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Article

Expertise, Knowledge, and Resilience in #AcademicTwitter: Enacting Resilience-Craft in a Community of Practice

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Abstract

Online communities of practice are a useful professional development space, where members can exchange information, aggregate expertise, and find support. These communities have grown in popularity within higher education—especially on social networking sites like Twitter. Although popular within academe, less is known about how specific online communities of practice respond and adapt during times of crisis (e.g., building capacity for resilience). We examined 22,078 tweets from #AcademicTwitter during the first two months of the Covid-19 pandemic, which impacted higher education institutions greatly, to explore how #AcademicTwitter enacted resilience during this time. Using text mining and semantic network analysis, we highlight three specific communicative processes that constitute resilience through a form of resilience labor that we conceptualize as "resilience-craft." Our findings provide theoretical significance by showing how resilience-craft can extend theorizing around both communities of practice and the communicative theory of resilience through a new form of resilience labor. We offer pragmatic implications given our findings that address how universities and colleges can act resiliently in the face of uncertainty.

Keywords

#AcademicTwitter; communities of practice; Covid-19; hashtags; resilience; Twitter

Issue

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1. Introduction

In Buzzanell's (2010) International Communication Association presidential address, which outlined the communicative theory of resilience, she posed the following question: "How do people go on from day to day amidst...looming possibilities of pandemics?" (Buzzanell, 2010, p. 2). Given the (ongoing) disruption caused throughout college campuses by the Covid-19 pandemic, as educators moved their classes and teaching online, many college instructors expressed frustration, angst, anxiety, and stress (Kamenetz, 2020b). In response to these institutional and pedagogical disruptions, groups like Pandemic Pedagogy emerged on social media platforms, like Facebook, while others took to

Twitter using #AcademicTwitter to broadcast ideas, seek help, and offer social and technical support (Supiano, 2020). In short, these forms of ad hoc, hashtagged spaces were organized as online and spontaneous communities of practice (CoP). Using the CoP framework, this study examines tweets from #AcademicTwitter to understand the specific ways that academics organized an online CoP in response to Covid-19.

We focus attention on the organizing process of CoPs, recognizing how they provide an environment for constructing personal and professional identities through the sharing of personal histories, information exchange, and mentoring (Andrew et al., 2009). As CoPs engender a diverse mix of novices with experts, these communities provide a fruitful ground in which beginners can



learn the talk, walk, and work of a profession (Lave & Wenger, 1991). For example, Park and Schallert (2020) illustrate how participation in practice and researchoriented programs provides a process through which doctoral students build an emerging professional identity. Further, recent research has affirmed the importance of instructional communication during uncertainty and crisis (Edwards et al., 2021). Wenger (1998) provides a framework of three outcomes used to measure instructional communication with CoPs: mutual engagement, shared repertoire, and negotiation of shared goals. These three foci offer insight into the knowledge construction and learning activities of CoPs, as organizations aim to overcome crises and mitigate risk (Edwards et al., 2021). However, less research has explored how these processes may also enact resilience during a crisis. We give attention to one CoP, #AcademicTwitter, to explore how it organizes resilience. #AcademicTwitter is one of many communal spaces in academia aimed at building "community, [having] some fun, and [letting] off steam" (Wright, 2015, para. 2). #AcademicTwitter "is used to share information, provide support, and engage in conversations regarding the world of academia" (Gomez-Vasquez & Romero-Hall, 2020, p. 2). Given the immense disruption caused by Covid-19, the scope of content shared on #AcademicTwitter's shifted to discuss the ongoing social, emotional, and work-related impacts of the pandemic throughout academia (Davies, 2021; Lobo, 2020). Given Buzzanell's prescient question about how individuals continue to do work during times of crisis, our article explores how #AcademicTwitter constituted resilience as a communicative process that is leveraged during disruptions as individuals share and receive knowledge within CoPs.

Our article begins by providing an overview of scholarship related to CoPs. We privilege research on both knowledge sharing and online configurations of CoPs as a backdrop for our study. We then integrate the communicative theory of resilience as a theoretical lens through which we explore the context of our study, #AcademicTwitter. Next, we describe our data collection processes and analytical methods. From there, we describe three communicative processes utilized within #AcademicTwitter that enact resilience-craft within the #AcademicTwitter CoP. Finally, we conclude by discussing the implications of our study and situating resilience-craft within the CoP and resilience literature.

2. Literature Review

2.1. Communities of Practices and Knowledge Sharing

CoPs are self-governed, learning-based networks routinely oriented around professional development and knowledge sharing (Wenger, 1998; Wenger et al., 2002). Specifically, Wenger et al. (2002, p. 4) conceptualize CoPs as "groups of people who share a concern, a set of problems, or a passion about a topic, and who deepen their

knowledge and expertise in this area by interacting on an ongoing basis." Yet, unlike formal organizations governed by defined rules and shared goals, CoPs develop socially through the mutual collaboration of practitioners and educators, novices, and experts (Lave & Wenger, 1991). Within CoPs, members gather to share resources and information, engage in joint activities and discussions, and contribute to collective expertise on the topic (Wenger, 1998).

