Personal online reputation: the development of an approach to investigate how personal reputation is evaluated and managed in online environments

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Introduction

The research presented in this paper is concerned with the development of a framework to investigate how online information is used in the creation, building, and evaluation of personal reputations. In this context term “personal reputation” refers to the reputation of private individuals rather than corporate identity and brand.

There are two broad research themes of the larger study:

(1) The means by which people evaluate or assess the personal reputations of others from the online evidence available to them.

(2) How people manage their own personal reputations through their use of online information, and to what extent those behaviours are intentional.

These themes are contextualized with reference to the broader information science literature on information behaviour and use. The information practices explored in this work are situated in everyday interactions with social media. Thus of particular interest to both the theme and research methods for this study is prior work on everyday life information seeking (ELIS) (Savolainen, 1995). In addition, aspects of bibliometric research that focuses on citation practice are relevant here.

This paper provides an overview of prior research into the evaluation of reputation from online sources. The main discussion is concerned with the design of a pilot study. Here we considered a possible method of investigation, as well as the appropriateness of the chosen methods for a larger doctoral investigation. This has resulted in the development of a research approach.

Literature review: Prior research into the evaluation of reputation from online sources

Evidence from the academic literature on the evaluation of personal reputations is weak, and reports of investigations into how individuals use online information to evaluate the personal reputations of others are scant. There is some evidence that the social media ‘footprints’ of individuals are evaluated from a human resources or employer perspective (Kluemper & Rosen, 2009; Labrecque, Markos, & Milne, 2011; Madera, 2012). Such approaches, however, are not systematic, nor comprehensive.

While the existing evidence considers specific aspects of individuals' reputations such as professional personas (Fieseler, Meckel, & Ranzini, 2014) there are gaps in the knowledge regarding the larger, 'whole-person' picture. For example, it is unclear how individuals:

- Identify sources of online information that may be useful in establishing the reputation of others
- Collect information from these sources
- Rate or evaluate the online information sources accessed
- Validate the online information sources accessed, including the taking into account the quality of online information collected
- Use this validation to evaluate the reputations of others on the basis of the information collected from online sources
- Combine evidence from online sources with other evidence in such evaluations

Although there is no discussion in the extant literature of the extent to which individuals manage their own online presences to actively protect their own personal reputations, there is evidence that individuals self-regulate their activities by managing the information they share across different platforms (Ollier-Malaterre, Rothbard, & Berg, 2013; Uski & Lampinen, 2014). It is also known that individuals curate their professional and private connections with the intention of managing their personal reputations (Fieseler et al., 2014). In addition, it can be seen that prior research has been conducted in areas related to personal reputation management and online information use, even if these empirical studies have not been conceived as such. These include:

- Investigations into the practice of seeking anonymity and/or using pseudonyms for the purposes of seeking information for medical or mental health issues (Greidanus & Everall, 2010; Mesch & Beker, 2010)
- Studies of how sexual and/or gender identities and socially stigmatised activities are hidden by individuals in online activities (Duguay, 2014; Lingel & boyd, 2013)
- Explorations of the use of pseudonyms to experiment with different personalities and identities (Vaast, 2007; van Dijck, 2013)
- Evidence that individuals seek official or legal avenues to manage, edit, and/or delete information about themselves (Ausloos, 2012; Finocchiaro & Ricci 2013)

However, this body of literature does not address a number of important questions. These include:

- To what extent are individuals concerned about how others can evaluate their reputations using online information sources?

- How do individuals manage *combined* professional and private reputations (for example, a formal presence of LinkedIn combined with another less formal one on Facebook) as one 'personal' reputation?

- How do individuals negotiate the management of information sources that hold material about them in *both* online and offline formats as the distinctions between online and offline worlds become blurred?

- To what extent do individuals actively monitor their online footprints for the purpose of reputation management?

Research into information related to citation practices from the domain of information science are relevant to this work. This is because citations can be used, and are read, as markers of academic identity, and thus influence academic reputations (Cronin, 1985). This prior work on the influence of formal information sources in the creation, building, and evaluation of professional reputations provides the context for this study of less formal online information sources (such as those supported by social media) and their roles as related to personal or private reputation creation, building, and evaluation.

The comparative analysis of practices that contribute to personal reputation creation, building, and evaluation with reference to (a) the deployment of citations in the academic literature and (b) social media use reveals a number of analogous activities. Importantly, however, it also uncovers key differences. In the case of citation practices, for example, many of the activities undertaken by a single academic, such as citing the work of others, appear to have a direct impact on the building of reputation (and identity) of other academics, as well as their own. The same does not appear to be the case with social media practices. Here there tends to be a common individual practice of creating content that has an impact on one's own reputation, with a lower chance of this being impacted by content created by others.

The table below outlines similarities and differences between the citation and social media practices.

