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Graduate teaching assistants' challenges, conflicts, and strategies for navigating COVID-19

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COVID-19 imparted unprecedented changes to higher education. Overnight, institutions were required to transition to online instruction, which brought about numerous challenges for instructors. This study examines the experiences of an often-overlooked instructor; graduate student assistants (GTAs). Their challenges and conflicts encountered with online instruction during COVID-19 and conflict management strategies are investigated. Sixteen ($N = 18$) GTAs from six universities in various regions of the United States were interviewed and constant comparative analysis was used to analyze data. Findings revealed that GTAs experienced challenges with (a) online instruction, (b) students, and (c) personal challenges. Also, GTAs encountered conflicts regarding (a) safety concerns and precautions and (b) online-related proficiency, support, and expectations. Lastly, GTAs (a) employed empathy and flexibility, and (b) created boundaries and consulted others as conflict management strategies. Findings are discussed and theoretical and practical implications are advanced.

KEYWORDS

graduate teaching assistants (GTAs), online instruction, COVID-19, challenges, conflict management

Introduction

The coronavirus disease 2019 (COVID-19) outbreak precipitated the disruption of life in various sectors of society globally, especially the education sector (Alberti et al., 2022). The World Health Organization (2020) advised people to avoid crowded, close-contact, and enclosed spaces, due to the highly transmissible coronavirus, leading to the closure of schools in various countries. In the United States, the rapid transition from in-person to online teaching heavily influenced not only students but instructors, as well (Na and Jung, 2021). Given the unprecedented change in teaching modes, insufficient knowledge, and experience with blended, remote, or online teaching (Gudmundsdottir and Hathaway, 2020; Trust and Whalen, 2021), instructors had to learn various ways to adapt, including learning new technologies, teaching approaches, and communication strategies (Trust and Whalen, 2021).

Research has examined the experiences, responses, and challenges of instructors due to the sudden shift to online instruction during the pandemic (e.g., Sunasee, 2020; Na and Jung, 2021; Trust and Whalen, 2021). Findings indicate that instructors experienced several challenges including technological constraints, lack of student engagement, assessment, evaluation, mental health, support, etc. (e.g., Adedoyin and Soykan, 2020; Openo, 2020; Na and Jung, 2021). However, most studies focused primarily on the experiences of full-time faculty and lecturers, with little attention given to the experiences of graduate teaching assistants (GTAs, hereafter).

In higher education, the position and importance of GTAs is recognized and has increased because of student diversity and a growing emphasis on undergraduate education (Nyquist et al., 1989). Universities depend on GTAs because of their knowledge, because they are invariably cheap to employ, and are more adaptable as employees (Gillon and Hoad, 2001). The specific roles and responsibilities of GTAs vary depending on the institution and teaching modality (Williams, 2012). Generally, GTAs help instructors of large introductory level undergraduate classes with duties like grading, holding labs, tutoring etc. Also, some GTAs are instructors of record, independently teaching their own undergraduate classes, especially within the humanities and social science disciplines. Given the invaluable and unique roles/identities of GTAs (i.e., student, instructor, and researcher), an investigation into the disruption of life caused by the COVID-19 pandemic is pivotal.

Therefore, the purpose of the present study is to examine the unique challenges and conflicts GTAs encountered due to the pandemic and the strategies they used in managing these challenges and conflicts. Few studies have examined the impact of COVID-19 on GTAs (e.g., Houston et al., 2021; Kumar, 2021), but not from a conflict management perspective. These studies have mainly focused on the challenges and experiences of GTAs from STEM programs, who typically assist full-time instructors with duties such as grading, holding labs, tutoring, and so forth, as opposed to GTAs within the fields of humanities and social sciences, who are often instructors of record. Additionally, these studies have often explored first-person reflective evaluations of GTAs (e.g., Sunasee, 2020; Wang et al., 2022), small group sessions, safety measures, and preparation strategies (e.g., Kumar, 2021; Tinnion et al., 2021). Hence, research is scant in investigating not only the challenges GTAs within the humanities and social sciences field experienced but also the conflicts they faced and how GTAs managed these challenges and conflicts resulting from the transition to online instruction.

In this study, we contend that investigating these issues is of particular importance not only because conflict is central to educational relationships (Serrano and de Guzmán Puya, 2011), but also because unique insights can be gained from the experiences of GTAs as they hold multiple identities (Alberti et al., 2022), and are often overlooked. Furthermore, by investigating the challenges and conflicts encountered by GTAs, valuable lessons can be learned on how to provide adequate support and resources for them. Environmental catastrophes can disrupt daily operations in various sectors of society, thus, exploring how GTAs managed the challenges and conflicts resulting from the move to online instruction, can provide educational institutions with insights on how to prepare for unforeseen circumstances. Moreover, as online instruction becomes more instrumental in education, it is important to shed light on the lived experiences of this invaluable group of instructors given their subject positions as instructors, students, and researchers. In the section that follows, we begin with a general discussion on the role of GTAs in higher education.

Graduate teaching assistants in higher education

GTAs are graduate students enrolled in higher education institutions who have knowledge of specific course content, design, teach, and administrate course material (Wadams and Schick-Makaroff, 2022). In the United States, the GTA position is formal, and they are considered (part-time) employees of the institution. The position provides GTAs with teaching support and the experience needed in pursuing their careers in academia, while also being a source of funding for postgraduate research (Park, 2004).

GTAs are not only instructors but hold different subject positions that index their various identities and roles, including university employees, (international) graduate students, researchers, are parents, married and/or in a relationship, have family responsibilities etc. These multiple identities, in addition to others (e.g., gender, age, race, nationality, etc.), impact their experience as instructors and are foregrounded based on relational and situational contexts (Hecht et al., 2005). At times, these identities come into conflict with each other, and when that occurs, one identity takes precedence over the other. For example, studies have found that GTAs fall behind on their research or do not spend enough time studying for their own courses because of the demands of teaching (e.g., lesson preparation; Muzaka, 2009). These identity issues, among others, such as contending with being a female or foreign-born instructor (Weinberg et al., 2009), being an adult learner with various responsibilities beyond that of a traditionally-aged student, add to the multiplicity of identities that impact GTAs instructor experience.

Although the teaching experiences GTAs gain contribute to the development of their careers, past research indicates that GTAs often lack the necessary training needed to complete their responsibilities (Smith et al., 2023). For institutions and/or departments who offer development opportunities for GTAs, the focus is mostly on addressing basic orientation to policies, such as time management and how to conduct oneself in the classroom (Gardner and Jones, 2011; Smith et al., 2023). Rarely do GTAs receive training on nuanced aspects of teaching such as developing teaching philosophies, understanding different approaches to student learning, or feedback on teaching practices. Also, GTAs lack training in handling unanticipated circumstances that may arise in the classroom or society (Smith et al., 2023). Meaning that a lot of what GTAs learn about teaching comes through practice over a period of time. If GTAs learn how to be instructors through years of practice, then what experience/knowledge can they draw from during a global pandemic? Indeed, if their teaching toolkit is empty because of lack of experience during a regular semester, then GTAs have no knowledge to draw from during unexpected societal crises, like COVID-19. In the section that follows, we situate the current study within the context of COVID-19.