Furthermore, in considering the specific goals and aims of CoPs, Hydle et al. (2014) distinguish between communities of tasks (e.g., formalized working groups, committees, or research teams) and communities of learning (e.g., mentoring programs, learning communities, or professional development communities). We give attention to communities of learning, which are organized through their knowledge creation and subsequent learning processes that socially construct normative values and identity in a practice environment. In a practice-based environment, the role of craft, or the ability to improvise and adjust through expertise and knowledge, becomes vital to cultivating expertise (Amin & Roberts, 2008). Despite these configurations of CoPs as high-impact learning collectives, Lindkvist (2005) argued that traditional studies of CoPs ignore temporal aspects of CoP organizing. Studies minimize the role of short-term and ad hoc CoP configurations, noting that "such temporary organizations or project groups within firms consist of people, most of whom have not met before, who have to engage in swift socialization and carry out a pre-specified task within set limits as to time and costs" (Lindkvist, 2005, p. 1190). To address this limitation, online and virtual CoPs are gaining scholarly attention for the ease and utility of creating collective spaces for individuals (see Greenhalgh et al., 2020; Kimble et al., 2001).

Regarding online CoPs, Gunawardena et al. (2009) offered a conceptual framework that incorporates the increased use of social networking tools in professional life into their constitution of CoPs. Their framework includes socially mediated metacognition, which refers to "the reciprocal process of exploring each other's reasoning and viewpoints to construct a shared understanding" (Gunawardena et al., 2009, p. 14). Social media enable users to engage in metacognition using affordances, or how technical, social, or communicative features of media technologies allow people to engage with one another (Bucher & Helmond, 2018; Rice et al., 2017). Affordances (perceived or material) foster and promote certain communication types on social media platforms and are crucial in organizing CoPs. For our study, we focus on how the communicative affordances of hashtags create opportunities for online CoP organizing to occur.

CoPs also incorporate socio-material aspects that have both online and offline implications (Scott & Orlikowski, 2012). For example, Tewksbury (2013) illustrated how the Occupy Movement emerged synchronously online and offline, allowing members to



share strategies and knowledge to advance their participatory democratic ideals. Given the socio-material impact of online CoPs, we give attention to the use of hashtags on Twitter as a valuable and vital affordance in organizing CoPs online. Hashtags have been given increased attention for their utility in professional development in higher education. In their netnography of a college academic advising Twitter chat, Eaton and Pasquini (2020) called for increased focus on how and why certain types of knowledge sharing and organizing occurred in hashtag chat communities.

In our conceptualization of #AcademicTwitter as a CoP, we consider how "individuals realize collective challenges and opportunities associated with knowledge sharing across organizational boundaries" (Eaton & Pasquini, 2020, p. 2) through ad hoc, networked, and spontaneous practices. In this vein, we analyze how virtual engagement with #AcademicTwitter rendered socio-material consequences online and offline to adapt to changes generated by the Covid-19 pandemic. #AcademicTwitter convenes through a similar hashtagged community; however, we contend that a central component of the hashtag is the use of communicative resilience processes to provide a variety of support opportunities.

2.2. #Resilience and Crisis

To study the communicative enactment of resilience, we borrow from Richardson's (2002, p. 309) definition of resilience as an ability of an individual or group to reintegrate "from disruptions in life." Similarly, Buzzanell (2010) noted that resilience could be discursively rooted in how rituals, stories, and experiences communicatively constitute realities in dynamic and ever-changing ways (Buzzanell & Shenoy-Packer, 2015). Moreover, Buzzanell (2010, 2018) theorized resilience as a multi-level, adaptive-transformative communication process triggered by crisis and disruption, giving way to networked organizing. Lee et al. (2020) suggested that improvised networks can serve as a buffer against external threats and act as a resource for sharing new ideas and information. In this context, improvisation is not simply a facet of organizing but is the resilient process through which individuals engage. We, too, contend that networked resilience may be an important avenue through which ad hoc organizing occurs. A key consideration for this study is the role that communication networks play in fostering improvised resilience in a spontaneous CoP. Although Lee et al. (2020) examined improvised resilience in the context of disaster, we extend this line of theorizing by considering both the context of Covid-19 as a catalyst for ongoing disruptions wherein spontaneous and networked organizing through Twitter hashtags seemingly constitutes resilience online. As has been shown in recent research (Literat & Kligler-Vilenchik, 2021), social media participation can potentially improve wellbeing and resilience.

