-7 stated that their institution actively discourages online scholarly identity work, and therefore these concerns are minimized. However, F-20 was concerned that their institution might start requiring an online scholarly identity presence in the future, which would significantly impact pre-tenure colleagues mentioned above.

Ph.D. students discussed reputational concerns less in the abstract (e.g., discussing what might happen based on institutional policy change; speculating on the experiences of others) and instead addressed the threat of damage to their own reputations. They also expressed reservations
regarding how many of these platforms might exacerbate what they perceived as a competitive environment inherent to academia. Specifically, they were worried that their scholarly activities and opinions could be subject to critique due to academic networking sites and digital tool features like persistence and visibility of content. P-23 illustrates this concern:

> Sometimes you are perceived as a scholar when engaging on social media as "dumbing down the conversation" and you're not serious and you're oversimplifying things. I feel like you can be criticized by some people for saying the wrong thing or not thinking through your tweet. You didn't represent the research as accurately as you should have. Academia has a critique and criticism culture so engaging in information conversations that aren't verbal, face-to-face, this is out there and can be subject to further examination by parties who wanted to critique you for some reason.

Librarians discussing reputational concerns often quantified perceived reputational damage by social indicators such as the number of likes or shares on a social media post. For instance, L-33 explained that he times his posts to achieve maximum impact because if you don’t engage in scholarly identity work, “you are perceived as a slacker, not on top of things, as out of date, as not fully engaged, not confident, not professional.”

**Privacy Concerns**

A final theme addressed by participants was privacy concerns (n=6). As was found in the concern over damage to reputation theme, faculty expressed the majority of these concerns (n=5), which often related to context collapse. For example, F-57 stated that “the idea of students finding my site and trying to friend me and learning personal information about me” is unsettling. Moreover, making participation on academic networking sites “compulsory is an ethical issue because the tools track their posts.” On the other hand, another participant noted that while initially “people saw following others as quite negative like stalking” what was once “creepy is now due diligence” (F-20). No Ph.D. students explicitly discussed privacy. One
librarian mentioned this theme, which mimicked faculty concerns, stating, “I have concerns about… the amount of data you put into their platforms” (L-69).

Themes Related to Library Support Roles

This section identifies themes related to potential and desired library support of scholarly identity creation and maintenance, illustrated by participant quotations. Participants were not directly asked about how libraries could support scholarly identity practices because the literature suggested that this topic was still a developing area in library instruction. The decision was made not to suggest librarian intervention or specific types of support that the participants may not have considered in the first place, but rather to explicitly explore the types of support that was currently being provided. The development of librarian support as a theme from all three participant groups suggests that librarians may serve as salient support systems among participants.

Library Support: Librarian Themes

Librarians were asked about what support they currently offer their users. All ten librarians said that their institutions offered workshops for faculty and doctoral students. For example, L-1 said: “We will basically do a workshop about tools and strategies for managing scholarly profiles, deciding where to publish, avoiding predatory publishers, metrics/altmetrics, [and] social media.” Nine librarians said that they help users by packaging content, or by helping them to identify their audiences and to format their submissions for certain publications (Reed et al., 2016). Librarians may be able to use their “strong knowledge about the audience of journals…and give advice” (L-11). Seven offer individual consultations by appointment. One librarian (L-1) noted that her institution runs a yearly conference on scholarly identity-related topics. Most workshops and consultations focus on general orientations, metrics, and
discussions/demonstrations of digital tools and academic networking sites. Librarians seemed most interested in promoting open access venues, including their institutions’ repositories, as well as ORCID, which is not-for-profit and supported by member organizations (ORCID, 2020). However, many claimed to offer services regarding all tools and academic networking sites, depending on their users’ needs and desires.

Librarians also mentioned the importance of context and disciplinary differences in how scholars engage with scholarly identity work. Participants suggested that natural sciences utilize different platforms and maintain different norms than humanities scholars and social scientists. Librarians also mentioned catering their workshops to specific user populations, including users’ disciplines and roles (e.g., doctoral students or faculty).

In addition to the above themes, six librarians discussed the need first to use digital tools and academic networking sites for scholarly identity before developing and teaching scholarly identity services, despite their colleagues’ reservations. For example, L-101 said: “It's hard to teach them effectively if the person teaching doesn't use them themselves. This can be tricky for tools that aren't as used in the library world to see how other people use those services and best teach them.”

Library Support: Ph.D. Student Themes

Ph.D. students’ perspectives suggested potential library support roles including individual consultations (n=2), orientations to altmetrics and other aspects of an online scholarly landscape (n=2), and help with personal website creation (n=1). These findings suggest that librarians have an opportunity to develop and promote these services to their users. To illustrate the orientation to altmetrics/scholarly landscape theme, P-95 said that she would appreciate help in:

Creating accounts in Google Scholar and ResearchGate. I wish I had known earlier in my career, maybe when I started my Master’s program, it would have been more helpful
for me to use these tools earlier rather than later. I didn't have my Bachelor’s degree here so I had limited ideas about how to disseminate information related to your research. The usage, how to actually use them for your research. I didn't have the knowledge.

