

The Hidden Costs of Connectivity: Nature and Effects of Scholars' Online Harassment

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Abstract

A growing body of research reveals that some scholars face online harassment and that such harassment leads to a wide variety of adverse impacts. Drawing on data collected from an online survey of 182 scholars, we report on the factors and triggers involved in scholars' experiences of online harassment; the environments where said experiences take place, and; the consequences it has for personal and professional relationships. We find that online harassment is heavily entwined with the work, identity, and in some cases, the requirements of being a scholar. The online harassment scholars experience is often compounded by other factors, such as gender and physical appearance. We build on prior research in this area to further argue that universities ought to widen their scope of what constitutes workplace harassment and workplace safety to include online spaces.

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Introduction

The opportunities that online environments afford scholars, researchers, and academics have been examined extensively in prior academic literature (e.g., Veletsianos & Kimmons, 2016; Carrigan, 2016; Donelan, 2016; Gregory & Singh, 2018; Manca & Ranieri, 2015). Yet, a growing body of research now reveals that these same online environments also operate as sites of exclusion and harassment (Barlow & Awan, 2016; Citron, 2014; Duggan, 2014, 2017b). The goal of this research is to articulate and better understand the relationship between scholars' engagement with online environments and their experiences of online harassment. In this paper, we expand on prior work to further understand the damaging impacts of online harassment on scholars. Using data from an online survey of 182 scholars, we address the following questions: What is the nature of the online harassment scholars experience? And what are its differential effects on scholars?

Literature Review

Networked technologies such as Twitter, Facebook, Academia.edu, and LinkedIn are part of the fabric of contemporary scholarly activities. They are used for research, teaching, networking, and collaboration, and also serve as sites where scholars collect data and circulate scholarly outputs. While some online tools and environments are mandated by universities (e.g. email or institutional Learning Management Systems), others are typically considered voluntary (e.g. Twitter). The ability to opt-out of seemingly voluntary tools and environments, however, is increasingly harder because of the cultural capital they carry (Stewart, 2016). For instance, public engagement is an important aspect of the research lifecycle, and Twitter is often viewed as the de-facto online environment where such engagement happens (Cole, 2014). Barlow and Awan (2016, p. 2) argue that the responsibility of such engagement is 'centralized to the individual academic role' and that

scholars themselves are expected to ‘connect with the public.’ The focus on engagement makes online tools and environments all the more appealing as an easy and effective method for scholars to share research with wider audiences, network with peers, and seek employment opportunities. In this way, online environments have become instrumental in scholarly engagement, dissemination, and mobilization. So while online participation and presence are not likely coded into employment contracts, there are many reasons to consider social media and other online spaces as necessary to fulfilling knowledge mobilization mandates and expectations.

Harassment has become commonplace for many users in these online environments. Online harassment typically refers to acts of verbal and emotional abuse, which includes things like negative comments about one’s appearance, threats of physical harm, and actions such as stalking, zoombombing, doxing, and other privacy invasions (Citron, 2014; Powell & Henry, 2017). A 2017 Pew Internet Research report found that 41% of Americans have experienced online harassment (Duggan, 2017b). Though public discussions about online harassment date back to the early 1990s (Dibbell, 1993), more recent campaigns of hate and abuse, such as GamerGate (Quinn, 2017), have fuelled popular and scholarly inquiry. Research into these topics suggests that online hostility and harassment impacts people of all identities, but the *type* of harassment received by individuals is very often tied to their subject position. For example, two reports found that although men and women both experience online harassment, the harassment women experience is more personal, threatening, and sexually inappropriate (Duggan, 2014, 2017b). Another analysis of 70 million blocked comments on articles written for *the Guardian* (Gardiner et al., 2016) revealed that ‘articles written by *women* consistently attracted a higher proportion of blocked comments than articles written by *men*’ (para. 4). In another study, Duggan (2017a) found that 1 in 4 Black

Americans have experienced online harassment tied specifically to their race or ethnicity and that Black Americans were less likely to report feeling comfortable speaking freely in online spaces. Other factors and subject positions that may compound online harassment include religion, sexuality, class, ability, and one's political or social affiliation.

Research examining the online harassment of scholars is nascent but gaining momentum (Blizard, 2016; Hodson et al., 2018; Veletsianos et al., 2018). Prior research in this journal noted the possibility of risks for academics who merge personal and professional identities in online spaces (Jordan, 2020). Social media's ability to bring together diverse aspects of an individual's life under one network—known as context collapse—is a perceived vulnerability among scholars on Twitter (Stewart, 2016). Specifically, vulnerability stemmed from the knowledge that communicating on Twitter, and other online spaces, opens users to infinite contexts, many of which are unknowable (Stewart, 2016). For example, in 2017 Princeton University professor Keeanga-Yamahtta Taylor gave a commencement speech in which she described US President Trump as racist and sexist. The speech was recirculated by Fox news and on social media and Taylor's work email became bombarded with vile threats—most of them racists and sexually violent (Thrasher, 2017). Important to note is that Taylor's abuse began only after a video was shared to a different audience than the one that it was intended for: the move from the physical halls where she gave the commencement speech to the borderless corridors of online spaces was a catalyst in the harassment and misogynoir (Bailey, 2013) she experienced. For other scholars, the collapsed distinction between online and offline life has also become a point of vulnerability. Reflecting on her experience with “highly publicized violence against Black folks” online, scholar Zandria Robinson

(2015, p. 80) explained that a significant part of the harm she experienced came from the integrated nature of her life with online spaces was.

These experiences with online harassment impact how scholars engage online by influencing what they choose to share and what areas of research they choose to pursue. Olson and LaPoe (2018) argue that online spaces lack protection, which causes people to self-censor and, in turn, choose 'safe topics' (284) to research and write about as a form of self-protection. The authors (Olson & LaPoe, 2018) refer to this phenomenon as the digital spiral of silence, which they describe as a quietism that occurs in response to the perception that one's opinion is in the minority. This has consequences for innovation: conducting and sharing research that challenges mainstream assumptions, or which appears to support certain political agendas, may leave an individual subject to online harassment, thereby incentivizing individuals to pursue research that upholds the status quo. This is even more dangerous for 'professors on the margins,' explains Robinson (2015), for when they use their voices 'in ways that matter beyond narrow academic confines and convey uncomfortable truths [they] will inevitably be targeted' (p. 80).