In recent years, the study of communicative resilience online has been given much attention, with scholars examining different facets of Buzzanell's communicative theory of resilience. For instance, Eddington (2020) examined how members of an online men's rights community utilized contradictory and alternative logic to (re)construct online and offline gender identities. Any cascading, multidimensional, and unexpected events can trigger resilience (Hintz et al., 2021). Trigger events, or turning points, can occur both as anticipated and unstable changes that are momentary or persistent. Further, research (Jarvis, 2021) illustrates the opportunities and advancements of information sharing and supportive communication to enhance collective resilience during prolonged periods of unease. In shifting focus to the communal knowledge enactments of #AcademicTwitter, we move to make evident the convergence of improvisation with expertise towards engendering resilience.

Given the enriched possibilities of resilience through expertise, we give specific attention to themes of resilient labor. Agarwal and Buzzanell (2015, p. 409) conceptualize resilience labor "as a dual-layered process of (re)integrating transformative identities and identifications to sustain and construct ongoing organizational involvement and resilience." That is, resilience labor recognizes the influence of context and organizational site in sustaining workers, and their identities, in their organizational involvement (Ashcraft, 2007; Kuhn, 2006). Agarwal and Buzzanell (2015) identify ideological and organizational networks as critical to the substance of resilience labor in aligning identity/identification. Resilience labor is a materially discursive process crafted through creative adaptations and empowering logic brought on by the trigger event (Buzzanell et al., 1997), thus it is a particularly well-suited phenomenon on which to examine knowledge-sharing practices of a CoP. Additionally, Ford (2018) characterized resilience labor as a form of work that is in a constant state of resilience enactment; therefore, considering the networked, ongoing, and dynamic nature of Twitter (and #AcademicTwitter), we give attention to the various ways that #AcademicTwitter enable academics opportunities to constitute resilience.

2.3. The Great Covid-19 Migration and #AcademicTwitter

As Covid-19 wreaked havoc on public and private life, it so too quickly forced all industry sectors online. Educational institutions at varying levels were particularly hard hit as teachers and professors sought to adapt to the demands of e-learning, eventually leading the World Economic Forum to estimate that 1.2 billion children, across 186 countries, were out of the classroom (Li & Lalani, 2020). As instructors worldwide sought to mitigate the disruption to their planned curriculum, many turned to social networking platforms, like Twitter, to strategize and innovate design. Among these communities, #AcademicTwitter emerged as a prominent tool for



educators, professionals, and commentators to discuss accessibility, academic life, and teaching and research support (Gomez-Vasquez & Romero-Hall, 2020).

Our focus on #AcademicTwitter builds upon recent scholarship that has examined the hashtagged space through various communicative patterns and roles of users. For example, Gomez-Vasquez and Romero-Hall (2020) mapped conversational topics and constructed the social network of users to examine how resources (e.g., knowledge, advice, and information) moved throughout the network. Others have examined #AcademicTwitter as a means of feminist praxis and advocacy. Talbot and Pownall's (2022) thematic analysis of #AcademicTwitter characterized the space in conflicting terms: one organized through both (a) communality and support and (b) "promoting the competitiveness and overwork that pervades offline academic settings" (Talbot & Pownall, 2022, p. 113).

Recent scholarship by Davies (2021) studied #AcademicTwitter during the Covid-19 pandemic to shed light on how academics framed their work during the early days of the pandemic. In their study, Davies (2021, p. 9) identified "humor, articulations of care, and the crafting of communities" as "central to life and work in the academy during the pandemic," and called for additional scholarship that highlights "the tools and practices throughout which these are rendered meaningful and bearable." Responding to Davies' call, we ask the following research question: How did #AcademicTwitter enact resilience during the beginning of the Covid-19 pandemic?

3. Methods

3.1. Data Collection

To study how improvised CoPs organize, we collected 22,078 tweets throughout March and early April 2020. We adopted a two-phase process. First, we used a Python library called GetOldTweets3 to collect all tweets that used #AcademicTwitter between March 9, 2020 (the day before Harvard University announced its closure) and April 4, 2020 (Henrique, 2018; Kamenetz, 2020a). GetOldTweets3 is commonly used in social scientific research and network analysis as it allows the researcher to enable a specific time interval (Zirbilek et al., 2021). Caitlyn Jarvis edited the existing code to retrieve the tweets that matched our search criteria, creating a query to collect all the tweets that used #AcademicTwitter between our designed dates. Second, we are utilizing text mining and semantic network analyses to explore the discursive and socio-material enactments of resilience in #AcademicTwitter to understand how the hashtag helped in constituting resilience.