COVID-19 and educational institutions

Closing schools due to emergencies is not a new occurrence. Emergencies like school shootings, terrorist attacks, natural

disasters (e.g., wildfires, hurricanes, tsunamis etc.), and other emergencies have closed schools for days to months in the United States (Trust and Whalen, 2021). In March 2020, the World Health Organization officially declared COVID-19 (i.e., a type of virus that causes severe acute respiratory syndrome) as a global pandemic. Consequently, educational institutions were closed abruptly all around the world. According to UNESCO (2020), about 107 countries implemented school closures, with ~862 million people affected by this closure around the world (Mahmood, 2021). In the United States, most university campuses were forced to close in March 2020. This sudden closure of campuses compelled millions of college students to finish their semesters online, via remote learning modalities (Katz et al., 2021).

Online instruction—a mode of instruction utilizing a virtual teaching platform (Wadams and Schick-Makaroff, 2022), has been traditionally used by students who are unable to physically attend classes (Rouamba, 2020). However, in 2020, the WHO suggested that schools employ online educational strategies, such as podcasts, radio, television, or electronic learning, for teaching during school closures. Hence, university administrators had no option but to have instructors use various applications for online teaching because it seemed like the best teaching method during COVID-19 (Teymori and Fardin, 2020). Instructors were forced to adapt immediately to the rapid changes in course delivery amidst the uncertainty of a widely spreading virus (Veletsianos and Houlden, 2020). Instructors had to learn new technologies, communication strategies, and teaching approaches during the shift to online teaching (Trust and Whalen, 2021). According to Trust and Whalen (2021), 12% of their study's participants reported being exhausted from having to find and learn the right technology to use for their classes because they did not have training and onsite support. Although online education provides access for many students, the abrupt move to online teaching due to COVID-19 caused instructors to face several challenges and conflicts for which they were not prepared (Teymori and Fardin, 2020; Trust and Whalen, 2021). These challenges engendered conflict, which we discuss in the next section.

Instructor challenges, conflict, and management strategies

We define *challenges* as facing an issue or struggle, internally and/or externally, which interferes with one's ability to achieve a goal. Traditionally, instructors face several challenges in the classroom, including student engagement, classroom management, absenteeism, and plagiarism, amongst others. These challenges are heightened when teaching online. Researchers posit that when using an online modality, challenges such as a depersonalized classroom, a "different" instructor presence (Arkorful and Abaidoo, 2015), time management, pedagogy, and assessment occur (Kebritchi et al., 2017). Unlike traditional classes, online classes require greater and continual involvement from instructors (Nambiar, 2020) because several uncontrollable factors like external distractions or unstable network connections can hinder teaching (Na and Jung, 2021) and learning for both instructors and students, respectively. Similarly, online instruction usually requires

instructors to invest a significant amount of time in designing and developing their course on the online platform, including creating new materials for instruction, uploading, and making files accessible, etc. (Baran et al., 2013). Apart from the challenges experienced in teaching, instructors also encounter conflict, which is inevitable given that much of our daily communication is rooted in goals.

Conflict is defined as incompatible goals and interests, among interdependent parties (Floyd, 2022). Interdependence signals that conflict can occur at an interpersonal, intergroup, or organizational level. At an organizational level, Burke (2006) posits that conflict can happen at four levels: (1) individual-organization (i.e., personal), (2) individual-individual (i.e., interpersonal), (3) organizational unit-unit (i.e., intergroup), and (4) interorganizational relationships. These levels are not exclusive and can intersect. Factors such as environmental change, technological developments, diversity, and flattening hierarchies contribute to these levels of conflict within organizations. Of significance to this paper is the individual-organization and individual-individual level of conflict because it focuses on the congruence or incongruence between the goals of the individual (e.g., GTA) in relation to the organization (e.g., university) and between individuals (e.g., students and GTAs). Thus, when goals are incongruent and incompatible, conflict arises (Burke, 2006).

When conflict arises, social actors may engage in conflict resolution. Resolution, however, is strongly dependent on whether the conflict is positive or negative. According to Deutsch (1949, 2014) theory of conflict resolution (cooperation and competition), when conflict has positive interdependent goals, social actors engage in constructive conflict resolution using cooperative conflict management strategies that result in win-win outcomes. In the same vein, Blake and Mouton (1984) advance accommodation and compromise as strategies, in addition to cooperation, that can offer mutually beneficial outcomes to parties. Each speaks to concessions actors make to resolve the conflict. Deutsch (2014) offers, though, that when conflict has negative interdependent goals, destructive conflict resolution uses competitive conflict management strategies with win-lose outcomes. These conflict management strategies are dependent on substitutability (i.e., when one person's actions can satisfy another's intentions), attitude (i.e., type of response toward self or the environment), and inducibility (i.e., ability to accept influence). Importantly, constructive-cooperation processes, compared to destructive-competitive processes of conflict management, can lead to healthy interpersonal relationships, increased group productivity, greater psychological health, and improved self-esteem among interdependent parties (Johnson and Johnson, 2011; Deutsch, 2014). Constructive resolution and cooperative strategies are thus desirable for win-win outcomes in conflict.

It is important to note that both challenges and conflict overlap and can be a cause of the other. For instance, an instructor may experience an issue externally, which could lead to conflict with a student, and vice versa. In the next section, we focus specifically on the challenges instructors experienced during the COVID-19 pandemic since research is scant in examining the conflicts arising from the move to online instruction.

Instructor experiences during COVID-19

As discussed, online instruction became a necessity during COVID-19. Thus, given the unprecedented change in teaching modes, and insufficient knowledge and experience with blended, remote, or online teaching (Gudmundsdottir and Hathaway, 2020; Trust and Whalen, 2021), challenges abound. Online learning already had challenges pre-pandemic, but the abrupt transition from in-person to online teaching because of COVID-19 created even more challenges for university instructors. Instructors were now forced to teach classes designed for in-person instruction in online formats. Recent research examining the experiences, responses, and challenges of instructors during COVID-19 found that instructors experienced challenges with technology, lack of student engagement, external distractions, not being in the same physical space with students, assessment and evaluation issues, mental health, support, distractions, etc. (e.g., Adedoyin and Soykan, 2020; Openo, 2020; Na and Jung, 2021). These studies indicate that the abrupt transition to online instruction impacted even seasoned instructors. Although a plethora of studies examine the experiences and challenges of full-time instructors (i.e., lecturers and faculty), the experiences of GTAs during this abrupt move to online teaching is understudied.