The spiral of silence and other outcomes of harassment do not impact all scholars equally. Researchers who focus on politics, diversity, feminism, or popular conceptions of liberal politics and social justice interests, for example, have received much public attention over their experiences with online harassment based on these ideas (c.f., Mary Beard [Schneier, 2016]; Vera-Gray, 2017). Harassment is therefore disproportionate, and in understanding it researchers need to consider the political and social climate that scholars navigate. Massanari (2018, p. 4) for example, developed the term 'Alt-Right gaze' to explain how the emergence of far-right ideology

‘illuminates, objectifies, and actively constructs a particular social reality’ that disciplines, surveils, and in some cases silence researchers online. This is perhaps best exemplified through websites like Professor Watchlist, whose mission is to ‘expose and document college professors who discriminate against conservative students and advance leftist propaganda in the classroom’ (Professor Watchlist, 2018). More recently there have been calls by far-right public figures to record online lectures and courses during academia’s pivot to remote teaching/learning due to COVID-19 in March 2020 to ‘document & expose the radicalism that has been infecting our schools’ (Kirk, 2020).

While the scholarship that comes under attack online is diverse, scholars who discuss race are at risk of being disproportionately impacted by harassment (Flaherty, 2017), particularly under the ‘Alt-Right gaze.’ For example, in 2013 Sociologist Saida Grundy published a tweet questioning white masculinity. The tweet circulated among right and far-right groups resulting in an endless barrage of harassment, which included a campaign to have her fired (Jaschik, 2015). Grundy was called anti-white and racist—unfair tactics used against people of color who critique dominant groups. She ended up apologizing for her comments and ultimately curbing her ability to freely express problems with whiteness.

Significantly, online harassment impacts scholars on a personal level. Earlier research shows how harassment causes feelings of fear for one’s safety and turmoil amongst family members (Barlow & Awan, 2016); physical health issues, such as headaches and stomach pains (Cassidy et al., 2014); and mental health issues, such as depression and anxiety (Cassidy et al., 2014). Some of these personal effects are severe and may also have serious professional consequences (Authors 2018a,

2018b). For example, these impacts have led some scholars to rethink how to and whether they should participate online, including taking practical steps such as using pseudonyms online or on publications and taking further steps to ensure participant anonymity (Massanari, 2018).

What remains unknown in earlier literature is the extent to which online harassment is connected with the work that scholars do and are expected to do. While research shows the negative impact online harassment has on scholars' mental health, relationships, and desire to speak openly in online environments, we do not yet have a clear understanding of how these various impacts influence scholars' professional identity and work, and whether such impacts have differential effects on scholars. Following recommendations from the first issue of 2020 published in this journal, wherein the editors recommend complicating the notion that technology is an "inherently 'good thing'" (Selwyn, 2019, 2) we address this gap by answering the following research questions:

1. What is the nature of the online harassment scholars experience?
2. What are its differential effects on scholars?

Conceptual framework

The harms incurred by online harassment are wide-ranging in severity and reach (Citron, 2014; Henry et al., 2017; Phillips, 2015). In many cases, the effects of online harassment are difficult to articulate, leading many researchers to account for them using established frameworks and ideas of harm. In our earlier research, we identified work-related consequences stemming from online harassment as one area in need of further investigation (Authors, 2018b). In this paper, we use Jane's (2018) framework of 'economic vandalism' to capture the work-related consequences of

online harassment that scholars' face and to explore their nuances. We use the concept of economic vandalism to understand and frame the threat online harassment poses to scholars' academic work; and to argue in favor of widening the scope of what constitutes workplace harassment in a social and cultural (as opposed to legal) sense.

In its broadest application, the concept of economic vandalism serves to name the 'professional and economic impact' that cyberhate has for targets of online harassment (Jane, 2018, p. 576). The term 'vandalism' suggests intent and purpose by those perpetrating the harassment. Throughout 52 interviews, Jane found that 43 of her participants experienced at least one incident of online harassment that had a harmful economic impact. By extension of these harms, the women Jane interviewed also noted depressive episodes, emotional outbursts, panic attacks, and other concerns with mental health, and removed themselves from online and offline spaces, all of which hampered their ability to work.

The concept of 'economic vandalism' is appropriate here because it captures the way online harassment exploits the porous structures of work/non-work life and online/offline life. Specifically, it frames non-work-related harassment as damaging to a person's professional life by virtue of the borderless nature of online spaces. For example, Citron (2014) notes that many women who had their intimate images non-consensually shared by former ex-romantic partners lost their jobs after the images were posted online. Similarly, the continuation of offline harassment using online tools complicates the messy circumstances of online harassment, much of which does not 'map neatly onto extant paradigms vis-à-vis laws and workplace policies' (Jane, 2018, p. 587).

These considerations are important for studying scholars' harassment because scholar's personal and professional lives often overlap.

Economic vandalism focuses on work-related harms experienced by women. The focus on gendered cyberhate is vital, for research repeatedly outlines a gendered dimension of online harassment. However, as our study explores the nature of online harassment for those working in higher education regardless of gender identity, we adopt Jane's concept and widen its applicability to meet our broader ends. In particular, as well as exploring gender, our research explores race, sexual orientation, and position within the academy.

Methods

Data Collection and Analysis

We created a survey consisting of 38 questions, including multiple choice questions, matrix tables, text entry, Likert scale, and slider scales. The survey was informed by Jane's (2018) concept of economic vandalism and previous research in this area (Blizard, 2016; Cassidy et al., 2014; Vitak, 2017). All seven co-authors discussed and revised the survey until consensus was reached. The final survey invited participants to think about their experiences with online harassment *specifically related to their academic and scholarly work*. The survey was divided into six sections.

1. Experience(s) over the last year
2. Most recent experience(s)
3. Response(s) to most recent experience
4. Impact(s) of most recent experience
5. Background information (such as type of online environments commonly used)

6. Demographics

The survey was then added in Qualtrics, an online survey platform, and tested by three co-authors. The survey was distributed in English. An invitation to complete the survey was disseminated by social media account *Shit Academics Say* (@AcademicsSay) on Twitter and Facebook wherein it was then subsequently re-shared by others over two weeks. This account was selected due to its prominence in the academic community and the potential to reach a wide range of scholarly audiences (see Hall, 2015).

Data analysis was completed using a combination of Excel and Qualtrics Stats iQ. In this study we limit our research questions to the quantitative data collected. The analysis involved descriptive statistics and frequencies using the whole sample for each question and cross-tabulations using each demographic category. This level of analysis provided the details and data necessary to address our research questions.

Sample

A total of 182 individuals, identifying as scholars and academics that had experienced online harassment within the previous year, completed the survey. The sample primarily consisted of white, straight, and cisgender women. The majority were MA and PhD students (n=57, 31.3%), and the rest were tenured professors (n=42, 23.1%), tenure-track professors (n=39, 21.4%), and non-tenure-track (e.g., contingent, contract, and adjunct) instructors (n=20, 11%). The remaining participants (n=24, 13.2%) identified as “other” and included roles such as independent scholar and academic librarian. Approximately 76% (n=139) of participants identified as women. The rest

identified as men (18.7%; n=34) or gender non-binary (5%; n=9) including transgender men and women, nonbinary, genderqueer, and agender identifying participants. The gender imbalance is consistent with previous research on online harassment as a gendered phenomenon (Duggan, 2017b).