3.2. Data Analysis

We adopted a threefold process of analysis for the 22,078 tweets from #AcademicTwitter. First, the tweets

were analyzed using text mining, a computational social science methodology adept at identifying relationships between words and phrases in large, unstructured data sets (Ignatow & Mihalcea, 2018). Lambert (2017, p. 3) describes text mining as "one strategy for analyzing textual data archives that are too large to read and code by hand, and for identifying patterns within textual data that cannot be easily found using other methods." A key assumption of text mining is that meaning can be found from the analysis (and the frequencies) of words, phrases, and concepts into conceptual hierarchies (Jarvis & Eddington, 2020, 2021; Sowa, 1984). Meaning, as Leydesdorff and Welbers (2011, p. 474) contend, "is generated when different bits of information are related at the systems level, and thus positioned in a vector space." To conduct the text mining, we utilized the AutoMap software (Carley, 2001).

To begin text mining, we preprocessed all tweets. Preprocessing is a necessary step that creates a uniform text corpus by removing metadata and hyperlinks, creating synonyms of concepts (e.g., "covid," "COVID-19," and "coronavirus" were transformed to "covid19"). Once the text corpus was sufficiently cleaned, a co-occurrence list of semantic concepts was generated. The co-occurrence list is the basis for the semantic network analysis and contains pairs of words near one another. A fundamental assumption of this approach is that terms and concepts that are frequently close in proximity to one another contain meaning (Grimmer & Stewart, 2013). These procedures are the first step in creating a relational network of semantic content known as a semantic network. Within the context of this study, text mining offers insights into revealing potential relational networks of meaning that undergird individuals' enactment of resilience on #AcademicTwitter.

Once the text corpus was reasonably cleaned, AutoMap generated a co-occurrence list of pairs of words that frequently appear together in the text corpus. These word pairs (and their corresponding frequencies) are imported into network analysis software, NodeXL for analysis (Smith et al., 2010). In this instance, nodes represent the concepts (i.e., words or phrases) that appear within the text corpus of #AcademicTwitter. Edges represent the co-occurrence of concepts with one another, and their frequencies represent the strength of the ties. In other words, a thick edge between two concepts indicates that the words frequently appear together. Semantic network analysis can be useful in identifying central ideas and concepts that emerge within a network. Semantic networks also exhibit similar structures to social networks (Doerfel, 1998). As such, network analytics like cluster analyses can be applied to uncover conversational clusters—or themes—that appear within the semantic network. Clustering analyses are helpful in that they create "cliques" of word pairs that more frequently occur together, which demonstrate underlying group structures. Group structures can exhibit thematic qualities as they recur and revolve around central topics



or concepts; however, to interpret the clusters, we utilized thematic analyses to contextualize specific topics and concepts in the three largest clusters of the Twitter data (Eddington, 2020; Jarvis & Eddington, 2020).

Using the three largest clusters as a guide, we returned to original tweets to identify themes, or recurring and repeated meanings, embedded within our semantic networks (Eddington, 2020; Leydesdorff & Welbers, 2011). To understand the specific meanings conveyed by the clusters, Sean Eddington searched the text corpus for specific instances of central words and phrases identified within the cluster analyses. Next, Sean Eddington recorded the comments for central cluster nodes in a separate spreadsheet and used a constant comparative analysis to code them (Corbin & Strauss, 2015). After examining the semantic data in context, Sean Eddington engaged in open coding and then began to group the initial codes into broader categories. For example, codes related to "resources," "suggestions," and "advice" were grouped into the higher-level category "knowledge sharing." This process occurred for each of the remaining clusters. Once initial themes were defined, Sean Eddington discussed the findings with Caitlyn Jarvis to ensure validity.

Our findings are discussed in the next section. In compliance with the 2019 Association of Internet Researchers' Ethical Field Guidelines 3.0, tweets that are shared are both paraphrased and anonymized to address issues with risk and data anonymization (Franzke et al., 2019). Additionally, in the reporting of our findings, when discussing specific nodes in the quotes, we bold and place parentheses around the semantic connections (i.e., "pandemic—pedagogy").

4. Results

In responding to the research question, we identified three primary purposes of #AcademicTwitter that help to constitute resilience. First, the hash-tagged space enabled users to engage in sensemaking about academics' experiences at the onset of Covid-19. Second, #AcademicTwitter cultivated opportunities for knowledge-sharing. Third, #AcademicTwitter provided a space for social support for academics given the initial impact of Covid-19 on everyday lives. It is through the entanglement of these three communicative processes that resilience within #AcademicTwitter is constituted.

4.1. Sensemaking

Sensemaking was the first way that #AcademicTwitter constituted resilience. Sensemaking, or the ability for individuals to retroactively define and understand their experiences, can often be triggered through crisis *and* is an ongoing process (Weick, 1995). As academics struggled to make sense of their disrupted realities, the quick transition online was a key focal point of the space. In Figure 1, the central (and largest) node in

the cluster was "online," and many users discuss different experiences and perceptions of the transition to online teaching. Within the "online" cluster, nodes connected to "online" were nodes like "move_course," "shift," "and "prepare."