In the present study, we argue that GTAs experienced more challenges than those associated with instruction only. As discussed, GTAs are also graduate students who engage in academic research. Thus, GTAs carry a full-course load (six credits or more) and conduct academic research that contributes to a university's research activities. So, GTAs faced similar challenges with adjustment to online learning as any college student during COVID-19. Moreover, GTAs had to contend with challenges, such as halted research activity and funding, "dry" laboratory research, and limited or no access to research participants faced by academic researchers across the United States (Omary et al., 2020). Furthermore, some GTAs are also international students while others are married or in a relationship, and/or have children and other family responsibilities, meaning these GTAs have an added layer of responsibilities and challenges that they face during a normal school year. During COVID-19, these responsibilities were exacerbated as international GTAs had to deal with travel bans, visa policies, inability to visit, take care of, or bury loved ones who contracted the virus, and prejudice and discrimination (e.g., #AsianHate; Mbous et al., 2022). Despite these challenges, GTAs were expected to learn, transition, and excel at online instruction with limited support or training.

Therefore, the present study focuses on the experiences of GTAs because of their unique and invaluable roles within tertiary institutions. Even though some studies have examined the impact of COVID-19 on GTAs (e.g., Houston et al., 2021; Kumar, 2021; McLaughlan, 2021), they have mainly focused on the experiences of GTAs from STEM programs. Thus, this study examines the possible challenges (i.e., issues or struggles) and conflicts (i.e., incompatible goals and interests) GTAs within the fields of humanities and social sciences experienced and ways in which they managed challenges and conflicts. Given the above context of COVID-19 and the transition to online learning, we pose the following research questions:

RQ1: What (a) challenges and (b) conflicts did GTAs encounter in online teaching?

RQ2: In what ways, if any, did GTAs manage these challenges and conflicts?

Methods

Participants

A purposive sample (Creswell, 2014) of GTAs ($N = 18$; *female* = 14; *male* = 4) in the United States were selected and interviewed based on two inclusion criteria: (a) had taught when classes transitioned to online teaching in March 2020 and (b) were within the field of social sciences and humanities. Participants were from six different universities in four regions of the United States (i.e., Midwest, Northeast, South, Southwest, and West South Central), ranged between the ages of 22–40 years ($M = 28.78$, $SD = 4.41$), and were mostly doctoral students (98%) who taught for an average of 46 months ($SD = 33.05$) in classes in communication, journalism and public relations, drama, theater, and political science. Pseudonyms are used to protect participants' identities.

Procedure and in-depth interviews

Following approval from the Institutional Review Board, a sample of participants from various universities in the United States was solicited via snowball sampling. Participants were recruited via social media, emails, text messages, and personal contacts of the first author. Recruitment messages provided participants with a description of the research and an email address to contact the researcher if they met the eligibility criteria and were willing to participate in the study. Interviews were conducted via Zoom. At the beginning of each interview, oral consent was obtained from participants and then demographic information (i.e., age, gender, program, class rank, and length of teaching experience) was collected. Interviews were audio- and video- recorded and lasted between 21 and 126 min ($M = 50.78$ min, $SD = 26.59$ min); transcriptions yielded 114 pages of single-spaced text.

Participants were asked a series of questions about their experiences teaching during the move to online instruction due to the pandemic. In-depth interviews allowed us to gain more information about participants' stories (Lindlof and Taylor, 2019). The first author began by asking general questions about their teaching experiences and checking presuppositions. Next, questions about the challenges, conflicts, and management strategies due to the abrupt transition to online instruction because of COVID-19 were asked. Sample questions include, "Have you had to deal with any unique challenges with your students due to the move to online instruction as a result of COVID-19? Could you please share with me an experience when this occurred?" "How did you manage this challenge?" and "Have you had discussions with friends or fellow students or supervisors about COVID-19 related issues? Could you please share with me what in particular the discussion was about?" At the end of the interview, participants were thanked for their participation. Participation was voluntary and all materials were in English.

To enhance the credibility of findings, positionality, and member check—two validation strategies recommended by Creswell (2014) were utilized. First, positionality is important within qualitative research because it is a way through which researchers acknowledge that their interests, biases, and experiences can affect the interpretation of data (Tracy, 2019). Thus, like participants, both authors were GTAs during the time of data collection. Given our firsthand experience with the topic, we recognize that data analysis could be infused with our own subjectivity and may nuance the interpretation of data. We acknowledge that this emic, interpretive investigation is not exogenous to our positionality. Second, member checking, a critical tool used for establishing the credibility of authors' interpretation of data and findings (Creswell, 2007), was conducted. Four participants reviewed the final analysis of the findings and affirmed that they were reflective of their personal experiences. Additionally, our findings include the use of rich quotations in participants' (*in vivo*) language to aid in verification. Note that all emphases in quotations were added by the authors.

Data analysis

We used a modified constant comparative analysis (Charmaz, 2000), which is typical for contemporary communication research (Lindlof and Taylor, 2019), to answer the study's research questions. We analyzed data in five stages. First, transcripts were read and reread. Second, data reduction was performed to retain only those portions of the data that pertained to challenges, conflicts, and strategies for managing challenges and conflicts during the pandemic. Third, we engaged in open coding, an inductive, iterative process through which a summative label is assigned a code and then constantly comparing codable data (Charmaz, 2000). Using Owen's (1984) criteria of repetition (i.e., repeated words, terms, or phrases used in responses), recurrence (i.e., use of different words reflecting similar underlying meanings), and forcefulness (i.e., participants' tone of voice reflective of strong emotions), we conducted open coding iteratively via line-by-line coding of participants' responses until all responses were coded and accounted for in an exhaustive and equivalent manner (Charmaz, 2000). Fourth, a constrictive process of focused-coding was conducted whereby categories derived during open-coding were read and reread for similarities and differences. Fifth, we conducted axial coding, a cyclical process in which researchers examine the interrelationships between categories. Through the process of prospective conjecturing, we explored why and how categories related to each other, while synthesizing and theorizing findings with the literature (Tracy, 2019). Thus, at the process's conclusion, all codable data were accounted for comprehensively within the theoretical framework presented in the findings (Tracy, 2019).

Findings

RQ1a: challenges encountered by GTAs

In relation to the challenges GTAs experienced, three main themes emerged from participants' responses, (1) challenges

posed from teaching online, (2) challenges with students and (3) personal challenges.

Challenges teaching online

These involve the challenges inherent in online teaching. In other words, the challenges GTAs faced because of the characteristics of online instruction. The three main categories of responses include (a) the neophyte online instructor, (b) technological constraints, and (c) impersonal nature of online learning.