Most individuals in the sample identified as White/Caucasian or European (n=150, 78.1%), distantly followed by Hispanic or Latino identifying persons at 4.7% (n=9), East/South-East Asian at 4.2% (n=8), South Asian, at 1.6% (3), and Arabian/West Asian, Black/African American or African, and Aboriginal or Indigenous at 1% (n=2). About 64% of the sample identified as straight (n=117) and 23.1% identified as lesbian, gay, bisexual, queer, asexual, and pansexual (hereafter LGBTQAP+). Almost half of the participants resided in the United States (47.3%, n=86), with the other remaining participants representing 22 countries across Africa, Asia, Australia, Europe, and South and North America.

Limitations and Delimitations

Three limitations face this research. First, the data rely on a self-reporting mechanism and are based on recall. Second, our sample lacks diversity, as it is primarily comprised of white, straight, and cisgender women and risks contributing to a particular narrative where white women's oppression and experiences with harassment are centered. Due to the low numbers of people not identifying as white, we could not determine statistical significance.¹ For the purpose of descriptive

¹ While we could have conducted an ANOVA to determine significance between groups, the small sample sizes in each group would violate the test's assumptions. An alternative to this would be to group Caucasian vs. "Other" (dummy variable coding all into a comparative group) that would still have unequal cell sizes but allow for some comparison. However, doing so would collapse all non-white individuals into a non-representative category and would undermine our efforts to illustrate the intersectional nature of these issues

statistics we use the BIPOC category (Black, Indigenous, people of color) to include participants who identified as Hispanic or Latino, East/Southeast Asian, South Asian, West Asian, Black, African, African American, Aboriginal, and Indigenous. Our non-representative sample was an inadvertent result which reflects the need for diverse networks of scholars to do this work. Future research ought to conduct more purposive sampling to achieve a more diverse sample. Third, while social media dissemination via @AcademicsSay provided extensive reach, it also means that our sample may exclude a variety of scholars, particularly those not on social media due to harassment they experienced. Additionally, this account's Twitter analytics at the time of dissemination show that its followers were estimated to be 54% female, and mainly from the U.S. (39%), U.K. (16%), Canada (8%), and Australia (5%), which coincides with our limited sample previously mentioned. While no specific steps were taken to address these recruitment limitations, the survey was publicly available and the survey was shared widely by others, expanding the reach beyond those who follow this particular account.

Results

What is the nature of online harassment?

Our first research question focused on the circumstances and environments in which participants experienced harassment related to their scholarly work. To understand whether circumstances beyond participants' academic or scholarly work prompted harassment, we explored their perceptions of:

- other factors they believed also contributed to their harassment (hereafter factors), and
- the particular events that may have led to harassment (hereafter triggers).

Factors

Participants reported what they believed contributed to the harassment they received within the last year. The five most commonly reported factors were one's gender (65.9%), opinion (51.6%), field of research (45.1%), moral/ethical stance (41.7%), and rank as a faculty member (38.5%). Less than 5% were unsure of why they were targeted. These findings are shown in figure 1.

[Figure 1 near here]

The vast majority of participants (96.6%) reported that more than one factor contributed to their harassment and more than two-thirds (66.9%) reported four or more factors. On average, participants chose five different factors as contributing to the harassment they received.

Participants who identified as women most commonly reported their gender (73.4%) and opinion (47.5%) as contributing factors. Similarly, the most common factor reported by participants who identified as gender non-binary was their gender (88.9%) and their opinion (77.9%). Gender non-binary participants also commonly reported their political stance/politics, moral/ethical stance, and field of research (66.8% each) as contributing factors. Participants who identified as men most commonly reported their opinion (61.8%) and rank as a faculty member (55.8%) as predominant factors.

For students, their gender (68.4%) and their opinion (63.2%) were leading factors. For non-tenure-track instructors, their rank as a faculty member (65%) and gender (55%) were the main factors. Tenure-track professors most commonly reported gender (74.4%), followed by their opinion and

their rank as a faculty member (each at 48.7%). Tenured professors reported their gender (57.1%) and their field of research (45.2%) as the main factors contributing to their experience with online harassment.

Though only a small subset of our sample indicated they were non-Caucasian, the data reveal some notable trends concerning race. White/Caucasian or European participants (hereafter White participants) identified their gender (67.3%) and their opinion (52.7%) as common factors. Similarly, BIPOC identified gender (53.8%) and opinion (46.1%) as common factors, but half (50%) of BIPOC also reported that their physical appearance was a contributing factor to the harassment they received, compared to only 34% of White participants.

Similarly, individuals identifying as LGBQAP+ identified similar factors they felt contributed to their harassment. Participants who identified as straight and LGBQAP+ reported gender (62.4% and 76.2%, respectively) and opinion (49.6% and 54.7%) as the most common factors. LGBQAP+ identifying participants also reported their moral/ethical stance (57.1%) and their physical appearance (54.8%) as areas they felt incited harassment. Though not as frequently reported, 35.7% of LGBQAP+ identifying participants reported that their sexual orientation was a contributing factor to the harassment they received compared to only 5.1% of straight participants.

Looking across specific demographic categories, these results appear to affirm prior research noting that harassment is often tied to one's subject position. For example, women and gender non-binary participants reported their gender as a contributing factor at more than double the frequency of men (73.4% and 88.9% compared to 29.4%); half (50%) of BIPOC indicated that

one's physical appearance was a common factor in the harassment they experienced, compared to 34% of White participants; and 35.7% of LGBTQAP+ identifying participants reported their sexual orientation as a factor, compared to 5% of straight-identifying participants. These findings suggest that some populations consider visible identity markers as significant compounding factors in the harassment they received.

Triggers

Participants were asked to think about whether they believe any particular *type* of online engagement triggered harassment within the last year. The most common triggers were identified as: 'A post I made on social media' (46.7%), and 'My teaching activities' (30.2%). Closely following was 'Something that I wrote or created AND shared on social media' (29.7%), 'Something that I wrote or created but DID NOT share on social media' (27.5%), and 'Something someone else wrote and I shared on social media' (22.5%). A complete list is provided in figure 2.

[Figure 2 near here]

Nearly half (40.1%) of the sample identified only one trigger as contributing to their experience with online harassment. Almost one-quarter of the sample (24.2%) identified two triggers, 18.7% identified three, and 16.5% identified between four and six different triggers.