For many within the space, sharing their experiences and reflections regarding the "shift—online" was critical to story and understand their experience. As one user noted: "This is not a 'shift—online'! Let's call it what it really is: emergency education! #AcademicTwitter." Others lamented the impact of the shift online. Another user reflected:

The reality of the mandate to "move_courses—online" means that I teach from home. My kinder-gartener is also at home, so I'm homeschooling a child with ADHD. Not to mention that my husband has PTSD, and we've disrupted his routine. #AcademicTwitter.

While some struggled with the personal ramifications of the shift online, others lamented the impact on their ability to teach effectively: "Great. Now that I must 'move_courses—online,' I'm struggling with the lack of control over my courses. The semester started off so well! Now it seems like chaos. #AcademicTwitter #COVIDCampus."

Additionally, as faculty and academic workers moved their courses online, users on #AcademicTwitter discussed and debated creative strategies for working through the process of quickly moving courses online for both instructors and students. For some, individuals tweeted about the importance of not losing communication and trying to address student concerns early. As one individual shared: "As we 'move-courses' online, don't forget to reach out to your students about their access to technology and whatnot! My students are freaked out, and we can do our best to address their concerns as much as possible!" Others reframed the shift online as opportunities for using the Covid-19 pandemic as an application to their teaching. One instructor tweeted, "I'm teaching a class about conspiracy theories....As we 'pivot-online,' I'm thinking about restructuring the course to be all about Covid-19!" As shown in the two previous tweets, users adopted various sensemaking strategies to understand and creatively work through the challenges of the pandemic's disruption on their work. Their use of creative labor in sharing their experiences on the hashtag also offered opportunities for individuals to raise awareness of different resources and information about how to best serve the needs of both students and instructors.

4.2. Knowledge Sharing

Knowledge sharing was the second function of #AcademicTwitter's enactment of resilience. Knowledge sharing, or the act of sharing information and knowledge



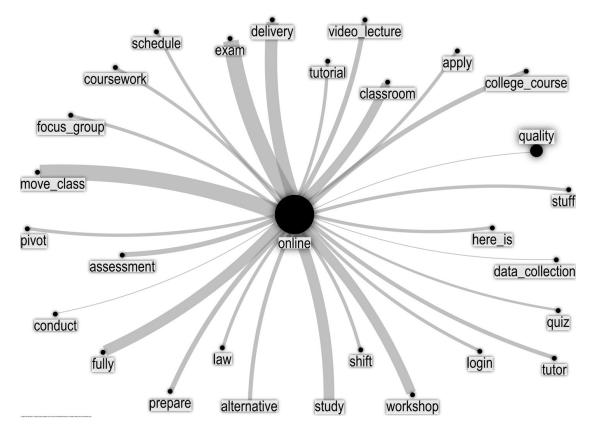


Figure 1. Discussions around the shift to online teaching in #AcademicTwitter.

within a collectivity, has long been considered an essential function of membership in online CoPs (Wasko & Faraj, 2005). #AcademicTwitter is no exception to this in users' engagement through the hashtag. As Figure 2 highlights, various sub-clusters in the semantic network refer to knowledge sharing in different ways. A primary way that knowledge sharing occurred was through sharing resources. Users often retweeted information regarding textbook publishers' open-access efforts for students and academics. Tweets often referenced specific publishing companies (e.g., SAGE, Haymarket Books, or JSTOR) that provided several "'free—downloads' of awesome books that support #onlinelearning and #socialdistancing." Others promoted technology resources like PollEverywhere which offered free premium memberships and trials for faculty members. Another function of knowledge sharing focused on resources for students. Various users reflected on individual students' experiences and challenges given the pandemic, and others promoted additional resources for students struggling financially. For example: "#AcademicTwitter: I've attached a 'greatresource' to send to your students who may need additional financial support. #COVID19."

Within #AcademicTwitter, many users took to the space to share knowledge and trusted the hashtagged space to be a font of knowledge and ideas for managing the disruption caused by Covid-19. For instance, two central nodes within Figure 2's semantic cluster,

"good" and "great," were often used in connection with ideas, conversations, or suggestions for resources. Some asked questions about technology and software recommendations; one user inquired: "Any 'goodsuggestions' for daily calendars and project management software to use while we work from home (and after)? #AcademicTwitter." Others used #AcademicTwitter to ask questions about best practices for managing the disrupted learning environment. For instance, one user reflected: "Hey #AcademicTwitter, I've lots of 'goodsuggestions' about adjusting online. A popular idea is not requiring synchronous work and synchronous classes to help manage student stress. What do you think about this?" Others continued to share knowledge and advice related to managing academics' well-being. Many users shared threaded conversations offering "'great—advice' for maintaining self and sanity" during Covid-19. For example, one user shared that the compounding disruptions of Covid-19, earthquakes, power outages, working from home, uncertainty in career, and dissertation writing were tough to manage. They asked: "Anyone have any 'great—advice' for how I can focus, concentrate, and keep moving forward? #AcademicTwitter."