The neophyte online instructor

Most GTAs acknowledged they were novices as they had never taught an online class pre-pandemic. GTAs encountered difficulties with time management, that is, trouble finishing the assigned content for the day. Also, GTAs had to learn new ways of teaching content that was originally designed for in-person learning to an online platform, as Rose described, "*Trying to adapt to the online format with COVID, the course content had to be adjusted to [sic] direct online format. Imagine trying to teach public speaking online.*" Owing to their inexperience with online instruction, GTAs reported that it was harder to teach certain classes and/or online and this, in turn, made it more difficult for students to understand. In an illustrative comment, Marie noted, "*Something that I can easily get students to understand in a classroom, will be hard for students to understand over here [Zoom]... So that's unique challenge of online teaching.*" Additionally, when some universities returned to in-person classes in the Fall of 2021, GTAs reported difficulty managing hybrid classes (i.e., teaching in-person and online, simultaneously). One of the challenges GTAs experienced was engaging with and managing the questions and concerns of the students attending in-person along with those online, simultaneously. Ellie, explained, "*This hybrid teaching thing, trying to teach online and in person at the same time... so that everybody can hear everything, and... has a chance to do the same activities... it's just chaos.*"

With limited preparation or training for online instruction, GTAs were left to fend for themselves and their students. This lack of GTA training exposed further the history of limited and lacking pedagogical training that GTAs receive as newcomers tasked with teaching courses independently (as instructors of record). Overnight, most GTAs were transformed into information technology (IT) specialists who had to become learning management systems (LMS) and videoconferencing platform experts. Regardless, despite improving their technology skills, GTAs still experienced challenges with technology.

Technological constraints

Several GTAs encountered technology-related challenges including students' difficulty accessing online portions of the class, inability to use certain software and attend class, resulting in students feeling lost. For instance, Edward noted, "[students are] *not able to access certain components of the online course. They can't view the lecture, their internet shut off during a quiz, having trouble navigating the interface.*" In fact, some GTAs discovered that some students were not versed with some (basic) software until classes went online. As Debbie shared, "*Not everyone has a good computer to do those assignments. And some people need to use*

the *software* that they have *never used*. I realize a lot of undergrad students don't even know how to use Microsoft Word." Similarly, some GTAs had their own issue with technology. They reported being forced to end the class due to technological constraints. Abbie shared, "I tried to share back my PowerPoint and it just wasn't working."

There is a general perception that everyone possesses some degree of technological savvy, but COVID-19 illuminated that there is a bigger digital divide than what most assumed. Lack of technological savvy among students and instructors across the United States became starkly apparent, especially, when GTAs realized that online instruction requires much more to simulate student-instructor connection in a virtual classroom.

Impersonal nature of online learning

GTAs shared how impersonal teaching online was for them, making it more difficult to develop connections. GTAs lamented the difficulty in putting a name to a face because they were unable to interact interpersonally with their students. For instance, Ellie noted, "I can't see people's faces. I can't recognize my students. I can't match all my students' faces with their names, which I hate. I think it negatively impacts teaching." Due to the affordances of online teaching, GTAs encountered difficulties knowing their students personally. Likewise, the impersonal nature of online teaching made it harder for GTAs to assess students' engagement with and understanding of course content. For asynchronous classes, it was more difficult for students to send emails asking for clarification when they did not understand course concepts. Furthermore, GTAs noted the lack of face-to-face interactions with students led to distractions for some students. Susan lamented that during class, she noticed some students "driving the car and listening to lecture... undressing, dressing up, having breakfast." Similarly, GTAs expressed how some students pretended to be "present" in class but were not (i.e., students whose cameras were turned off). GTAs noticed that the attention span of students was shorter as students were either distracted or forgetful. Becca described, "Sometimes, they don't pay attention to important announcements. That will not happen if that is an in-person class because they are there... But they could be in the bathroom without a laptop while you're announcing something important."

The differences between in-person vs. online (a) synchronous instruction became apparent and GTAs did not possess necessary skills to remedy the situation given their inexperience with online teaching. Although, scholars have long predicted that online learning will be crucial for the future of higher education (Allen and Seaman, 2014), many universities and colleges fell short of the demands of online instruction imposed by COVID-19. Next, we report on the challenges GTAs experienced with students.

Challenges with students

GTAs encountered two main categories of challenges with their students, namely, (a) health challenges, and (b) student engagement and motivation.

Health challenges

Because of the pandemic, health was another challenge reported by GTAs. GTAs noted that several students contracted the virus

and, as a result, could not attend class. For instance, Elenore received emails from students saying, "my family got sick, and I had to take care of them. And I was not taking care of my classes." As observed, the pandemic impacted students' learning as well as the priorities placed on certain responsibilities. Sadly, while some students had to take care of sick family members, others had to deal with the loss of family members due to COVID, as Lisa shared, "Last week I got my very first student whose grandparents passed away from COVID."

Student engagement and motivation

GTAs talked extensively about how difficult it was to engage students in class discussions. Some GTAs felt that students were too comfortable learning from home and/or simply tired from being on Zoom all day and thus, did not want to engage in class discussions. For example, Matt shared:

Students are struggling to participate... get burned out on Zoom after 30 min...especially whenever students are learning from home and there's other distractions.... Whenever we went online, I had four or five students in each section that essentially disappeared and never talked to me.

GTAs described attendance as another challenge during the pandemic. Some students stopped attending class and/or turning in assignments, without any explanation. GTAs also discussed their frustrations when students did not read their emails (e.g., "I've noticed is that they really don't check emails," Marie). Given that classes were online, (a) synchronous, emails were the main channel of communication with students regarding assignments and other class updates. However, some students did not read their emails and emailed GTAs asking for extensions for late assignments or enquiring about things GTAs already addressed in their email to the class.

Furthermore, lack of motivation from students was another challenge GTAs encountered. Some GTAs noticed that students' energy and enthusiasm seemed to have declined. GTAs observed mental exhaustion and burnout in students, as Matt described, "their brains are fried." Relatedly, some GTAs felt that some students did not seem to be taking class seriously as observed from the increase in plagiarism. Debbie stated, "I realized the students in online class do a lot of cheating." One reason GTAs thought plagiarism increased was because students may have found it difficult to attend online office hours to ask for help and instead resorted to cheating. Besides, for GTAs who taught freshmen, they noticed these students' lack of experience with taking online classes, self-discipline, and time management skills. As Lisa shared, "They haven't done online classes before and they haven't realized just how much self-motivation, time management that needs to go into it." Thus, due to students' level of education as well as the challenges inherent in online instruction, GTAs were saddled with the responsibility of providing these first-time college (online) students with more guidance than freshmen typically would have needed.

The findings illustrate that much still needs to be done to prepare students for online learning. Past research shows that online learning, in many instances, is self-directed

(Kebritchi et al., 2017). These findings highlight that many students were just as ill-prepared and ill-equipped as instructors to transition to online learning. The personal challenges of GTAs, discussed next, demonstrate this assertion.

GTAs' personal challenges

GTAs shared personal challenges encountered, namely, (a) mental exhaustion, (b) loneliness, and (c) balancing responsibilities.

Mental exhaustion

GTAs reported experiencing fatigue as a result of trying to manage their varied roles as instructors, researchers, and as students themselves. For instance, some GTAs suffered Zoom fatigue and headaches during the transition to online instruction. In a representative comment, Morgan lamented, "COVID *fatigue* and *technology fatigue* has definitely been something that I'm experiencing. I *don't have the energy* or the *endurance* like I used to...I've had *headaches* because of *so much*... screen time." GTAs also discussed their struggle with mental health and how this was elevated during the pandemic. Given the lockdown all around the country, GTAs could not engage in exercises that helped manage and relieve stress such as going to the gym. Abbie shared, "My *mental health* really *tanked*. I felt really *unproductive*...I *wasn't doing research*...I felt *unmotivated*. I was constantly caught up with *anxiety*... I wasn't *getting physical activity* to *release* some of that [stress]." GTAs' mental exhaustion resulted in lack of energy, enthusiasm, and motivation to engage in their own classes and research endeavors, causing them to feel guilty for not being productive.