Table 1: Similarities and differences between building and evaluating identity and reputation through academic citations and social media platforms

As seen in citation practices	**Related practices on social media**
Citing another within the main content of a paper Making note of someone in acknowledgements or footnotes of a paper	Favouriting or liking a post Sharing or retweeting a post Mentioning individuals via user names Hosting or providing guest blogs
Citing well-respected authors Co-authoring papers	Friending, following, or otherwise connecting with individuals

Coercive self-citations or other citations added at the request of a publisher or editor	Use of anonymous accounts Use of pseudonyms
Citing well-respected authors Following academics on networking platforms Co-authoring papers with well-respected academics	Linking to well-respected bloggers Connecting with others through “mentions” Re-posting content of others Providing or offering guest blogs
Self-citing or otherwise referencing previous works by one’s self Sharing through social media platforms	Linking back to own content on other platforms Sharing content from one platform on another (for example, Tweeting a link to your blog post)
Using social networking platforms Distributing information through social networking platforms	Using social networking platforms Sharing information through social networking platforms
Reviewing lists of contacts on networking platforms Reviewing reference lists in articles	Reviewing social media activities of connections Reviewing lists of connections

Determining the methods for data collection in a study evaluating personal online reputation

In considering the literature around academic citation and social media practices, these individual areas of reputation building and evaluation can be drawn upon and applied to a broader study of online information’s role in reputation building and evaluation across a number of social media platforms. An investigation seeking to discover the role that online information plays in the process of building and evaluating reputation will help to further the knowledge base of online information’s role in reputation.

The methods of investigation employed most often when researching academic citations tends to favour quantitative analysis, with investigations into the overall citations counts of an author or publication. It appears that there is less research into *how* and *why* academics make citation decisions. However, there is also a limited number of studies that include at least some level of qualitative research. Included in this is Hyland’s (2003) study that investigates self-citation. Here semi-structured interviews were conducted with two researchers from each of the eight disciplines investigated to determine an “insider” understanding of preferences and practices

(Hyland, 2003). The limited number qualitative of studies, including those investigating the motivations behind a citing author's referencing behaviours, was noted as a central problem within citation analysis 15 years ago (Cronin, 2000, p. 447). However, the predominance of quantitative studies is still evident in the information science literature today.

In contrast, research methods deployed in studies on social media practices, and in ELIS are largely qualitative. They use a mix of ethnographic observation, qualitative surveys, case studies, and/or in-depth interviews. There also tends to be an element of secondary data analysis, generally through coding and interpreting online content such as forum discussions or public social networking feeds. Quantitative investigations are used to a lesser extent, often to investigate the degrees to which individuals are connected with others through "friending" or "following" others. In addition, much of the research conducted to date is concentrated on single aspects of an individual's life, such as employment (Kluemper & Rosen, 2009; Madera, 2012; Roberts & Roach, 2008) or mental health issues (Duguay, 2014; Yue, Kan, Xiaomeng, & Zhen, 2010).

Lacking in these investigations into academic citation and social media practices is a whole-world view that considers how individuals manage their online activities and information in regards to their personal reputations, *as well as* how they evaluate the reputations of others based on the online evidence available to them. The larger study currently in progress seeks to address this gap in knowledge.

One of the challenges in determining robust methods of investigation for this study was to establish a way of examining both broad research themes simultaneously. It was determined that semi-structured, in-depth interviews would be an appropriate method to gather data regarding participants' own practices in the building and creation of their personal reputations using online information. However, after engaging in early-stage conversations with potential participants, it was determined that answering questions regarding the evaluation of others was difficult when not actively interacting with the online information.

Four potential solutions were considered to create an environment where participants could interact with online information whilst talking about how they evaluate the personal reputations of others. These are outlined in the table below.

Table 2: Potential methods for investigating the role of online information in the evaluation of personal reputation

Option	Method	Description
Option 1	Profile mock-ups	Researchers create false user profiles. Profiles contain information that mimics situations discussed in the literature. Interviews are used to discuss how reputations are evaluated with the online information provided.
Option 2	Participant screen shots	Working with researchers, participants create screen shots of their own online profiles. Other participants then evaluate the reputations of each other based on the screen shots provided. Interviews are used to

		discuss how reputations are evaluated with the online information provided.
Option 3	Observation	During the interview, participants are invited to discuss how they use online information to evaluate others. This is done whilst the participants interact with their own social media accounts.
Option 4	Diaries and interviews	Participants are asked to keep a diary that records their evaluation practices, as well as the processes they undertake to build and create their own personal reputations. At the end of the week, participants take part in a semi-structured interview.

For this study, Option 1 was deemed unrealistic because of the technical and time-based challenges required to create the multiple profiles that would be needed. Further, it would have been difficult to recreate a fair representation of the types of user profiles across a number of social media platforms. Option 2 presented similar challenges, as the limited number of participant profiles would not have created the same wide profile selection available in a normal environment.