4.3. Social Support

The final way users engaged in #AcademicTwitter was through social support, or the ongoing "exchange of resources...to enhance well-being" (Shumaker &



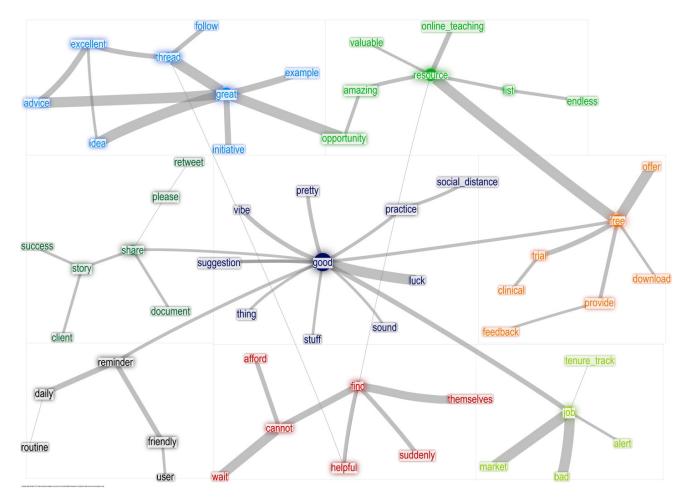


Figure 2. Discussions around knowledge sharing within #AcademicTwitter.

Brownell, 1984, p. 13). Social support occurred in #AcademicTwitter through individuals' willingness to share their feelings and fears about the Covid-19 and its impact on academics' work. In Figure 3, the central node within this cluster is "i_am." Nodes connected to "i_am" are nodes like "concern," "afraid," "struggle," and "exhaust." Users tweeted about different experiences (positive and negative, humorous and severe). For example, one user humorously shared: "Now that my partner and I will be working remotely together, 'i_am—afraid' that they'll now see how long I spend in bed scrolling on my phone!!!"

Others offered concerns about the overall impact of Covid-19 on their respective disciplines: "I don't know about you, but 'i_am—afraid' that #COVID19 will affect our productivity. Sure, we can go to the library and keep reading academic research, but the cancelled opportunities for in-person professional development will be a big loss! #AcademicTwitter." Like this sentiment, users shared a sense of loss because of Covid-19. For instance, a user argued:

This is NOT normal, and we need to acknowledge that. Normalize being not okay. Normalize saying, "i_am—struggling." We are all struggling with our productiv-

ity, the anxiety of the ongoing pandemic uncertainty, and the loss of cancelled experiences. This is NOT normal. #AcademicTwitter.

Despite the prevalence of fear and uncertainty within #AcademicTwitter, another facet of the hashtag was users' willingness to make the best of the conditions triggered by Covid-19. Some individuals used #AcademicTwitter to acknowledge specific mentors and colleagues that were helpful, and others mentioned the institutional support offered by their university. Others sought to background negative emotions in favor of foregrounding positive aspects present in their lives (e.g., practicing gratitude). One user reflected:

Filming my lectures in the random spaces in my house that aren't cluttered by toys or during my child's hourlong nap, and I can't help but think about how I've got lots of support and resources to get through this. "i am—grateful" for that! #AcademicTwitter.

Others referenced #AcademicTwitter as a specific space that helped to normalize the pandemic's impact on academics' work. One user tweeted:



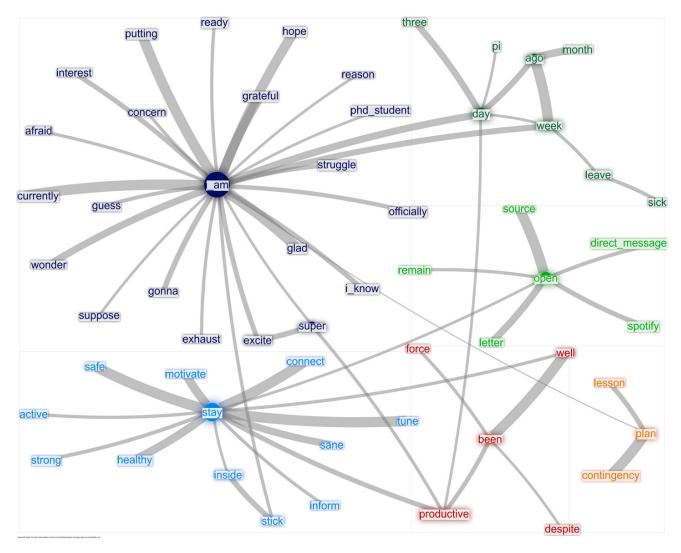


Figure 3. Discussions around social support within #AcademicTwitter.

It's difficult to stay productive during this time, but "i_am—grateful" for the #AcademicTwitter community in making it okay to say that we're in a difficult time! Remember—we're doing the best we can, and we should be taking care of ourselves, too!!!