Examining the data by gender reveals that ‘A post I made on social media’ was the most common trigger for women (42.8%), men (58.8%), and gender non-binary participants (66.7%). For women, the second most common trigger was identified as their teaching activities (33.3%). This was the sixth most common trigger for men (23.5%) and the seventh most common trigger for gender non-binary participants (11.1%). Men (38.2%) and gender non-binary participants (55.6%) identified something that they wrote or created AND shared on social media (as opposed to something they wrote but didn’t share) as the second most common trigger.

Across academic positions, students most commonly reported that their experience with online harassment was triggered by a post they made on social media (55.4%). Students (32.1%) also equally reported that something they wrote or created AND shared on social media and something *someone else* wrote, but that they shared on social media (32.1%) triggered the harassment. Non-tenure-track faculty (55%) indicated that they felt their teaching activities were a major trigger to the harassment they received over the last year. Among tenure-track and tenured faculty, a post they made (35.9% and 54.8%, respectively) and sharing something they wrote or created on social media (30.8% and 35.8%) were identified as the most common triggers.

White participants (48%) and BIPOC (42.3%) participants both reported that a post they made on social media was the most common trigger. Another 42.3% of BIPOC participants also reported that their teaching activities were a common trigger, compared to only 27.3% of White participants. Participants who identified as straight reported that a post they made on social media (42.7%) and their teaching activities (34.2%) were a common trigger to the harassment they received. For LGBTQAP+ identifying participants, a post they made on social media (64.4%) and

something that they wrote or created AND shared on social media (42.9%) were identified as the most common triggers. The largest discrepancy between triggers for straight and LGBTQAP+ identifying participants was something someone else wrote, but that they shared on social media. LGBTQAP+ participants (38.1%) reported this case as triggering harassment at double the rate of straight participants (14.5%)

Online Environments

The most commonly reported environment for online harassment was email, with 41.8% of our total sample indicating as such. The social media sites Twitter (34.6%) and Facebook (29.7%) were the second and third most highly reported arenas for online harassment. These three environments were by far the ones where most harassment was reported as being experienced (figure 3).

[Figure 3 near here]

Participants most frequently experienced online harassment in one environment, with almost two-thirds (62.1%) of the sample indicating as such. Nearly 27% of participants indicated that they were harassed in two different environments. Thereby, the number of participants and online environments steadily decreased, with only 11% of the sample indicating they received harassment in three to six different environments.

Women reported experiencing online harassment via email (43.2%) and Twitter (30.2%). Men reported Twitter (47.1%) and email (41.2%), and gender non-binary participants reported Twitter (55.6%), YouTube (33.3%), and Facebook (33.3%). Across academic positions, students (42.1%) most commonly reported Facebook as the site of harassment, closely followed by email (36.8%). For non-tenure-track instructors (45%) and tenure-track professors (48.7%) email was most commonly reported. For tenured professors (42.9%), Twitter was most often cited, followed by email (38.1%).

Both White and BIPOC participants identified email as the most common online environment where they received harassment (42.7% and 38.5% respectively). White participants also identified Twitter (34.7%) and BIPOC participants identified Facebook (34.6%) as the second most common environment. Participants who identified as straight reported email (43.6%) and Twitter (35.9%) as the most common sites of harassment, whereas LGBTQAP+ identifying participants reported Facebook (38.1%) and Twitter (35.7%) as the most common sites, though email closely followed (33.3%).

Email, Twitter, and Facebook were commonly reported across all participants. Slight differences occur amongst demographics, the most obvious include gender, wherein only 22.2% of gender non-binary participants reported email as a site of harassment, compared to women (43.2%) and men (41.2%), and sexual orientation, where 38.1% of LGBTQAP+ participants reported Facebook as a site of harassment compared to 28.2% of straight identifying participants.

What are the effects of online harassment on scholars?

Our second research question focused on the effects (read: impacts) of online harassment on scholars. We examined three kinds of effects: personal, professional, and relational. This section offers an overview of the potentially damaging impact online harassment has on scholars with a focus on how these effects impact one's relationship with work-related responsibilities and duties.

Personal Effects

Participants were asked whether they experienced any personal negative effects relating to the online harassment they received. Figure 4 shows that over two-thirds of participants reported feelings of anxiety and distress (69.2%), and nearly half reported feeling more irritable than usual towards others (46.7%), difficulty concentrating (45.6%), and feeling depressed (44%).

[Figure 4 near here]

While it was most common to experience one negative effect (20.3% of the sample), on average participants reported experiencing four different negative effects, potentially reflecting the fact that negative effects are seldom experienced in isolation.

Women and men commonly reported experiencing the same three personal effects: nearly three-quarters of women (74.3%) and more than two-thirds of men (69%) reported feeling anxious and distressed. Nearly half of women (49.3%) and just over half of men (51.7%) reported feeling more irritable toward others than they would normally be. And nearly half of women (48.5%) and men (48.2%) had difficulty concentrating. Gender non-binary participants also reported feeling anxious and distressed (62.5%), and feeling depressed (50%).

Across academic positions, students (75.5%), non-tenure-track instructors (80%), tenure-track professors (68.4%), and tenured professors (71.1%) most commonly reported feeling anxious and distressed as a result of their experience with online harassment. For students (60.4%), feeling depressed was also highly reported. Half of the participants who identified as non-tenure-track instructors (50%), reported feeling embarrassed to talk to colleagues and peers about the incident and reported experiencing sudden emotional responses when reminded of the incident. Both tenure-track (47.4%) and tenured (39.5%) faculty also reported feeling more irritable towards others than they would normally be.

White participants and BIPOC participants both identified feeling anxious and distressed (70% and 61.5%, respectively) and feeling more irritable toward others than usual (45.3% and 50%, respectively).

Participants who identified as straight (67.5%) and LGBQAP+ (71.4%) most commonly reported feelings of anxiety and distress. LGBQAP+ identifying participants reported experiencing personal negative effects at rates higher than straight identifying participants. In particular, only 42% of participants who identified as straight reported having difficulty concentrating, compared to 59.5% of participants who identified as LBGQAP+.

Professional Effects

The data indicate that online harassment has a substantial negative impact on scholars' ability and desire to do their work. For instance, 55.5% of our sample expressed that they lost confidence in

academic or scholarly activities (such as teaching, research, and service), 51.1% experienced a loss of productivity at work or school, 44% felt like they did not want to go to work or school, 35.2% felt like quitting their job or leaving their program, 34.1% indicated suffering reputational damage, and 32.4% lost confidence in their ability to collaborate with others. Figure 5 shows the complete list of professional effects in order of prevalence.