**Library Support: Faculty Themes**

Faculty opinions were similarly dispersed in terms of library support related to scholarly identity work. Faculty members stated that they wanted to learn more about open access (n=3), digital tools (n=2) and copyright (n=3), as illustrated by F-57:

> As I’m preparing to go on my sabbatical and work on a book proposal, I think how difficult it is to navigate the publishing world on the book level. [For] some practices about academia and scholarly work, people are less open about them then they could be…Give me the truth serum they use in Harry Potter. Pull back the curtain on some of the publishing practices.

**The Magic Wand Question**

The magic wand question was adapted from Cheuk and Dervin (2011) who found it useful to ask participants "If you had a magic wand, what would you like to happen?" (p. 10). Participants were asked to consider if they had a magic wand, what type of help would they most desire with their scholarly identity creation and management? Three themes developed centering on the desire for: (a) mentors or groups of mentors, (b) streamlined technical systems, and (c) a proxy. A small number of both Ph.D. students (n=2) and faculty (n=2) wished for a mentor or group of mentors. This role of mentor, or of convening mentoring groups might be taken on by librarians, although this theme did not appear in their responses. The majority of the librarians (n=6) most desired the ability to designate a proxy who could complete their scholarly identity work (or their users’ scholarly identity work). For example, one librarian said she would like “someone who would just keep all of this stuff updated for me all the time” (L-1).

Across all three groups, participants said that they wanted streamlined technical systems that were more user-friendly and integrated, although there were more librarians (n=6)
mentioning this desire than Ph.D. students (n=3) or faculty (n=4). When discussing a streamlined system, librarians specifically desired automatic updates, an all-encompassing platform, social networking features, and user-friendly attributes. For example, L-46 said:

Well, what I’d like is a platform that kind of rolls the services LinkedIn offers with the identification ability of ORCID and the ability for it to report out to you for no fee. So that you know who you’re connected to, who’s looked for you specifically, what searches your name came up in if someone did a search on a topic. And if there’s not cost involved because, you know, you said, magic wand.

DISCUSSION AND RECOMMENDATIONS

Benefits and Drawbacks of Scholarly Identity Work

RQ1 asked, “What are the perceived opportunities, benefits, drawbacks, and challenges of online scholarly identity work use among Ph.D. students, faculty, and academic librarians?” The research findings reported here indicate that participants found scholarly identity tools to be useful in accomplishing a variety of aims. For example, they used academic networking sites to connect with peers, disseminate their research, and share materials with other scholars. Though academic librarians helped faculty and Ph.D. students accomplish these aims, they also constructed their own scholarly identities to promote their work and communicate with others in their field. Overall, participants suggested that maintaining a scholarly identity can increase their professional impact.

Goffman’s theoretical framework provided insights into scholarly identity practices described by the participants in this study. All participants were found to have engaged in impression management strategies to either promote positive face work (Goffman, 1959) or avoid negative face threats (Goffman, 1959; 1967). The benefits and drawbacks identified by participants suggest that they are aware that their self-presentation on academic networking sites may affect how others perceive them. However, despite identifying several advantages of
scholarly identity work, participants expressed significant confusion of how to select platforms and leverage their advantages, skepticism toward scholarly identity work in general, and drawbacks related to for-profit motives of specific scholarly identity platforms and the time commitments required for each. Participants discussed several concerns related to impression management and face work. Participants also must negotiate with significant face threats that accompany scholarly identity activities online and offline. Participants’ concern regarding context collapse (Marwick and boyd, 2011), for example, may stem from anxiety regarding who can see their posts and subsequently judge them. Scholarly identity activities may be risky in this and other regards, as participants had to negotiate multiple identities simultaneously while determining what may be “professional” versus what may harm their reputations.

The level and manner of concerns varied over the participant groups. Twice as many faculty participants as librarian participants voiced concern regarding damage to reputation. Faculty participants were also more likely to frame this concern in the hypothetical, such as how they imagined use of digital tools and academic networking sites for scholarly identity would impact the reputations of their pre-tenure colleagues or how their institutional policy might develop regarding scholarly identity. Ph.D. students were more likely to discuss damage to their own reputations as opposed to hypothetical scenarios, which may reflect their position relative to employed faculty members.