#AcademicTwitter offered social support in various ways that served to make space for fears, acknowledge the stress and frustration of the pandemic, and provide a communal opportunity to find gratitude for their lives, their offline community, and the online social networks that they maintain.

5. Discussion

Building on research related to virtual/online CoPs and the communicative theory of resilience, our goal in this article was to illustrate how organizing hashtagged spaces can constitute a form of resilience. The three processes that we uncovered within #AcademicTwitter (e.g., sensemaking, knowledge sharing, and social support) worked together to produce a specific kind of resilience in the context of work—what we introduce as resilience-craft. Taking the three themes together, resilience-craft is constituted in CoPs through the communicative acts of solidarity, information sharing, and offering support within #AcademicTwitter. Given these findings, we introduce resilience-craft as a unique online communicative process that extends resilience (and resilience labor) theorizing and integrates this line of theorizing within the community of practice scholarship.

5.1. Theorizing Resilience-Craft

To conceptualize resilience-craft, we draw from both Agarwal and Buzzanell (2015) and Tracy and Donovan (2018) to showcase the labor and enactment of resilience through ongoing work situations impacted by crisis or disruption. Regarding resilience labor, Agarwal and Buzzanell (2015, p. 412) note that resilience is created through resilience-building in others and oneself and is a continual process of "both accepting reality pragmatically and making creative adjustments to adapt to, and potentially change, circumstances." Ford (2018)



built on Agarwal and Buzzanell's concept and argued for a reconceptualization of resilience as not just moving on from disruption but also endurance. Ford (2018, p. 253) argued that "resilience is a different process in a context where the source of the disruption is also the focus of the work." Given the ongoing focus of Covid-19 within #AcademicTwitter, we proffer that academics' use of the hashtag represents a form of resilience labor that is made possible through the ongoing and uniquely improvised knowledge sharing, support, and advice made possible vis-a-vis resilience-craft. In doing so, academics cultivate individual (e.g., for individual academics and users) and communal forms (e.g., shared throughout the #AcademicTwitter community of practice) of resilience by their engagement with #AcademicTwitter. Our study demonstrates how the dynamic interplay of hashtag affordances enables users to create communal resilience online while simultaneously adapting their offline work in response to their engagement.

Regarding the notion of craft, Tracy and Donovan (2018) conceptualize craft practice as a uniquely engendered form of expertise, wherein key leaders continually use jargon to solidify their organizational commitment. Resilience-craft, then, is the integration of the creative labor involved in giving and cultivating resilience (e.g., sensemaking, knowledge sharing, and social support) and the use of the highly specialized hashtagged space, #AcademicTwitter. That is, by drawing upon academics' lived experiences, their networks, and their expertise (in scholarship, teaching, and learning), #AcademicTwitter serves as a valuable networked and online space through which resilience is constituted as users give and build resilience individually and collectively. During the early days of the pandemic, the expertise and knowledge shared throughout #AcademicTwitter was vital for academic workers as they navigated new work realities, shifted priorities, and managed the emotional and mental stress caused by the pandemic. As was remarked in countless peer-reviewed and public presses alike, Covid-19 brought forth unprecedented education disruption and learning crises, which forced educators at all levels to leverage expertise, collaborate across borders, and provide support in new and unanticipated ways (d'Orville, 2020). Our study highlights how the collective expertise shared in #AcademicTwitter transcended traditional conceptualizations of CoPS that focus on task and learning by shifting the role of expertise to be one of commitment to the collectivity of academics on Twitter.

We offer resilience-craft to explain and differentiate the communicative enactment of resilience in #AcademicTwitter. Different from improvised resilience and creative labor, we highlight how #AcademicTwitter works together through the hashtag. That is, the hashtag affords an explicit focus on both knowledge-building and community engagement. Hashtags have been given much scholarly attention in recent years for the communicative affordances that support organizing (see

Jackson et al., 2020). We situated our study within the scholarship of CoPs by focusing on the communicative elements of the hashtag as an organizing space for academic workers (Eddington, 2018). Although writing about the role of #hashtagactivism, Jackson and colleagues describe, "for those individuals and collectives unattached to elite institutions, Twitter, and the unifying code of the hashtag, have allowed the direct communication of raw and immediate images, emotions, and ideas and their widespread dissemination in a way previously unknown" (Jackson et al., 2020). So, too, can hashtags cultivate similar communicative practices during crisis and disruption. We contend that hashtags, as a communicative affordance, enable resilience-craft to be constituted through academic workers' ongoing engagement in the hashtagged space. Although improvisation and creative workarounds can exist in #AcademicTwitter through the types of advice given that are not typically expected from academics (e.g., surviving a quick transition to online teaching, especially for members of the academy not trained to teach online), the hashtag itself appeared to transform the traditional community boundaries and norms during the nascent Covid-19 crisis. Additionally, while vital to sustaining various forms of expertise within the online community of practice, the three communicative processes we identified (e.g., sensemaking, knowledge sharing, and social support) worked together to constitute resilience during times of crisis. That is, different from other theorizing of online CoPs, and #AcademicTwitter specifically, our study foregrounds the ongoing Covid-19 pandemic as a triggered disruption to the everyday realities of academics.