[Figure 5 near here]

Much like personal effects, professional effects often co-occur. On average, participants experienced three professional effects as a result of online harassment. While it was most common for participants to experience one professional effect (19.8% of the sample), 15.4% and 13.5% of participants reported three and five professional effects respectively. Overall, more than two-thirds of the sample (65.3%) reported experiencing two or more professional effects.

Women experienced a loss of confidence in their academic or scholarly activities (68.3%), a loss of productivity at work or school (62%), and felt like they did not want to go to work or school (53.7%) as a result of their experience. Men experienced a loss of productivity at work or school (55.6%), damage to their reputation (48.2%), and felt like they did not want to go to work or school (44.4%). Lost confidence in academic or scholarly activities and reputational damage were equally common effects (80% each) for gender non-binary participants, followed by loss of productivity at work or school (60%).

Students (68.8%), non-tenure-track instructors (65%), and tenure-track professors (71.9%) most commonly experienced a loss of confidence compared to tenured professors (51%). Conversely, tenured professors were most likely to report experiencing a loss of productivity (69%). Feelings of not wanting to go to work or school were felt somewhat uniformly across students (50%), non-tenure-track instructors (60%), and tenure-track professors (65.6%), but only 37% of tenured professors reported this effect.

Over half of White and BIPOC participants reported losing confidence in academic or scholarly activities (55.3% and 57.7%, respectively), as well as experiencing a loss of productivity at work or school (52% and 50%, respectively). Half of BIPOC participants also reported that they felt like they did not want to go to work or school, compared to 44% of White participants.

Participants who identified as straight reported feeling a loss of productivity at work (54.8%) and a loss of confidence in academic or scholarly activities (50%). For LGBTQAP+ participants, these same effects were reported in reverse order, with 56.4% reporting that they lost confidence in academic and scholarly activities, and 47.9% reporting a loss of productivity at work or school.

While many of the effects were felt somewhat uniformly across groups, we see some interesting professional effects associated with different academic positions. For example, students (18.75%) felt that their experience impacted their job prospects more than any other academic position, and non-tenure-track instructors (60%) felt like quitting their job at a rate higher than students, tenure-track, and tenured professors. This indicates that one's position within a university might mediate the professional effects of online harassment.

Relational Effects

Participants were asked whether any of their relationships suffered as a result of their experience with online harassment. Participants most commonly reported negative effects on their relationship to social media (37.4%), their relationship with colleagues and peers (29.7%), their relationship to their research (25.8%), and their relationship with others in their field (23.1%). These impacts are shown in figure 6.

[Figure 6 near here]

On average, participants experienced two relational effects. Almost one third (30.3%) of the overall sample reported one relational effect, 19.7% reported two effects, and another 19.7% reported three effects. The remaining 24.4% reported four or more relational effects.

Women (45.5%), men (58.3%), and gender non-binary participants (50%) most commonly reported a negative effect on their relationship to social media. Women also frequently identified their relationship to colleagues and peers as having suffered (37.5%), men reported their relationship to their research as having suffered (54.2%), and participants who identified as gender non-binary (33.3%) frequently identified both their relationship to colleagues and peers and their relationship to others in their field as having suffered (33.3% each).

Students reported that their relationship to social media (61.4%) and their relationship with their research (45.4%) was most likely to suffer. Non-tenure-track instructors (33.3%), tenure-track

professors (38.7%), and tenured professors (42.4%) reported their relationship with colleagues and peers as suffering. For tenure-track (38.7%) and tenured professors (54.6%), their relationship to social media was also commonly negatively impacted.

White participants most commonly reported a negative impact on their relationship with social media (37.3%), followed by their relationship with colleagues and peers (28%), and their relationship to their research (26%). For BIPOC participants, the most common negative impact was on their relationship with colleagues and peers (42.3%), to social media (34.6%), and their research (23.1%).

Participants who identified as straight (34.2%) and LGBTQAP+ (47%) most commonly reported that their relationship to social media was negatively impacted. For LGBTQAP+ identifying participants (31%), their relationship with their research was also commonly reported as negatively impacted.

Some relational effects disproportionately impact students, for example, students' (45.5%) relationship with their research was much more likely to suffer than non-tenure-track instructors (20%), tenure-track professors (32.2%), and tenured professors (24.2%). Men also commonly reported a negative effect on their relationship with their research (54.17%), much higher than women (29.5%) or gender non-binary participants (16.7%). And lastly, BIPOC participants (42.3%) reported a negative impact on their relationship with colleagues and peers at a rate much higher than White participants (28%).

Overall, we see personal and close relationships being less negatively impacted. For example, participants were least likely to have their relationship with friends (9.3%) and family (12.6%) suffer, whereas work relationships (such as with colleagues and peers or with others in their field) and relationships to work-related activities (such as their research) were more frequently impacted.

Discussion

The nature and effects of online harassment reported in this study support and expand Jane's (2018) concept of economic vandalism. Drawing upon a series of case studies from interviews, Jane argues that online harassment should be considered an 'insidious new form of workplace harassment' (576) because it adversely impacts one's occupational experiences. Our findings affirm Jane's argument and expand this understanding by demonstrating that scholars' online harassment also *begins with, stems from, and overlaps with* their work, in addition to *adversely impacting* it. In particular, our results offer three insights that help the research community understand how online harassment impacts scholars.

First, the online harassment that scholars report appears to vary by gender, sexual orientation, and appearance. Gender was the most common contributing factor reported by women, gender non-binary participants, participants from all positions within the academy (save non-tenure-track instructors, for whom this came second), White participants, BIPOC participants, and LGBTQAP+ participants. In contrast, men reported gender as the 10th most common factor contributing to their harassment, with only 29.4% identifying it as such. This suggests that online harassment is a highly

gendered experience for many scholars. Further, sexual orientation was a frequently reported factor among LGBTQAP+ participants (35.7%) compared to straight participants (5.1%). And lastly, the factor ‘my physical appearance’ was ranked relatively low by most participants across demographic categories, except participants who identified as LGBTQAP+, BIPOC, and gender non-binary, potentially indicating that scholars who deviate from a straight, white, cis-gendered subject position are harassed for being as such. This is a reminder that individuals cannot “rid bodily identifiers in any realm” (Richard & Gray, 2018, p. 12) and that, for ‘professors on the margins’ (Robinson, 2015, p. 80), the increased visibility that comes with online spaces can be greatly damaging.