As noted by two participants, some individuals may experience scholarly identity work differently based on aspects of their identities that intersect with their scholarly pursuits. Broader notions of privilege and power come into play regarding gender, race, nationality, and other factors that may affect a person’s ability to craft an identity that garners respect and positive attention. One participant explained:
I guess one of the things that I've noticed recently was, for example, at a conference that I'm engaged with, almost all the invited keynotes were men. I was getting frustrated because my area has a lot of women, but men tend to get more public-facing presentations. That bothered me on a gender front. There are issues with minorities as well, in terms of the impact of getting keynote lectures and getting an invitation. It can be about who you know. R1 institutions have more money and more travel. People see each other again and again, and naturally think to invite each other to other things. If you don't have funding and power to get away, you're not going to get to the conference and get the invite. So, it's kind of a cycle that feeds on itself that comes from prestige and funding and networking, which all feeds into your scholarly identity (L-11).

Beyond these face threats, participants voiced moral and ethical quandaries regarding the closed and for-profit nature of specific digital tools and academic networking sites for scholarly identity.

**Academic Librarians and Scholarly Identity Work**

RQ2 asked, “What, if any, practices do academic librarians engage with to assist Ph.D. students & faculty with managing online scholarly identity work?” There were some commonalities, but also notable differences across the three perspectives of participant groups that librarians should consider when supporting scholarly identity for faculty and Ph.D. students. All groups noted that selection of digital tools and academic networking sites for scholarly identity work depends on contextual factors. Librarians, Ph.D. students, and faculty use a variety of tools and academic networking sites to serve different purposes. A participant’s role, context, and specific aims influenced tool and academic networking sites selection. Consistently, Twitter and Facebook most commonly were used by approximately three-quarters (n=24) of participants, while more faculty than librarians and Ph.D. students used ResearchGate and Academia.edu in their scholarly identity work. While all librarian participants reported that their institutions offered workshops on scholarly identity and that most supported faculty and Ph.D. students in creating and maintaining their scholarly identity, no more than three participants indicated that they desired assistance related to any sub-theme of suggested areas of academic librarian
support. This suggests that librarian support of scholarly identity may not be in developmental stages, as suggested in the literature, but that it is becoming more prevalent, although yet under-reported or that our participant group of communication faculty and Ph.D. students were less aware that librarian support is available. Future studies that include these three groups may suggest whether this is a discipline related phenomenon and how to effectively market librarian support of scholarly identity to these academics. There was agreement across groups that benefits included the ability to connect with other researchers and to disseminate academic activities. There was an overall skepticism toward scholarly identity work, most clearly articulated by the librarians who pointed out common drawbacks of time commitment, confusion over which platforms to use and how to best leverage effort, and concern about for-profit motives.

**Academic Librarian Strategies for Assisting Scholarly Identity Work**

RQ3 asked, “How can scholarly identity-related assistance become a more substantial part of academic librarians’ services to Ph.D. students and faculty?” The findings of this study suggest different strategies for librarians to support faculty and Ph.D. student scholarly identity efforts. Faculty specifically requested information on different scholarly identity digital tools and academic networking sites. Scholars also requested information on how to share their published research while respecting copyright law. However, they did not specify how they would want this information presented. Ph.D. students desired orientation to altmetrics, the scholarly landscape, and information on creating personal websites. They also specifically requested individual consultations on these topics. While many of the librarians reported offering workshops and consultations on most of these topics, they did not discuss a differentiation between the content or delivery of this information between faculty and Ph.D. students.
One strategy for presenting this information to Ph.D. students would be to introduce them to the scholarly landscape, and then compare the benefits and drawbacks of different scholarly identity digital tools and academic networking sites. Faculty members have more knowledge of the scholarly landscape, and because they have more publications, they may be more aware of copyright developments, especially around open access. The issue of open access may be especially salient in the current landscape given the attention brought to Elsevier’s profit-driven practices by the University of California’s decision to divorce from their services (Kell, 2019). Ph.D. students with publications and faculty may be more receptive to one-on-one consultations that offer practical strategies for circumventing barriers, saving time, and maintaining a sustainable scholarly identity presence. One librarian offered the following comprehensive strategy:

Find all of your numbers like ORCID, Web of Science, and Thompson, choose an email address on all profiles, a picture on all profiles. Email is something you should check regularly. Have a list of ways your name has appeared in author statements on any publications and a list of all your publications in a citation system like Mendeley or the like. Have a folder with a PDF of every publication, whether publicly available or not. Create a checklist of the order in which you update your profiles whenever you publish something new (L-73).