In times of crisis, the types of communication that organize CoPs serve dual purposes of learning and community to enact resilience-craft. Our study showcases how the communicative functions and processes embedded that organize online, hashtagged CoPs can shift quickly to respond, adapt, and transform professional communities online and offline. Pasquini and Eaton (2021) contend that online professional communities are normal for various members of the academic community, and the networked boundaries that are created through these spaces transcend both work and personal lives. During the initial months of Covid-19 impact across the world, #AcademicTwitter served as a space that both continued traditional forms of community of practice activities and expertise while making a marked shift in solidarity with the everyday lived realities of academic workers. In doing so, the resilience-craft enacted through the willingness of individuals to reflect and share their experiences, offer support and resources, and normalize the ongoing pandemic impacts that gave voice to both the online and offline experiences triggered by the pandemic.

5.2. Practical Implications

Given the ongoing disruptions caused by Covid-19, our study shed light on a crucial practical implication.



Individuals used #AcademicTwitter as a space to often vent their frustrations about the compounding issues related to work and care in the academy. As our study examined the initial days of the pandemic, Davies (2021) examined a smaller corpora of Twitter data from #AcademicTwitter (between April and July 2020) and found the notion of institutional critique becoming more prevalent as the pandemic continued. Individuals felt a lack of ongoing institutional support and care, particularly around issues related to gender, access to technology, and the notion of academic productivity. For example, Davies (2021, p. 8) shared:

One tweeter wrote, addressing those anxious about their levels of productivity, that the pandemic "accentuates privileges" and that not everyone was able to be productive to the same extent, while another talked about the "duplicitous bullshit" of rewarding people who were managing to be particularly productive at a time of global crisis.

Taking this into consideration, administrators and senior leadership at universities would do well to re-examine their work-life policies, funding, and jobrelated demands given the fissures exposed via Covid-19.

Additionally, #AcademicTwitter is a useful space for academic workers to share their experiences. Our findings emphasize that Covid-19 and the Great Migration represent a change in work experiences—especially among tenure-track professors. As such, administrators and senior leaders should find ways to acknowledge the adverse work experiences and stressors that were heightened during the pandemic. This could mean adjusting annual evaluation processes, reimagining and recalibrating demands for tenure, or normalizing the pandemic's impact on their work when going up for tenure. That is, the issues that we surfaced existed prior to Covid-19, yet the pandemic illuminated the various ways that inequities are institutionalized throughout academe.

Further, the notion of resilience-craft, which we theorize in this article, reveals the additional and improvised labor that many academics engaged with during the pandemic. Resilience-craft uniquely showcases those processes through which disruption and unease became a normative part of the work environment for academics. Supervisors and administrators alike should recognize the new forms of labor that were required for academics to remain afloat. Things like meeting students' emotional needs, sitting with students through moments of pain, and providing empathetic support are not frequently considered in the process of promotion, yet became increasingly commonplace throughout the pandemic.

5.3. Limitations and Future Directions

Like all research, this study is limited in some ways. First, our use of the Twitter data from mid-March to April 2020 only captured a glimpse of academics' experiences

during Covid-19. That is, as most colleges resorted to online learning for the bulk of the 2020-2021 school year, future research could examine the evolution of the resilience-craft discourses throughout the preceding year and a half as college educators began to transition back to in-person instruction or returned to "normal." Second, although our study examined the semantic networks of tweets, there are immense possibilities and opportunities to explore academics' lived realities more deeply. Throughout our networks, the persistent references to fear (for self and others), the anxieties and stressors triggered by the ongoing pandemic, the management of working from home, and balancing work and personal lives would enrich our ongoing understanding and sensemaking of the social impact of Covid-19. Future studies could adopt qualitative approaches (e.g., interviews, photo-elicitation, photovoice) to understand the lived experiences of academics more richly during Covid-19. Third, given our focus on the content of the hashtag during the early months of the pandemic, our analyses did not include information about the academics that make up #AcademicTwitter. There are opportunities to explore more fully the social networks of help and support that were leveraged during the crisis. Extending methodologies adopted by Gomez-Vasquez and Romero-Hall (2020), future studies could utilize social network analyses to explore and map key users of #AcademicTwitter during this time to showcase the types of diversity in academic workers (e.g., nontenure-track, adjunct professors, administrators, tenure-track) that constituted the online CoP.

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Conflict of Interests

The authors declare no conflict of interests.

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