Psychological, physiological, and emotional health became important factors to consider when assessing personal wellbeing during COVID-19. These issues were brought to the forefront as it challenged GTAs' wellbeing, not only when sickness and loss struck, but when academic progress was at stake. The overwhelming responsibility of ensuring that online instruction is going well; that GTAs are staying on top of their own classes; and conducting research, put GTAs' health and wellbeing at risk. Unfortunately, these findings illuminate that GTAs are not prioritized, and little support is offered by the administration to alleviate the mounting pressure they experience as instructors, students, and researchers.

Loneliness

GTAs reported feeling lonely, isolated, and disconnected from people. For some, they could not travel home to be with their families during the pandemic. For others, feelings of isolation resulted from losing family members to COVID (e.g., "I *lost 8 family members* to COVID since it started in May," Miriam), or not being able to go home to take care of sick family members due to the lockdown (e.g., "My *granddad* was sick too with COVID. He was *in the UK*," Abbie). Indeed, the lockdown during the pandemic greatly impacted feelings of loneliness for GTAs. GTAs shared not being able to meet up face-to-face with fellow graduate students, in their shared office, to chat and/or problem-solve. Marie lamented:

I feel there's *less connection*...less information sharing... we are *very isolated*... It's not too bad for me, at least, because I'm already a second-year TA, but I'm sure it's gonna be harder for whoever is starting this year.

As mentioned, the lockdown mandates forced all schools to close and move to remote work and online learning. Thus, new GTAs did not get the opportunity to form bonds with cohorts in their departments, and many senior GTAs moved home or into silos. This removed the opportunity for GTAs to form bonds and relationships that can provide them with social support with others in their program or who teach similar courses. Most importantly, the lockdown diminished the chances of information sharing about best practices, lesson plans, activities, and so forth.

Balancing responsibilities

As discussed, GTAs have varied identities and roles and reported challenges managing their responsibilities. For GTAs who were parents, they had to homeschool their kids while teaching, and taking their own online graduate classes. For instance, Naomi expressed that she had "a lot especially because my *kid was at home*. My *husband* was at home." Likewise, a few GTAs reported that they struggled with time management due to the extra guidance they provided to students. Hence, GTAs had to figure out ways to prioritize their own education. As Marie described, "When things are moved online...your life is messy. So, you gotta *handle the schedule of your life* and then... *handle, teaching*." Furthermore, for GTAs whose main responsibility was to assist professors with teaching-related duties, they reported helping these professors move the entire class content online. Because some of these professors were not versed with online features, they heavily relied on GTAs to make all the changes within a short time, which added to GTAs' workload. So, not only did GTAs have to act as a support to students but professors as well. The challenges outlined in the above section, including the balancing act in which GTAs engaged, elucidated the brewing conflict GTAs experienced being an online instructor. These findings are reported next.

RQ1b: conflicts GTAs encountered

Regarding conflicts, GTAs reported they encountered conflict with both the university administration and students. When asked about conflicts, GTAs shared disagreements with these individuals as it pertained to two main issues, namely, (1) safety concerns and precautions, and (2) online-related proficiency, support, and expectations.

Safety concerns and precautions

GTAs talked extensively about their university's poor management of the pandemic by not providing clear guidelines about COVID-19. GTAs shared their frustrations with their university administration's unwillingness to enforce CDC guidelines. For GTAs whose universities returned to in-person classes in the Fall of 2021, they expressed that the university administration seemed to be more concerned with moving back

to in-person instruction than the safety of GTAs and the whole university community. Smith shared his frustrations as such:

The *university administration* has given general guidelines as a *one size fits all* for how things are going to go...Because teaching public speaking... vocal projection increases the space through which droplets are likely to travel and will significantly *increase the risk* of transmitting the virus... No one *enforces* the [university's health] guideline. There are *no systems of accountability*... They're prioritizing the values of efficiency and profit instead of the *health of the individual people who work for them*.

Echoing the same issue, Matt stated:

We *hate* the way our *university is responding*... The way we're *handling the pandemic, it's terrible*. It's out of *pressure for money*... My biggest problem was that we met in person to begin with... the moment they [students] get a slightest bit of freedom, it would be shocking to assume that they continue the *social distancing* policy... I can be mad at the *administration* for caving... I think it shows poor leadership skills.

These GTAs lamented being forced to teach in person when they did not feel safe. GTAs expressed that their university engaged in a customer service mentality, where it was all about the economic benefits of returning to in-person classes, despite a global pandemic. Furthermore, one GTA encountered conflicts with their students, expressing disagreements over taking safety precautions. This GTA shared that some students refused to follow CDC guidelines, perhaps, because of unclear instructions from the university as well as the perceived politicized nature of the effectiveness of these measures in the United States.

Online-related proficiency, support, and expectations

This conflict pertained to university's expectation that GTAs should be proficient in online instruction without formal training. GTAs felt that it was unrealistic for their university to expect them to efficiently teach classes that were originally designed as in-person using an online platform. As Smith shared, "We are now expected to be *proficient in Canvas* to facilitate online learning. But we *haven't had any thorough training*." In fact, one GTA acknowledged they did not have a good laptop to teach the online class they were expected to teach. Ellie explained, "*Graduate students do not have laptops issued to them*... Every time I want to use my video camera, I have to uninstall and re-install the video driver...the biggest logistical challenge has been trying to use my own equipment and it *doesn't always work*."

Additionally, given that online teaching required creating additional course content, some GTAs complained about having to do this additional work with no compensation or incentive, especially when some of them did not feel supported by their department heads. GTAs described frustrations over the limited options they had, compared to full-time faculty members, in terms of choosing not to teach in-person during the Fall of 2021. Since their tuition and means of livelihood are tied to their assistantships,

GTAs felt like they had to do what they were told even when their safety concerns conflicted with that of the university and department. Sadly, GTAs expressed that they could not count on their department heads to advocate for them to the university (e.g., "no one at our department level... *is standing up for us*," Smith).

Furthermore, and in terms of conflicts with students, some GTAs reported that students were frustrated with online classes because they expected an in-person learning experience. GTAs also felt that learning from home caused students to be too relaxed and did not create a good study/work environment. As Debbie explained, "the students are just *so laid back* and they're not ready for study... I try to help them to study but they're like too *comfortable* [at home]." Thus, students stopped seeking clarifications about assessments and were not communicative about class activities, but then complained about these issues in end-of-semester evaluations. Moreover, some GTAs suspected that students took advantage of the pandemic by being dishonest when asking for extensions. For instance, Naomi described an experience with a student and stated, "the student was not being *entirely truthful* there because he really wanted to play on my emotions..." Consequently, GTAs saw an uptick in students requesting exceptions for late work.