Further studies may yield more nuanced strategies for enhancing scholarly identity and for instructing faculty and Ph.D. students in effectively maintaining their scholarly identity. The results of this study suggest that in a one-on-one consultation, or possibly group mentoring sessions, the librarian can recommend tools concerning the benefits and drawbacks identified in this study and related literature. By recommending streamlined strategies, open versus closed or for-profit platforms, and suggesting ways to minimize damage to a person’s reputation, librarians can address the significant concerns with scholarly identity digital tools and academic networking sites.
LIMITATIONS AND FUTURE DIRECTIONS

This work is not without limitations, including lack of triangulation for data collection and analysis, as well as a small, self-selected sample exhibiting a lack of diversity in research area (all participants were social scientists), gender, race/ethnicity, geographic location, and disciplinary focus. Future research can address these limitations by conducting additional individual or focus group interviews, or large-scale surveys with researchers from other fields and in other nations to discover potential disciplinary and cultural differences. These investigations could also directly ask participants how academic librarians can support their scholarly identity efforts.

Other factors to be investigated based on research findings include determining the connection between scholarly identity practices and perceptions of quality scholarship (e.g., for tenure and promotion decisions), investigating in further detail scholarly identity barriers with a particular focus on those shaped by face work and impression management concerns, and exploring avenues for how academic librarians can provide enhanced services based on their specialized knowledge. The next phase of this work seeks to identify sustainable and ethical practices and strategies to establish and maintain scholarly identity (see also omitted for blind review) and to explore what practices are in use through analysis of academic networking sites posts.

A concurrent rise in social media use and push to engage in self-promotion of one’s scholarship among academics has led to a new landscape from which to examine how academics disseminate research. Although researchers and librarians identify significant benefits and opportunities to engaging in maintenance of a scholarly identity presence, especially in virtual environments, it is irresponsible to promote scholarly identity digital tools and academic
networking sites without considering their potential drawbacks and challenges. This research has taken the first step to clarify some of these drawbacks and challenges within the context of developing scholarly identity digital tools and academic networking sites to help researchers make informed and ethical decisions when seeking to increase their impact and reputation online.
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Table 1. Participant demographics
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Table 2. Participants’ most frequently used academic networking sites
REFERENCES


ORCID. (2020), About ORCID, available at: https://orcid.org/about/what-is-orcid/mission


Appendix A: Interview Guide

We are interested in finding out more about your thoughts on the information practices and strategies you use to create and manage your scholarly identity. These practices and strategies include academic endeavors that allow you to promote a personal brand, build your reputation, and increase the impact of your research.

1. What does the term “scholarly identity” mean to you?
2. What does the term “scholarly impact” mean to you?
3. What do you think is the difference between these two terms?
4. What is the relationship between a scholar’s identity and their impact?
5. How has this relationship changed over time with the advent of new digital tools (such as ResearchGate, Academia.edu, etc.)?
6. How important is it to you to create and maintain your scholarly identity or personal brand? Why does it have this level of importance?
   
   Probe, if not mentioned… How important do you think creating and maintaining a scholarly identity is to getting a job [for grad students] or getting tenure and promotion [for faculty members]?

7. [for more senior faculty members] How do you feel that expectations [from deans, chairs, mentors] have changed over time regarding creation and maintenance of scholarly identity?

8. What information practices and strategies do you engage in when creating and maintaining your scholarly identity?

9. Tell me about your use of social networking sites (SNS), such as ResearchGate, Twitter, Academia.edu, particularly regarding creating and cultivating your scholarly identity.
   
   Probe, if not mentioned: What digital tools or resources do you use for measuring and increasing your scholarly identity?

   Probe, if doesn’t use…

   Tell me what would assist you in getting started with SNS for developing your scholarly identity?

   Tell me what has prevented or stopped you from using SNS for developing your scholarly identity? (skip to question 15)

10. What barriers have you experienced (if any) regarding the use of social networking sites or digital platforms to create and manage your scholarly identity? How could those barriers be alleviated?
11. How much time and effort would you say you devote to behaviors and activities related to the cultivation of your scholarly identity?

   Probe, for heavy users of sites like Research Gate... How, if at all, have you changed your research or publication practices based on thing you have learned about your scholarly performance by using these sites?

12. Recall and describe a time, within the past six months, that you engaged in activities that you felt were successful in creating or cultivating your scholarly identity? What stands out to you that made this successful?

13. Recall and describe a time, within the past six months, that you engaged in activities that you felt were unsuccessful in creating or cultivating your scholarly identity? What stands out to you that made this unsuccessful?

14. Describe any help you have had in creating or cultivating your scholarly identity.

   Probe...

   Who provided this help?

15. If you had a magic wand and could have any type of help to create or manage your scholarly identity, what would this help look like?

16. What other thoughts do you have on the topic of developing your scholarly identity that we have not yet covered?

17. What other thoughts do you have on the topic of developing services relating to creating and managing scholarly identity for yourself that we have not yet covered?

[Additional questions for librarians]

1. What is your view of current information practices for faculty, students, and librarians in creating and managing their scholarly identities? Why do you hold this view?

2. What information practices and strategies do you engage in when helping doctoral students and faculty to create and manage their scholarly identity?

   Probe...