Option 3 was given greater consideration than the first two, as it would have provided participants the opportunity to be observed in their normal online environments. However, concerns were raised about behavioural changes during observation as well as the privacy of participants' social media connections (e.g. friends or followers), whose profiles would be seen by the researcher without their consent.

Ultimately, option 4 was determined as the most appropriate method for determining how participants evaluate the reputations of others because of its practicality. Further, based on feedback from pilot study participants, it did not present a burdensome amount of work. The decision was therefore taken to use a combination of participant diary-keeping and in-depth, semi-structured interviews in the study.

In addition, there is a tradition in ELIS research where diaries are used as alternatives to interviews. It is noted that the rich data they provide are reliable sources of information and eliminate the potential for inaccurate reporting (Narayan, Case, & Edwards, 2011, p. 3). Several studies use a combination of diary-keeping and interviews (Agosto & Hughes-Hassell, 2005; Dervin, 1983; McKenzie, 2003; Rieh, 2004). Although these studies vary the way and order in which they collect data, they share a common theme in that they combine the robustness of two forms of data collection for analysis.

Implementation of the pilot study

Using Rieh's study from 2004 and Hilligoss and Rieh's study from 2007 as guides, a multi-step data collection process was undertaken to pilot the proposed data collection method using participant diaries and interviews (Hilligoss & Rieh, 2008; Rieh, 2004). For this pilot study participants were asked to keep a diary over the course of one week as they engaged with their

social media accounts. Within one week of completing the diaries, participants took part in hour-long, semi-structured interviews.

Demographic information was not collected as a formal part of the pilot study. The ages and education levels of all participants were known to the researcher through conversations prior to the study. However, it became clear during the pilot process that a stronger understanding of the participants' backgrounds and their past use of technology and social media would be useful. Although this additional information is unlikely to have altered the interview process, it is possible that it would have provided valuable insights for the analysis stage of the pilot study.

Sample

Eight subjects for the pilot study were PhD students based in Scotland. This group was chosen for two main reasons: (1) the relative ease of access to group members and (2) an assumption of a diverse set of backgrounds, based on personal experiences with Scottish-based PhD students. However, care was taken to ensure participants understood that this research is not specific to academic reputations, but rather about "whole self" reputation. To help with this understanding, the purpose of the research was clearly stated, and follow-up or prompting questions were devised to use during the interviews to help participants stay within the scope of the investigation. The clarification of the research purpose was deemed a success in that all participants discussed their use of social media as it pertained to both private and professional aspects of their reputations.

The small sample size used for the pilot study meant that the theoretical saturation point (the point at which no new data is emerging) was likely not achieved (Bryman, 2012, pp. 421-426). However, the primary focus at this stage was to test the methods of study, rather than investigate the research questions. It was anticipated that this stage of the investigation would help to better determine the appropriate sample size to use for data collection in the main study.

Participants were chosen for their PhD status, rather than their gender or age. However, it should be noted that there were equal numbers of men and women, and equal numbers of members from both Generation X (born 1965-1980) and Generation Y (born 1981-1997). The latter classification is relevant as the main study aims to use generation groupings for the main sample. In that case, "Baby Boomers" (born 1946-1964) will be added as a third generation classification[1].

Edinburgh Napier University's research integrity process was used throughout the study, including naming conventions of participants. Names were changed for the study to ensure anonymity. The study participants were as follows:

Table 3: Pilot study participants

Participant name	Gender	Generation
Fay	Female	Generation Y
Brian	Male	Generation X

1 Generation categories are based on definitions set by the Pew Research Center, located at http://www.pewresearch.org/files/2015/01/FT_generations-defined.png.

Casey	Female	Generation X
Helen	Female	Generation Y
Roy	Male	Generation Y
Joe	Male	Generation X
Lowell	Male	Generation Y
Gail	Female	Generation X

Online platforms investigated for this study

The aim of this research is to investigate general social media use and practices in the creation, building, and evaluation of personal reputation. However, it is not possible to investigate how participants use all of the elements available on the Internet at this time. For the purpose of this research investigations focus on information created, accessed, and shared through a limited number of social networking platforms and personal blogs.

The primary social networking sites to be considered are the popular tools Facebook, Twitter, Google+, Instagram, and LinkedIn. These sites were determined based on the top ten sites and apps identified in Ofcom's 2014 *Adults' Media Use and Attitudes Report* (Ofcom, 2014, p. 39). Personal blogs were also considered, including personal website or journalling system (e.g. Tumblr, Blogger, or WordPress) that individuals read or contribute to. It is recognised that some participants may use other platforms. Where that is the case, participants are encouraged to discuss all of the platforms they use within the scope of social networking sites and blogs.