The findings demonstrate that GTAs' health and wellbeing were not prioritized, and little support was offered by the administration. Among the ways in which the administration lacked support were the weak implementation of COVID-19 policies that led to reckless behavior among students, limited choice in mode of instruction (online vs. in-person) for GTAs, lack of training for online instruction, and lack of advocacy for GTAs from the administration. These factors made GTAs feel like they were exploited for cheap labor with very little premium placed on their lives or their value to the institution. The following sections address how GTAs managed the challenges and conflicts reported above.

RQ2: strategies for managing challenges and conflicts

GTAs managed challenges and conflicts in two main ways: (1) empathy and flexibility, and (2) creating boundaries and consulting others.

Empathy and flexibility

GTAs talked extensively about how they sought to show empathy and be flexible in dealing with their students, by being understanding and accommodating. Since GTAs were also dealing with the uncertainty caused by the pandemic and new forms of instruction, they endeavored to provide clearer instructions, sometimes often repeating instructions, to keep students updated about classes, COVID-19 policies, and/or any changes to instruction. Additionally, GTAs strived to make LMSs more accessible for students to navigate. As Naomi described, "Our goal is to make it [online class] *easier for the students to understand*...*saves* you some *time* on the back end, you're not fielding questions... *design* a clean, *straightforward* module." Thus, through understanding and perspective-taking, GTAs were able to

better support the needs of their students. Some GTAs described changing some of the ways in which they taught, conducted formative and summative assessments, provided instructions and feedback as well as changed deadline policies in order to be more flexible and accommodating of students. For instance, Ellie noted, “[Teaching online] has required me to *shift* some of my lesson planning... *changed* my *teaching* style... my goal is having them get some *hands-on experience*.”

To be empathic, GTAs described focusing on individuating their own and students’ personal experiences. Some GTAs acknowledged sharing personal experiences with students to humanize them. GTAs managed COVID-19-related challenges by being open and sensitive to their students. Some GTAs created weekly check-ins during the online class to see how students were faring. In the same vein, GTAs reached out to students who stopped attending class. Abbie shared, “It is for me to...bring *empathy* to the classroom... just *talking to them*, showing that they’re *humans*...and you [GTA] also are *human*...as well makes them feel better.”

To be flexible, in relation to student engagement and motivation, GTAs used group activities and discussions to encourage students’ participation in online classes. Several GTAs used games, discussion boards, and breakout rooms to spur participation. Becca explained, “I just *divide* it [class] into different *groups* and...give them *more discussion*... *more activity*. [I] don’t expect to cover the same amount of content as we did in person.” Similarly, some GTAs shared that they recorded and posted their lectures online so students could refer to them while studying. GTAs also shared implementing students’ feedback, suggestions, and opinions on how to improve the online learning experience, all in an effort to be empathic and flexible.

Creating boundaries and consulting others

Given their numerous responsibilities, GTAs found ways to create healthy work-life balance. GTAs reported being communicative with students regarding when to expect feedback on assignments since GTAs were also students themselves. Also, some GTAs reported using separate, different, online platforms for work and social/personal life as a way of creating and maintaining healthy work-life boundaries. For instance, Morgan shared, “I am for *boundaries*. I always have an *away message* for Friday at five o’clock... and that’s just for my *own peace of mind* and so I can get *my own stuff done*... I had to learn to *separate* my *social platforms* vs. my *work platform*.”

Along the same lines, several GTAs acknowledged that they consulted supervisors, advisors, and their peers regarding how to manage COVID-19-related challenges. In terms of their students, GTAs often consulted their course directors and/or professors about how to handle student problems. For instance, when her efforts to track down students, who consistently missed class, failed, Elenore shared, “if they don’t answer... *we report* to... *the advisor of undergrads* in the department and they would figure out what was going on with them.” Likewise, some GTAs noted that they asked other GTAs how to engage students and manage attendance-related issues. As Marie described, “I *talked* to another international TA...to get *some idea* about how she designed her class... [I] talk to *my peers*

and try to find out whether I’m facing very *specific difficulties* or *common difficulties*. And we get some inspiration about how they *settle those problems*.”

Regarding challenges stemming from their own research and schoolwork, a few GTAs reported that they consulted their advisors about how to stay motivated to conduct research and combat isolation. Abbie shared, “I *spoke to my professor*. I was really *feeling guilty* about not...following up on some of the *research projects*...we talked about *research strategies*... And so that’s one thing about *combating* such *social isolation* and especially *lack of motivation*.” What is observed with the strategies GTAs used is that despite the deficiencies experienced during the troubled times of COVID-19, they maintained decorum and resorted to positive-problem solving techniques that benefited the students and the university administration. The downside is that the GTAs did very little to put themselves and their needs first. In the next section, we discuss key findings and what they mean in relation to the literature presented.

Discussion

The findings in this study have provided evidence that online instruction is more challenging than previously assumed. The COVID-19 pandemic necessitated a rapid transition to online learning, which unmasked how ill-prepared, ill-equipped, and technologically challenged instructors were to assume online instruction. Key findings in this study reflect GTAs experienced significant challenges with the transition from the traditional to an online classroom. What became apparent is that instructors and students, alike, lacked the much-needed technological knowledge to engage in online instruction and learning, respectively. The lack of knowledge and skills induced a list of challenges and conflicts that GTAs were necessitated to resolve. GTAs employed various strategies that yielded admirable solutions given the limited resources available to them. The remainder of the discussion teases apart these various challenges and conflicts and addresses the conflict management strategies GTAs employed.

GTAs’ reports of ineffective responses from universities surrounding COVID-19 and the transition to online instruction produced challenges, which engendered conflict. Many of their challenges were rooted in obstacles in effectively enacting their roles, which resulted in conflict with university administration (i.e., individual-organization) and students (i.e., interpersonal). First, the individual-organization level of conflict arises because the individual’s needs are incongruent with the organization’s goals. This can be categorized as negative interdependent goals (Deutsch, 2014). Based on the findings, the decisions made by the university administration were advantageous to the institution with little to no regard for the interests of GTAs. These decisions came into conflict with GTAs beliefs and values regarding COVID-19. Consequently, GTAs experienced intrapersonal conflict, meaning conflict with themselves. That is, negotiating their beliefs against what the institution is requiring them to do (e.g., returning to in-person instruction prematurely).