   What tools or resources do you use for measuring, increasing, and communicating their scholarly identity?

3. Describe any help that your library provides to faculty or doctoral students who are looking to create or manage their scholarly identity?

4. (If none or minimal) What has prevented or stopped your library from providing (or providing more, if minimal) services to faculty and doctoral students regarding creating and managing their scholarly identity?
5. What would assist your library in getting started in providing services (or in providing more service) to faculty and doctoral students regarding creating and managing their scholarly identity?

6. Now, turning to yourself as a scholar/researcher. How important is it to you to create and manage your scholarly identity or personal brand? Why does it have this level of importance for you?

7. What information practices and strategies do you engage in when creating and managing your scholarly identity?
   
   Probe…

   What tools or resources do you use for measuring, increasing, and communicating your scholarly identity?

8. If you had a magic wand and could create any service that would help faculty, doctoral students, or yourself, regarding creating and managing scholarly identity, what would that look like?

9. What benefits, if any, do you see for a service of this type?
   
   Probe, if not addressed… benefits to you, your library, your college or university, your faculty and doctoral students

10. What drawbacks, if any, to you see for a service of this type?
   
   Probe, if not addressed: drawbacks to you, your library, your college or university, your faculty and doctoral students

11. What other thoughts do you have on the topic of developing services relating to creating and managing scholarly identity for yourself, faculty, and/or doctoral students that we have not yet covered?
## Appendix B: Codebook

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<td>Types of people that influence person’s choice of tools to cultivate a scholarly identity. Emic (Radford et al.)</td>
</tr>
<tr>
<td>2.2.1</td>
<td>Librarians</td>
<td></td>
</tr>
<tr>
<td>2.2.2</td>
<td>Faculty</td>
<td></td>
</tr>
<tr>
<td>2.2.3</td>
<td>Doctoral students</td>
<td></td>
</tr>
<tr>
<td>2.2.4</td>
<td>Other</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Specific tools &amp; cases</td>
<td>“Examining one particular tool” (Kjellberg, et al., 2016, p. 225)</td>
</tr>
<tr>
<td>3.1</td>
<td>Scholarly Reputation Platforms</td>
<td>“Either social networking websites or sites that utilize social media, usually as part of a broader portfolio of services, to build, promote, and measure reputation.” (Nicholas et al., 2015, p. 171)</td>
</tr>
<tr>
<td>3.1.1</td>
<td>Multidisciplinary social networking platforms</td>
<td>Examples: ResearchGate, Academia.edu (Nicholas et al., 2015, p. 171)</td>
</tr>
<tr>
<td>3.1.1.1</td>
<td>ResearchGate</td>
<td></td>
</tr>
<tr>
<td>3.1.1.2</td>
<td>Academia.edu</td>
<td></td>
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<tr>
<td>3.1.1.3</td>
<td>Google Scholar</td>
<td></td>
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<tr>
<td>3.1.1.4</td>
<td>Microsoft Academic</td>
<td></td>
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<tr>
<td>3.1.1.5</td>
<td>ORCID</td>
<td></td>
</tr>
<tr>
<td>3.2</td>
<td>SNS/SRM</td>
<td>“social network sites/social reference managers” (Kjellberg, et al., 2016, p. 225)</td>
</tr>
<tr>
<td>3.2.1</td>
<td><strong>Professional platforms</strong></td>
<td>SNS</td>
</tr>
<tr>
<td>-------</td>
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</tr>
<tr>
<td>3.2.1.1</td>
<td>LinkedIn</td>
<td></td>
</tr>
<tr>
<td>3.2.2</td>
<td><strong>Microblogging</strong></td>
<td>(Kjellberg, et al., 2016)</td>
</tr>
<tr>
<td>3.2.2.1</td>
<td>Twitter</td>
<td></td>
</tr>
<tr>
<td>3.2.2.2</td>
<td>Tumbler</td>
<td></td>
</tr>
<tr>
<td>3.2.3</td>
<td><strong>Other SNS Platforms</strong></td>
<td>(Kjellberg, et al., 2016)</td>
</tr>
<tr>
<td>3.2.3.1</td>
<td>Facebook</td>
<td></td>
</tr>
<tr>
<td>3.2.3.2</td>
<td>Instagram</td>
<td></td>
</tr>
<tr>
<td>3.2.3.3</td>
<td>Snapchat</td>
<td></td>
</tr>
<tr>
<td>3.2.4</td>
<td>Blogs</td>
<td>(Kjellberg, et al., 2016)</td>
</tr>
</tbody>
</table>

| 3.3 | **Websites** | |
| 3.3.1 | Personal website | |
| 3.3.2 | Departmental website | |

| 3.4 | **Institution specific resources/repositories** | |
| 3.4.1 | Open access repositories | |
| 3.4.2 | LibGuides | |