Second, study results show that the factors and triggers leading to the online harassment scholars receive are tied to their work and identity *as a scholar*. In particular, the most commonly reported contributing factors were aspects of scholars’ professional identity (e.g., *one’s field of research and rank as a faculty member*) and their epistemological identity (e.g., *one’s opinion and one’s moral/ethical stance*). Experiencing harassment as a result of one’s professional identity is a clear case of one’s work impacting their experiences with online harassment (see Gardiner et al., 2016). Epistemological identity is murkier: While anyone can be harassed for their opinion or moral/ethical stance, epistemological identities hold a unique place for scholars. Scholarly practice requires that individuals spend considerable time and resources formulating and refining their epistemological identity. Opinions and moral standpoints are particularly critical to shaping the projects one undertakes and the questions scholars ask. So while anyone, scholar or otherwise, may experience harassment due to their opinion or moral stance, when scholars are harassed for their epistemological stance, they are not being harassed for something they simply *have*, but

rather, they are harassed for who they *are* and for what they have worked hard to *develop* over years of study. It is the necessary development and cultivation of one's epistemological identity in academic scholarship that makes their being attacked online as a scholar a workplace problem.

The most commonly reported triggers and environments across the whole sample further demonstrate the enmeshed nature of online harassment and the work that scholars do. Some of the most common triggers included core activities involved in scholarly work, such as teaching, writing, research, and knowledge mobilization. Email was the most common online environment where harassment occurred, followed closely by Twitter and Facebook. Given the ubiquitous use of online environments for scholars to do their work, it is impossible to imagine that the harassment they receive can be bracketed from other scholarly activities. This is particularly true because of the 'potentially unlimited lifespan' (Jane, 2018, p. 586) of harmful material circulated online. The economic vandalism framework (Jane, 2018) suggests that online content is near impossible to remove and can thus sabotage scholars' work indefinitely.

Twitter and Facebook may be considered voluntary and most scholars technically have the option to opt-out of using them. This is unlike email, which can be considered a tool mandated by one's employer. Numerous researchers have noted, however, that public engagement and online participation via social media tools are increasingly becoming a scholarly requirement and expectation (e.g., Author; 2016; Barlow & Awan, 2016; Stewart, 2016) such that the ability to opt-out is only reserved for a select few. Choosing to opt-out can create a professional gap (O'Keeffe, 2019), which is particularly troublesome for the precariously employed, such as graduate students and non-tenure-track instructors who rely on online spaces to stay connected to the labor market.

Third, although scholars experience a range of adverse effects of online harassment directly tied to their profession, other work-related effects are more indirect, such as hampering scholars' ability or desire to work. Looking across professional effects, participants largely felt a loss of confidence, interest, and productivity at work or school. They no longer enjoyed their scholarship activities and, in some cases, felt like quitting their job or leaving their program. This logically follows from the personal effects' participants reported, such as anxiety, distress, depression, irritability, and difficulty concentrating, as well as relational effects, such as strained relationships with colleagues and their research. Participants also reported a negative impact on their relationship to social media, which can be especially problematic in an era where scholars' are expected to engage and connect with the public on their own accord (Barlow & Awan, 2016). This resonates with previous findings in the literature, which suggest that some scholars are reluctant to express themselves online and develop an online presence (O'Keeffe, 2019), and instead engage in risk management tactics such as shrinking online presence and keeping networks small, out of fear that they will become targets of online abuse (Stewart, 2016). In other words, the expectation to mobilize and share research makes online spaces, like social media, an accessible way to fulfill work-related duties, but these places can become contested (and potentially dangerous) sites of engagement that must be treated with care (Stewart, 2016).

These latter two implications, in particular, demonstrate the connection between scholarly work and online harassment. While the nature and effects of harassment experienced by scholars are similar in many ways to other reported experiences, our findings show that the harassment experienced by scholars is closely tied to core activities of the profession and one's identity as a

scholar. Online harassment is not a bounded experience, and the causes and impact of such harassment are multidimensional. The results reported here enable us to articulate the connection between online harassment of scholars with their work according to three primary stages: the reasons for harassment, via triggers and factors; the online spaces where one is expected to work (e.g., email, and increasingly, social media), and the aftermath of online harassment (personal, professional, and relational effects). In other words, work conditions contribute to scholars' online harassment, online harassment takes place in work-related spaces, and online harassment negatively impacts scholars' work experiences. For these reasons, we recommend that universities broaden their concept of workplace safety to include online environments, the very online environments they encourage scholars to adopt and use.

Conclusion

This paper offers much-needed insight into particular challenges scholars face when engaging with online environments which are increasingly integral in higher education. By addressing questions about the nature and effects of online academic harassment, our findings highlight the relationship between the online harassment scholars' experience and their work and identity as scholars. We show that online harassment is detrimental on professional, personal, and social levels. By considering online harassment that scholars face as a workplace issue we posit that the confines of workplace harassment and workplace safety should be extended to include online spaces. While our research represents an important attempt at understanding online harassment of scholars, further intersectional research into the impact of identity and subject position on scholars' experiences with online harassment and support structures is necessary and urgent.

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Figures

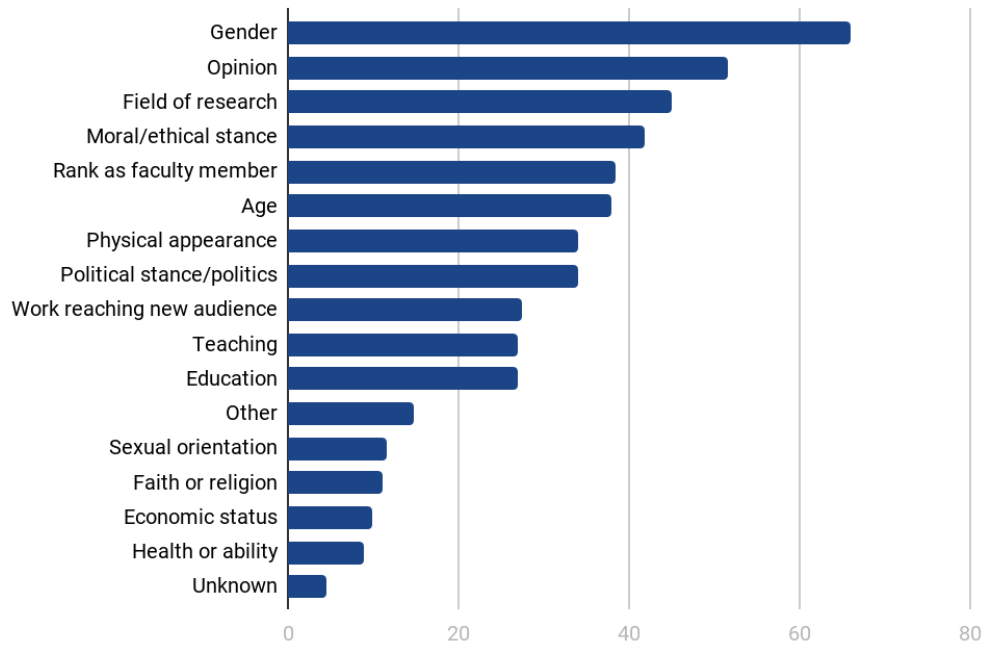


Figure 1: Complete list of factors contributing to online harassment in order of prevalence