The universities’ failure to enforce CDC guidelines, provide training for online instruction, and grant GTAs a choice in the mode of instruction after in-person classes resumed were

incongruent with GTAs' needs. Therefore, GTAs experienced loss in attaining their goals reflecting a win-lose outcome. This outcome illuminates the asymmetry in power and interdependency in the GTA-institution (i.e., individual-organization) relationship. Coleman (2006) contends that conflict and power are interrelated and used to seek or maintain balance or imbalance in relationships. Coleman (2006, p. 122) defines power as the ability to "make things happen" or bring about a desired outcome. Asymmetrical power then relates to an imbalance of power within a relationship (i.e., an imbalance in the ability to bring about a desired outcome). Those in power do not pay attention to the less powerful because they hardly affect outcomes (Coleman, 2006). The powerful often do very little to grant concessions or arrive at a mutually satisfying agreement. Based on findings, we observe that the institution did the bare minimum to satisfy GTAs' needs, further drawing attention to the reasons for limited investment in training and developing GTAs into qualified instructors. Instead, what is evident is that GTAs utilized all resources available to them to manage challenges and resolve the conflict resulting from decisions made by the institution.

Another aspect of power is related to roles. According to Coleman (2006), roles are pre-existent with predetermined social rules and norms of behavior that social actors must enact. Organizations establish expectations for these roles, which influence the experiences and responses of those who inhabit these roles. Thus, behavior is rooted in the shared expectations for the roles (Coleman, 2006). For example, GTAs step into a pre-existent role where the organization already has expectations for how these roles are to be executed. These roles, in turn, dictate how the individual responds to the organization and the power it holds. The psychological contract (Burke, 2006) between the individual-organization relationship is rooted in these expectations. That is, the organization ensures that the individual works a certain number of hours at an agreed pay rate, receives certain benefits, and holds certain responsibilities. During COVID-19, GTAs recognized that the psychological contract was broken, and new expectations were dictated that changed the conditions of the contract—asymmetrical power was enacted. This change brought about anxiety, ambiguity, and internal conflict regarding their role.

Similarly, GTAs experienced challenges and conflict with students (i.e., interpersonal conflict) who were struggling with online learning, were not keen on following university policies about COVID-19 (e.g., masking), and were fed up and fatigued with online learning. Students reacted negatively to abiding by the CDC guidelines and accused GTAs of politicizing the pandemic and forcing political ideology onto them. In fact, GTAs just expected students to follow the policies outlined by the university. However, the students' impatience with the situation and longing for the world to return to normal caused conflict to arise. Also, growing responsibilities at home and zoom fatigue led to students slacking and/or falling behind on homework and exams. GTAs reported that students shifted blame to them and refused to take ownership and accountability for their performance. The GTA-student conflict also results from negative interdependent goals, where students rejected GTAs' goals and enacted negative inducibility (Deutsch, 2014), that is, rejecting influence from GTAs in order to achieve

their goal. Based on these challenges and conflict, GTAs were necessitated to engage in conflict resolution.

Humans have a natural tendency to restore balance when incongruence exists between their beliefs, values, and actions, also known as cognitive dissonance (Festinger, 1957). To rid oneself of this dissonance, an attempt is made to restore the imbalance usually by reframing the source of dissonance (Festinger, 1957; Deutsch, 2014) to align actions with beliefs and values. Based on the findings, GTAs worked actively to resolve their dissonance. Findings revealed that GTAs approached the conflict with patience, empathy, and perspective-taking, attempting to help students and be tolerant of the university administration's shortcomings. The outcome of these actions was that GTAs actively engaged in negotiating with the administration to get parts of their needs satisfied; accommodating students by simplifying the LMS and granting extensions for late assignments; showing compassion and vulnerability; and being innovative in teaching and research. Thus, GTAs used constructive-cooperation conflict strategies to restore imbalance and resolve their dissonance, despite enduring win-lose outcomes in the individual-organization conflict.

GTAs' actions highlight another important aspect of power asymmetry. According to Deutsch (2014), obvious power asymmetries between groups rarely result in outright expressions or escalation of conflict. Essentially, when one group holds more power and interdependence is skewed, the group with less power will rarely revolt or escalate the conflict. Instead, the group with less power will find ways to satisfy their needs and reduce the impact of the conflict. An opposite action would be an uprising that can destabilize the power and influence the outcome of the conflict (Deutsch, 2014). This assertion can be observed in GTAs' actions where they, instead of revolting, found alternative solutions for their problems. What is more, they engaged in constructive-cooperation conflict resolution in lieu of the expected destructive-competitive strategy. Cooperative conflict management is characterized by friendliness, helpfulness, effective communication, orientation to task achievement, responsiveness to others' needs, enhancing others' talents, and more (Deutsch, 2014), which corresponds with GTAs' actions.

Additionally, by using a constructive-cooperation resolution process, GTAs practiced environmental power, the degree to which an individual can influence their environment (Coleman, 2006). Human behavior and agency can be influenced by personal and behavioral factors, as well as environmental events (Bandura, 1999). Thus, the environment or internal disposition can drive human behavior. GTAs responded adaptively to the challenges and conflicts posed by online instruction and COVID-19. Regardless of what they were up against, they were able to find solutions that benefited them, the students, and administration. This assertion is not surprising given that GTAs have been left to train and teach themselves to be effective traditional instructors. Hence, their ability to adapt to online instruction at an exponential rate with limited resources at their disposal is admirable. By choosing positive strategies, they gained positive psychological health, productivity, and favorable interpersonal relationships with students.

Theoretical and practical implications

This study advances some theoretical contributions to the study of conflict. Deutsch (2014) states that asymmetrical power has the tendency to produce win-lose outcomes which elicit the desire to engage in destructive-competitive resolution processes. The findings in this study demonstrate the opposite, in that GTAs practiced constructive-cooperative strategies to manage and resolve challenges and conflicts. Based on this finding, we contend that attitude and environmental power, in addition to characteristics outlined by Duetsch's theory of cooperation and competition, can significantly impact how individuals manage and resolve conflict.

Additionally, incongruence is a big motivator to engage in constructive-cooperation resolution process, especially for those who possess a positive internal disposition and desire to restore incongruence. The findings revealed that GTAs desperately wanted to resolve the internal conflict and consequently looked for ways in which to still enact their roles, help students, and attend to their own studies. Naturally, the constraints of the role did not provide them with the privilege to revolt. After all, even the universities' actions were constrained by the state mandates and the general politics surrounding COVID-19 in the United States at the time.

Another theoretical contribution pertains to instructional competence (Beebe et al., 2009). Several of the GTAs' responses to the conflicts and challenges were exemplary of the components that make up instructional competence (e.g., immediacy-affinity-seeking, clarity, credibility, relational power). For example, GTAs were empathic, adaptable, and flexible when responding to students' needs, often by sharing their own experiences of COVID-19 with students. They improved clarity in communicating course and assignment information and simplified the use of the LMS so that all students can easily access and navigate the platform. Most importantly, they readily accepted and implemented advice from students, supervisors, and colleagues regarding improving the course. These examples show that components of intercultural competence translate to other instructional contexts, especially online instruction, and should always be central to instructional training.

We also derived the following practical implications. First, course design plays a significant role in the success of online instruction. As Kebritchi et al. (2017) contend and findings confirm, spending time developing, designing, and creating the course prior to its commencement can save a lot of time during the semester. In addition, when developing the course, making sure that it is well-organized with expectations (e.g., policies, rules, assignment due dates, and course activities) clearly outlined can assist in student success with the online course. Doing so will free up time during the semester to focus on student and classroom management.