4 | **Assessing impact** | “Using traces from digital tools for impact measures” (Kjellberg, et al., 2016, p. 225) |
| 4.1 | Using Analytics/Altmetrics | Emic (Radford et al.) |

5 | **Motivations & Benefits of Using Online Technologies to Create, Cultivate, & Maintain Scholarly Identity** | “Practices & new modes of communication-Understanding digital communication practices by researchers.” (Kjellberg, et al., 2016, p. 225) |
<p>| 5.1 | Connect with other researchers (e.g., meeting researchers, following their activities) | (Nández &amp; Borrego, 2012, p. 786) |
| 5.2 | Disseminate academic activities including papers published, CV, teaching materials, etc. | (Nández &amp; Borrego, 2012, p. 788) |
| 5.3 | Follow other researcher’s activities | (Nández &amp; Borrego, 2012, p. 786) |
| 5.4 | Signed up because other researchers from the department/faculty are there | (Nández &amp; Borrego, 2012, p. 786) |
| 5.5 | Signed up because other researchers of interest are there | Emic (Radford et al.) |</p>
<table>
<thead>
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<tbody>
<tr>
<td><strong>5.6</strong></td>
<td><strong>Find collaborators for research projects</strong></td>
<td>(Nández &amp; Borrego, 2012, p. 786)</td>
</tr>
<tr>
<td><strong>5.7</strong></td>
<td><strong>Search for a job</strong></td>
<td>(Nández &amp; Borrego, 2012, p. 786)</td>
</tr>
<tr>
<td><strong>5.8</strong></td>
<td><strong>Facilitate getting a job</strong></td>
<td>Emic (Radford et al.)</td>
</tr>
<tr>
<td><strong>5.9</strong></td>
<td><strong>Facilitate getting tenure/promotion</strong></td>
<td>Emic (Radford et al.)</td>
</tr>
<tr>
<td><strong>5.10</strong></td>
<td><strong>Join or participate in professional/scholarly communities (e.g., professional/scholarly organizations)</strong></td>
<td>Emic (Radford et al.)</td>
</tr>
<tr>
<td><strong>5.11</strong></td>
<td><strong>To assist with teaching</strong></td>
<td>Emic (Radford et al.)</td>
</tr>
<tr>
<td><strong>5.12</strong></td>
<td><strong>Access conferences, academic opportunities, resources, etc.</strong></td>
<td>Emic (Radford et al.)</td>
</tr>
<tr>
<td><strong>5.13</strong></td>
<td><strong>Collaborate with research projects and teams</strong></td>
<td>(Nández &amp; Borrego, 2012, p. 788)</td>
</tr>
<tr>
<td><strong>5.14</strong></td>
<td><strong>Increase citations</strong></td>
<td>(Nández &amp; Borrego, 2012, 788)</td>
</tr>
<tr>
<td><strong>5.15</strong></td>
<td><strong>Edit materials quickly and easily</strong></td>
<td>(Nández &amp; Borrego, 2012, p. 788)</td>
</tr>
<tr>
<td><strong>5.16</strong></td>
<td><strong>Share/exchange materials with other researchers (e.g., crowdsourcing)</strong></td>
<td>(Nández &amp; Borrego, 2012, p. 788)</td>
</tr>
<tr>
<td><strong>5.17</strong></td>
<td><strong>Improve time management</strong></td>
<td>(Nández &amp; Borrego, 2012, p. 788)</td>
</tr>
<tr>
<td><strong>5.18</strong></td>
<td><strong>Be up to date</strong></td>
<td>(Nández &amp; Borrego, 2012, p. 788)</td>
</tr>
<tr>
<td><strong>5.19</strong></td>
<td><strong>Outreach</strong></td>
<td>“Opening the door to science/research outside academia” (Kjellberg, et al., 2016, p. 225)</td>
</tr>
<tr>
<td><strong>5.20</strong></td>
<td><strong>Share open access materials</strong></td>
<td>Emic (Radford et al.)</td>
</tr>
<tr>
<td><strong>5.21</strong></td>
<td><strong>Increase impact</strong></td>
<td>Emic (Radford et al.)</td>
</tr>
<tr>
<td><strong>5.22</strong></td>
<td><strong>Minimizing role insecurity</strong></td>
<td>Emic (Radford et al.)</td>
</tr>
<tr>
<td><strong>5.23</strong></td>
<td><strong>Other</strong></td>
<td>Emic (Radford et al.)</td>
</tr>
<tr>
<td><strong>6</strong></td>
<td><strong>No Perceived Need to Create, Cultivate, &amp; Maintain Online Scholarly Identity</strong></td>
<td>Emic (Radford et al.)</td>
</tr>
<tr>
<td><strong>7</strong></td>
<td><strong>Downsides/Drawbacks of SI Practices</strong></td>
<td>Emic (Radford et al.)</td>
</tr>
<tr>
<td><strong>7.1</strong></td>
<td><strong>Time constraints</strong></td>
<td>Emic (Radford et al.)</td>
</tr>
<tr>
<td><strong>7.2</strong></td>
<td><strong>For-profit use</strong></td>
<td>Emic (Radford et al.)</td>
</tr>
<tr>
<td><strong>7.3</strong></td>
<td><strong>Confusion</strong></td>
<td>Emic (Radford et al.)</td>
</tr>
<tr>
<td></td>
<td>SI Practices – Library Service/ Roles &amp; Potential Opportunities for Library Service/ Roles</td>
<td>&quot;Ways in which librarians can support scholar-practitioners and graduate students with profile and altmetrics tools&quot; (Reed, McFarland, &amp; Croft, 2016, p. 92). Note: Scholar-practitioners are primarily teaching faculty</td>
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<tr>
<td>8</td>
<td>Offer individual consultation</td>
<td>Emic (Radford et al). Suggestion to offer services that are “highly personalized in nature” beyond LibGuides and other general resources on altmetrics and scholarly profiles (Reed, McFarland, &amp; Croft, 2016, p. 92)</td>
</tr>
<tr>
<td>8.1</td>
<td>Offer individual consultation</td>
<td>Emic (Radford et al). Suggestion to offer services that are “highly personalized in nature” beyond LibGuides and other general resources on altmetrics and scholarly profiles (Reed, McFarland, &amp; Croft, 2016, p. 92)</td>
</tr>
<tr>
<td>8.2</td>
<td>Offer workshop</td>
<td>Emic (Radford et al)</td>
</tr>
<tr>
<td>8.3</td>
<td>Organize conference</td>
<td>Emic (Radford et al)</td>
</tr>
<tr>
<td>8.4</td>
<td>Establish goal</td>
<td>“Librarians can highlight the opportunities and strengths afforded by various tools, and recommend particular services based on the goal of individuals” (Reed, McFarland, &amp; Croft, 2016, p. 92).</td>
</tr>
</tbody>
</table>
| 8.5 | Tools | “One of the main places where librarians can assist scholar-practitioners and students...is to go over the...
tools available and to make recommendations” (Reed, McFarland, & Croft, 2016, p. 92).