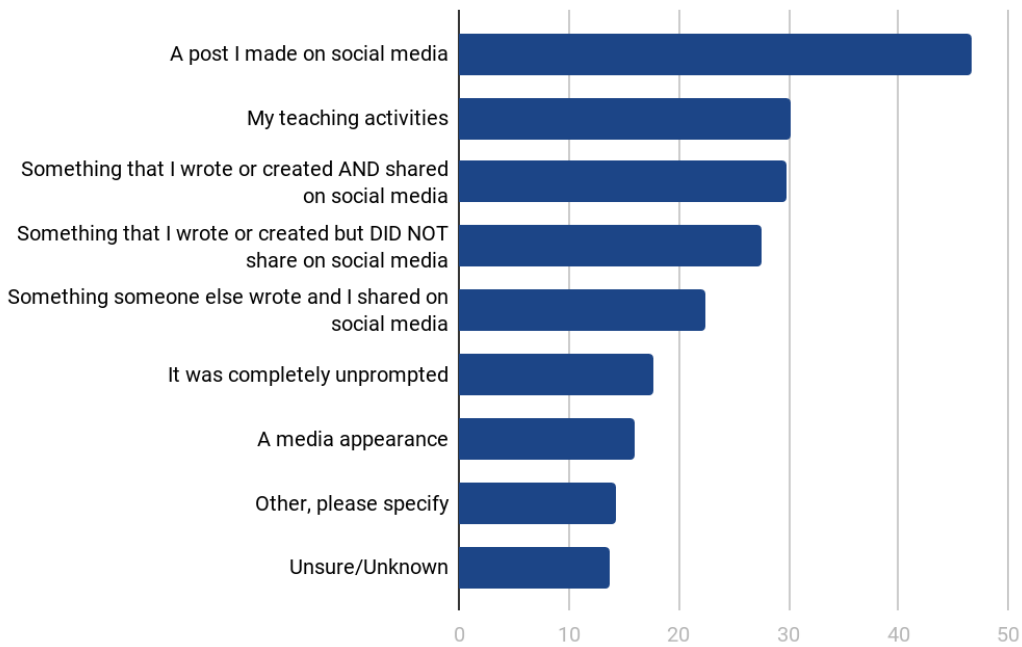


Figure 2: Complete list of triggers contributing to online harassment in order of prevalence

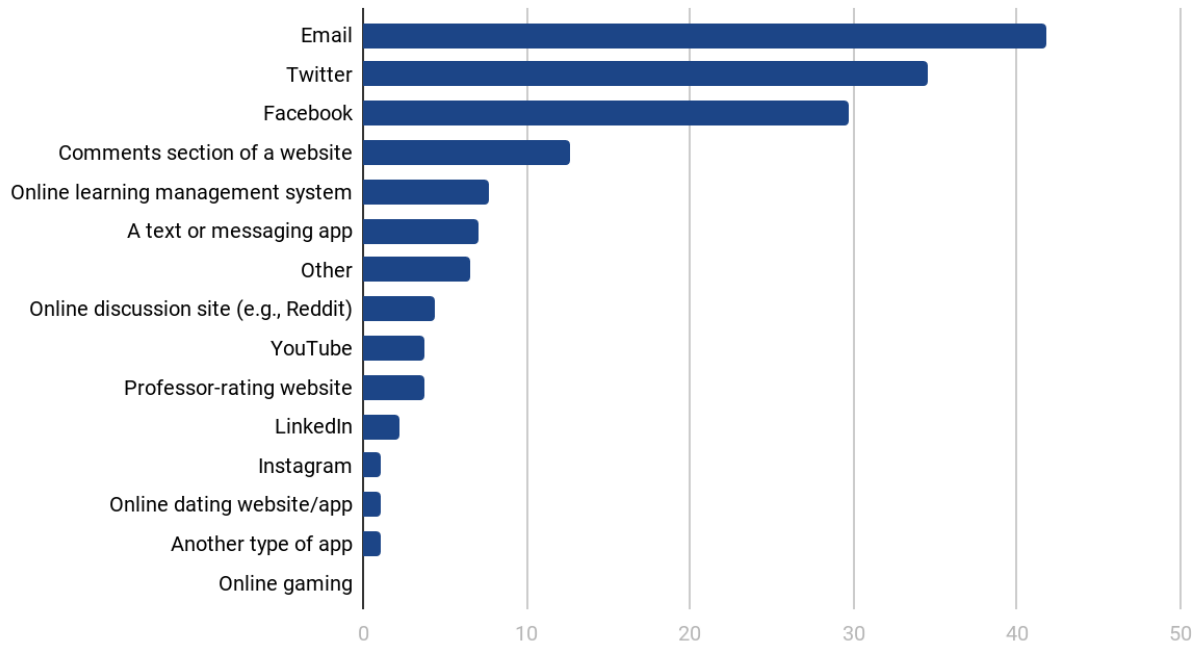


Figure 3: Complete list of online environments in order of prevalence.