Second, customizing online learning to ensure student learning, that is, employing various pedagogical strategies to meet student learning styles can have an optimal effect on student success. This is not a novel finding; traditional classrooms require the same degree of consideration. What the findings in this study illuminate is that instructors seem to have forgotten that though teaching has transitioned online, it is still a classroom. Therefore, the same pedagogical strategies can be customized and applied. Furthermore, as much as course organization is important, it can be beneficial

to leave room for flexibility and adaptability. Despite a well-planned and organized in-person course, unforeseen circumstances still arise. Thus, exceptions should be made to change the course direction if needed even with online teaching. Also, soliciting students' input can make them feel like a contributor to their learning and can instantiate increased investment and engagement from students to see themselves succeed in the course.

Third, GTAs should employ various tools and strategies for classroom and student management. The one-shoe-fits-all approach will not satisfy all students' needs. As illustrated by the findings, students' needs become even more varied and nuanced where online instruction is concerned. Equipping oneself with a myriad of ways to manage students in an online environment can be beneficial to the instructor and student. Furthermore, exercising vulnerability can humanize an instructor and make students aware that major instances of transition, such as a pandemic, impact instructors as well. A healthy degree of vulnerability with students will afford instructors grace from students when it comes to delays in grading, providing assignment feedback, and so forth.

Fourth, it is important that GTAs understand that they are student-teachers, which means being a student takes precedence over being an instructor. So, GTAs should seek to implement boundaries by prioritizing what is important to them (e.g., graduate studies, research, family) and striking a work-life balance, which is important for mental, emotional, and physical wellbeing. Also, camaraderie is important and crucial to GTAs' survival and success. Therefore, we advocate building relationships with fellow GTAs and soliciting help, advice, and information exchange with others to expand teaching tools and strategies for online instruction. But most importantly, to build a social network from whence they can garner social support.

Finally, since conflict is inevitable, GTAs should be aware of their default conflict management style and adopt various conflict management skills that can aid in constructive conflict resolution. This is especially important because of the ubiquity of conflict in academia. GTAs should remain positive when it comes to dealing with GTA-organization conflict, where asymmetrical power and interdependence exist, and with student-instructor conflict in an online environment, where anonymity is assumed, and accountability is taken for granted. In the same vein, we offer some recommendations for higher education institutions.

Recommendations for higher education institutions

- Universities and colleges were ill-equipped to deal with the COVID-19 pandemic. Thus, it will behoove institutions to put a strategic plan in place that outlines response and training for faculty and staff in the event of any future environments of risks, such as those posed by pandemics and climate change.
- Higher education institutions should assess the degree of investment toward GTA training and development as well as sources of social support. We advance two unique types of training that can benefit GTAs. One pertains to the student-teacher identity and role. GTAs often struggle with finding the balance and understanding the relationship between these

dual identities and roles. What is more, students find the complexity of these identities equally troubling. Training on how to negotiate, navigate, manage, and understand these dual identities and roles will be extremely beneficial to GTAs. This dual identity and role also encompass the aspect of being an expert on course material—an issue that often arises when responding to students' questions, providing feedback on assignments, etc. The other pertains to training in pedagogy and classroom management. Not all graduate programs require GTAs to enroll in a pedagogy course. Consequently, GTAs lack the knowledge needed to be effective instructors. We recommend that all GTAs be required to enroll in a 1–2 credit hour pedagogy course that can equip them with handling any conflicts and challenges in addition to those outlined in this study. These university employees are a much-needed resource that is undervalued. GTAs should be afforded more consideration as part-time faculty.

- Given the prediction that online learning will surpass \$370 billion by 2026 as expounded in the call for this special issue, universities and colleges should introduce online courses as part of the curriculum and mandate students to enroll in at least 2–4 online courses for their program of study. This recommendation also addresses concerns about student readiness to enroll and succeed in online instruction. Familiarity with online instruction can teach students the necessary technology skills and discipline needed for online employment and remote work, which has become a norm post-COVID-19. Current socio-technological trends show that mediated communication is the future, so it would behoove all parties involved to be proactive in implementing the necessary changes toward online learning. Additionally, this recommendation takes into account that students' readiness for online instruction would allow more time for instructors to develop a well-organized and engaging online course.

Limitations and future research

This study presents several limitations. First, GTAs from this study attended six higher education institutions across various U.S. regions. We acknowledge that much more variation exists in the online teaching experiences of GTAs during COVID-19 than presented in this data. More importantly, universities and colleges in higher education (e.g., public vs. private, research-intensive vs. teaching-intensive, etc.) differ, and thus, their responses may have been different as well. For example, teaching-intensive schools place a higher premium on teaching, so transitioning to online instruction may have been executed more effectively. Also, some institutions receive significant endowments from donors that may have been used to acquire technology and training needed for the transition. Given these factors, future research should consider their impact on the transition to online instruction.

Second, state mandates surrounding COVID-19 significantly impacted how institutions responded to CDC guidelines. Some states enforced strict guidelines for lockdown and remote work and school orders, while others were lenient, and in a rush to

return to normal. These guidelines affected how universities and colleges responded and the policies, capital, training, and so forth invested toward online instruction. Future research should examine the impact that state mandates have on the decisions universities make regarding online instruction.

Third, this study only examined the perspectives of GTAs, which provides a one-sided picture of the experience of online instruction and instructors' efficacy during COVID-19. Future studies should use a dyadic approach to examining the challenges, conflicts, and strategies for navigating a major incident with global effects. Hearing students' perspectives of GTAs' ability to manage online instruction during such an incident may provide more insights that can aid in better preparation. Also, the experiences of full-time faculty, adjuncts, and lecturers in comparison to those of GTAs should be examined. The conflicts and challenges experienced by these instructors can be assessed to help delineate the degree to which the conflicts and challenges are unique to GTAs further. Finally, this study found that there is a significant lack of pedagogy for online instruction. Future research should examine pedagogy for online instruction. This is much needed given the predicted increase in online instruction and that online instruction has become a norm post-COVID-19.

Conclusion

The advent of COVID-19 illuminated many shortcomings in higher education. It highlighted the lack of preparation and planning for major sociocultural, climate, or political catastrophes, lack of instructor training for GTAs, and unreadiness of college students to engage in complete and exclusive online learning. Educators and administrators in higher education should learn from this experience and put measures in place that can result in a better outcome when the next major catastrophe arrives.

Data availability statement

The datasets presented in this article are not readily available because participants' identities may be deduced from raw data. Requests to access the datasets should be directed to doris.acheme@uga.edu.

Ethics statement

The studies involving humans were approved by Institutional Review Board; University of Oklahoma, Norman-Oklahoma. The studies were conducted in accordance with the local legislation and institutional requirements. The participants provided their written informed consent to participate in this study. Written informed consent was obtained from the individual(s) for the publication of any potentially identifiable images or data included in this article.

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