Participant diaries

Participants were asked to record their thoughts and reactions regarding the reputation evaluations of others as well as their own actions (or non-actions) as they pertained to managing their own reputations. These thoughts were to be based on the information that appeared naturally during the normal use their social media accounts, as opposed to purposefully reviewing social networking profiles for the diary-keeping exercise.

The diaries were intended to act as tools to encourage participants to actively think about their engagement with social media. The expectation was that keeping a diary in this manner would give participants better recall and understandings about their own behaviours and motivations during interviews. Participants who provided hand-written diary entries submitted between 679 and 1,068 words. Three of the four participants who submitted electronic diaries provided word counts with a low of 1,828 and a high of 2,597. The lowest word count came from the participant submitting an electronic diary using Evernote, with a word count of just 270. The diaries were completed between July 3 and July 17, 2015.

Participant interviews

Interviews were scheduled with each participant to commence within one week of their completing their diaries. Prior to the interviews, diaries were reviewed and annotated. At this time, a list of follow-up questions or points of clarification were added to the interview guide for each participant. Seven of the eight interviews were conducted face-to-face, with the eighth being conducted via Skype. All interviews began with a general question about participants' use

of social media as a reputation-building tool, with follow-up questions asked as needed for clarification or expansion of an answer. The semi-structured nature of the interviews meant that some topics were covered on more than one occasion. Often, on subsequent discussions of a topic, there were more details provided, which were more relevant at that point in the discussion. For example, if a participant mentioned deleting posts whist discussing their overall online activities, that same topic might be covered in more detail when discussing issues of regret or self-censorship.

The participants appeared willing and able to answer all of the questions posed to them during the interview. However, most participants indicated that they felt as if they were being very "judgmental" when discussing the assessment of other individuals' reputations. Some of them seemed genuinely surprised that they had been making assessments all along without realising that they were doing so. Interestingly, despite purposefully using the terms "assessment" or "evaluation" when asking participants questions, most of them replied using variations of the term "judge". Interviews took place between July 13 and July 28, 2015.

Findings: Suitability of the proposed approach

The purpose of the pilot exercise was to establish an approach for the larger study. The two-part data collection method was a success in that it provided two rich forms of data that could be triangulated for the data analysis stage of the study.

At the start of the pilot study, it was hypothesised that participants might not realise they were making reputational evaluations, but that the act of recording their thoughts whilst interacting with social media might make them more aware of how online information was impacting that evaluation process. This was confirmed during the interview stage when all eight participants made comments about how they felt when they realised they were making evaluations without consciously realising it. That confirmation provided further confidence that the use of participant diaries was a strong data collection tool.

As the diaries meant that participants were more aware of their actions and behaviours during the interviews, they were able to discuss the evaluation processes more easily than they might have before realising that they were evaluating the reputations of others. This therefore strengthened the quality of the data collected during the interview process. Further, the ability for the interviewer to ask follow-up questions about diary entries meant that data was strengthened even further.

When combined, the data collected from the diaries and interviews produced a robust data set for analysis. The rich data is easy to work with and can be accessed for coding and analysis with relative ease. Data coding was completed using NVivo 10. The initial coding structure was determined based on the themes that arose from the literature review. Subsequent codes were added as new themes emerged from the participant data.

Minor changes have been made to the data collection methods for the main study. These include the addition of a pre-diary survey to gather demographic data as well as participants' levels of social media use, and a stronger emphasis on electronic diaries. Further, because the main study will be UK-wide, a greater number of Skype interviews will be undertaken, as opposed to face-to-face interviews.

The proposed approach of using participant dairies in combination with semi-structured interviews is therefore a suitable approach for this study. As well as demonstrating the value of the approach, analysis of the data revealed some interesting factors that are expected to emerge more fully in the main study. These relate to obligations to other through information sharing, as well as the judgement of others on the basis of online information shared.

Conclusions

The aim of the pilot study was to determine the appropriateness of processes and methods for the main doctoral investigation. The study was a success as it provided a range of insights regarding what worked or did not work, and how those insights might impact the main study. Importantly, the pilot study revealed interesting insights by participants which have helped to re-format the interview guides and the coding system for data analysis.

Further, indications from the findings show that there are themes emerging from the data that were not uncovered in the literature review. It is possible that those themes will emerge in more detail as the study continues. We will know for certain with the implementation of the larger study.

Next stages

The study is now being scaled up for the main empirical work with a sample size of 35-45 participants. Unlike the pilot study, the main study will include a short survey at the start of the diary-keeping week. The purpose of this survey will be to gather additional demographic information (for example, age, gender, and education), familiarity with and time spent on social media, and the platforms participants use or have heard of.

It is anticipated that the main data collection will be completed by the end of 2015 with data analysis taking place in early 2016.

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