8.6 Orientation to the altmetrics and scholarly promotion landscape
“Education and guidance on specific actions to take and tools to use... encouraging users in developing nuanced perceptions of social media” (Reed, McFarland, & Croft, 2016, p. 92).

8.7 Preparing users for the tough times
“Making users aware of the potential downside of engaging with profile tools should be a part of any service the library provides” (Reed, McFarland, & Croft, 2016, p. 93).

8.8 Copyright
“Librarians can assist by educating about Creative Commons resources and models enhancing copyright awareness on campus and reviewing work that individuals wish to release to the public” (Reed, McFarland, & Croft, 2016, p. 93).

8.9 Packaging content
“Librarians can help scholar-practitioners and graduate students to identify their audience segments and to present work in ways that are most suitable for various forums” (Reed, McFarland, & Croft, 2016, p. 93).

8.10 Open Access (OA) education
“Librarians may assist scholar-practitioners to assert their author rights with publishers in order to re-publish content in OA form, as well as provide education on suitable OA repositories” (Reed, McFarland, & Croft, 2016, p. 93-94).

8.11 Promoting new service
“Aside from direct contact with people whose work is already represented online, librarians can approach scholar-practitioners who are working on research projects – particularly those who are in the planning stages” (Reed, McFarland, & Croft, 2016, p. 94).

8.12 How to create a personal website
Emic (Radford et al.)

9 Theoretical Codes – Goffman Impression Management
“Impression management is performed when an individual controls information about the self to influence the impression that is formed about them in the minds of others” (Goffman, 1959; Batenburg & Barties, 2017).

9.1 Impression Management via SNS
“Social media seem a perfect place for impression management: the information one shares online is easier to control (i.e., the a-synchronic nature of social media gives individuals time to think about what they want to share) than the information one reveals during interpersonal interactions” (Batenburg, & Barties, 2017, p. 266).