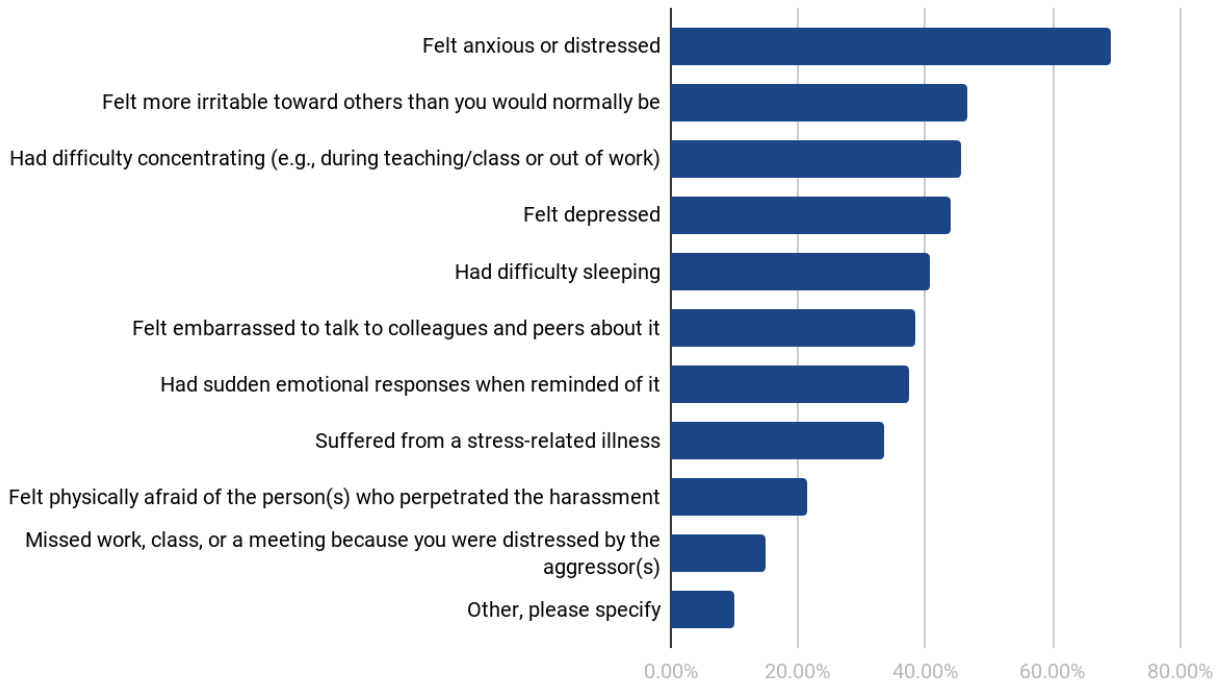


Figure 4: Complete list of personal effects in order of prevalence.

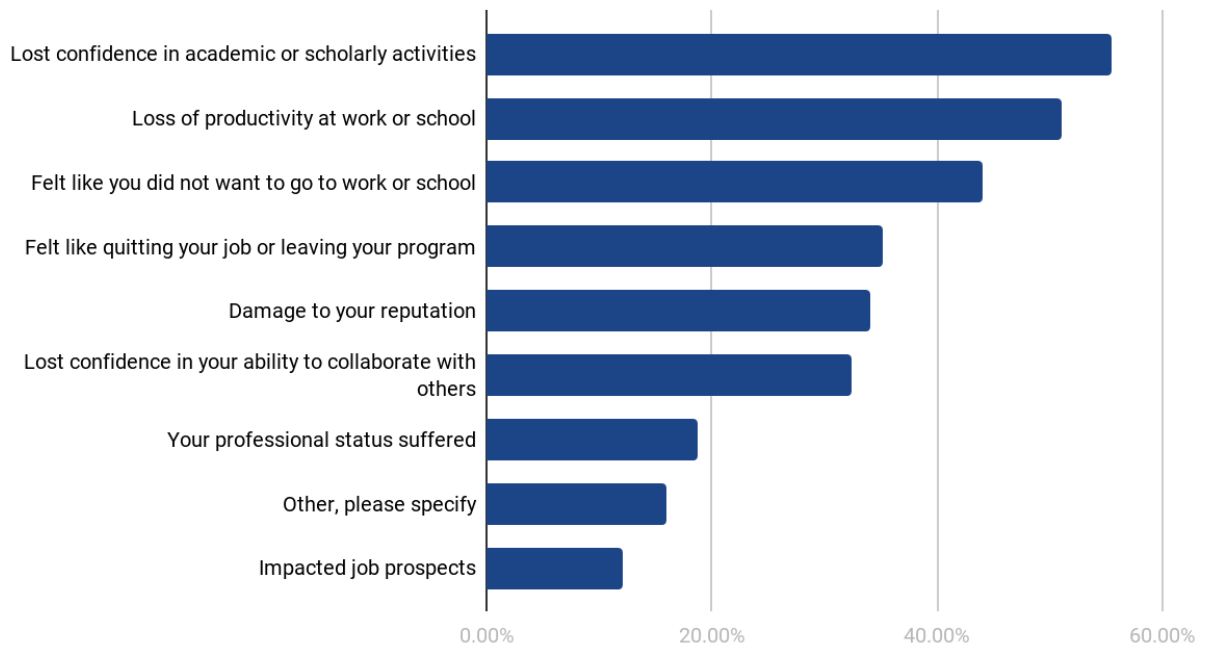


Figure 5: Complete list of professional effects in order of prevalence.

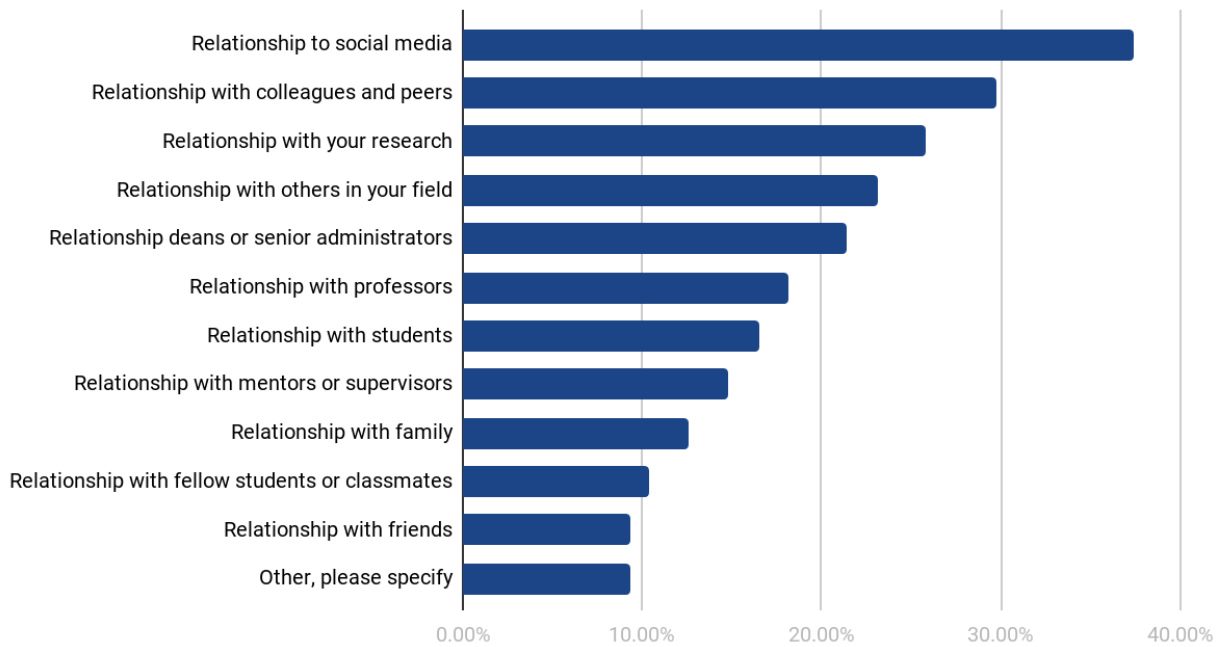


Figure 6: Complete list of relational effects in order of prevalence.