9.2 Reasons to present oneself
<table>
<thead>
<tr>
<th>Section</th>
<th>Type</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>9.2.1</td>
<td>Relational development</td>
<td>“Relational development disclosure seeks to increase relational intimacy and closeness with another person” (Bazarova &amp; Choi, 2014, p. 638).</td>
</tr>
<tr>
<td>9.2.2</td>
<td>Social control</td>
<td>“Social control disclosure is used to strategically share information about self in an effort to control social outcomes and resources such as information or social benefits” (Bazarova &amp; Choi, 2014, p. 638).</td>
</tr>
<tr>
<td>9.2.3</td>
<td>Identity clarification</td>
<td>“Identity clarification disclosure conveys information about one’s identity and defines one’s position for self and others” (Bazarova &amp; Choi, 2014, p. 638).</td>
</tr>
<tr>
<td>9.2.4</td>
<td>Self-enhancement</td>
<td>Idealizing the self, which research shows may have little effect or negative effects on others’ perception, despite popular discourse (Back et al., 2010)</td>
</tr>
<tr>
<td>9.2.4.1</td>
<td>Motivation for performance goals (Bareket-Bojmel et al., 2016)</td>
<td>Individuals are concerned with demonstrating their competence relative to others (Bareket-Bojmel et al., 2016, p. 789)</td>
</tr>
<tr>
<td>9.3</td>
<td>How oneself is perceived by others</td>
<td>The effects of SNS self-presentation on someone’s reputation (Batenburg &amp; Barties, 2017, p. 266)</td>
</tr>
<tr>
<td>9.3.1</td>
<td>Positive self-enhancement</td>
<td>The desire to increase the positivity and decrease the negativity of self-views (Bareket-Bojmel et al., 2016, p. 789)</td>
</tr>
<tr>
<td>9.3.2</td>
<td>Positive professionalism</td>
<td>When individuals display family values or professionalism, positive perception, including chances of being offered a job, may increase (Chiang &amp; Suen, 2015; Batenburg &amp; Barties, 2017, p. 267)</td>
</tr>
<tr>
<td>9.3.3</td>
<td>Negative professionalism</td>
<td></td>
</tr>
<tr>
<td>9.3.3.1</td>
<td>Overpromotion</td>
<td>Being entirely open and honest may not be the best way to impress a professional acquaintance (Buffardi &amp; Campbell, 2008; Batenburg &amp; Barties, 2017, p. 267); Emphasizing SNS presence over scholarly record (Emic, Radford et al.); Overshare (Emic, Radford et al.)</td>
</tr>
<tr>
<td>9.3.3.2</td>
<td>Posting Inappropriate material</td>
<td>Posting inappropriate material, such as alcohol and drug use, can have negative effects, including decreased chances of being offered a job (Chiang &amp; Suen, 2015; Batenburg &amp; Barties, 2017, p. 267)</td>
</tr>
<tr>
<td>9.4</td>
<td>Negotiating multiple identities simultaneously</td>
<td></td>
</tr>
<tr>
<td>9.5</td>
<td>Role insecurity (e.g., imposter syndrome)</td>
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</tr>
<tr>
<td>9.6</td>
<td>Risking face threat</td>
<td>Concern over publicly suffering a diminished self-image (Goffman, 1967)</td>
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<td></td>
<td>Code</td>
<td>Description</td>
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</tr>
<tr>
<td>10</td>
<td>Magic Wand</td>
<td>Use this code for participants’ responses to the “magic wand” question regarding desired tools and resources for SI management.</td>
</tr>
<tr>
<td>10.1</td>
<td>Mentor or group of mentors</td>
<td>Desire for a human actor or group actors (e.g., colleagues, cohort members) to assist with learning and maintaining SI practices (Emic, Radford et al.)</td>
</tr>
<tr>
<td>10.2</td>
<td>Proxy</td>
<td>Desire for a human actor or group of actors to complete and manage a person’s SI work for them (Emic, Radford et al.)</td>
</tr>
<tr>
<td>10.3</td>
<td>Streamlined Technical System</td>
<td>Desire for a user-friendly and cohesive platform that offers a variety of affordances (Emic, Radford et al.)</td>
</tr>
<tr>
<td>10.3.1</td>
<td>Automatic updates</td>
<td></td>
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<tr>
<td>10.3.2</td>
<td>Cohesive/All-encompassing</td>
<td></td>
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<tr>
<td>10.3.3</td>
<td>Social networking features</td>
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<tr>
<td>10.3.4</td>
<td>User-friendly</td>
<td></td>
</tr>
<tr>
<td>10.4</td>
<td>More resources for SI work</td>
<td>Desire for more and more acceptable resources for SI work, e.g. time and money (Emic; Radford et al.)</td>
</tr>
<tr>
<td>10.5</td>
<td>Transparency</td>
<td>Desire to understand purveyors’/vendors’ practices and motivations (Emic, Radford et al.)</td>
</tr>
<tr>
<td>10.6</td>
<td>Improved personal record</td>
<td>Desire to bolster or improve activities that build SI and are reported with digital tools, such as number of publications and conference attendance (Emic, Radford et al.)</td>
</tr>
<tr>
<td>10.7</td>
<td>Other</td>
<td></td>
</tr>
<tr>
<td>JQ</td>
<td>Juicy Quote</td>
<td>Use this code for excellent examples for other codes</td>
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