

Impacts of campus disruption on educational developers role-identity and teamwork

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Abstract

In times of crises, educational developers (EDs) work to ameliorate the teaching- and learning-related impacts caused by campus-wide disruptions such as health-related emergencies, mass shootings, and environmental disasters. These incidents may impact the personal-psychological factors and processes of EDs that, in turn, influence their engagement with team members and faculty. Given the vital role EDs play in improving faculty teaching and student learning across higher education (Dawson et al., 2010; Grupp, 2014; Schroeder et al., 2010), understanding the impacts of campus-wide disruptions on their functioning is critical. The present, novel study uses a psychological-phenomenological methodology and the Dynamic Systems Model of Role Identity (DSMRI; Kaplan & Garner, 2017) as a guiding theoretical framework to examine how a major disruption impacted the sense of self and engagement of EDs ($n = 6$) who hold different specialties (i.e., pedagogy or educational technology) and work in an educational development center housed within a large research institution. Participants completed three, open-ended survey questionnaires focused on their perceptions and actions before and during the COVID-19 disruption to institutional operation. Using the DSMRI *Analysis Guide and Codebook* (Kaplan & Garner, n.d.), five themes emerged from the data. These themes were used to address primary research questions and inform future directions and implications for theory, research, and practice.

Keywords: educational developer, disruption, role-identity, teamwork

Crises like health-related emergencies, mass shootings, and environmental disasters may seriously disrupt faculty instruction and student learning within higher education (Holzweiss et al., 2020; Rollo & Zdziarski, 2007). Given their meaningful and integral role within the teaching and learning higher educational landscape (Dawson et al., 2010; Grupp, 2014; Schroeder et al., 2010), educational developers (EDs) may be expected to join or lead coordinated response efforts during turbulent times. Indeed, crises such as the COVID-19 pandemic may result in increased job-related stress, burnout, health problems, social isolation, reduced quality of life, and lower work productivity and may usher in changes to the institution's work-related culture (Kniffin et al., 2021; Kossek & Lautsch, 2018; Lai et al., 2022; Tušl et al., 2021). The COVID-19 pandemic forced many EDs to act outside the confines of their understood role, bringing stress and tension (Landy et al., 2022). Considering the far-reaching institutional influence EDs have, it is critical to further examine how disruptions—most recently the COVID-19 pandemic—impact the personal-psychological elements (e.g., an individual's beliefs, values, goals, and perceptions) constructing their role, which consequently frames their engagement with faculty and team members.

A Chronological Account of Disruptions to the Academy

Within the context of higher education, crises may be conceptualized as sudden or unexpected events that disrupt typical operations, impede fulfillment of educational missions, or threaten the well-being of the institution's faculty, staff, students, property, finances, or reputation (Zdziarski, 2006). Rollo and Zdziarski (2007) highlights numerous crisis situations faced by institutions of higher education and their surrounding communities over a 50-year period, including one of the first nationally-covered mass shootings at the University of Texas at Austin (1966); demonstrations against the Vietnam War draft and violent

conflict with the National Guard at Kent State University (1970); a major health crisis at the University of Illinois at Urbana–Champaign and Parkland College (1991–1992); a 6.7 magnitude earthquake that caused significant destruction at California State University, Northridge (1994); the attack upon the World Trade Center (2001); and devastation wrought by Hurricane Katrina (2005) on the city of New Orleans and its surrounding colleges and universities. Holzweiss et al. (2020) examined the crisis response for online students at an institution impacted by Hurricane Harvey, which hit Houston, Texas, in 2017, and recommended that universities develop proactive crisis plans that consider supports that can be offered not only to students but also to frontline staff who are called to action following the onset of disruption. The recent COVID-19 pandemic brought about concerns of the physical health and safety of workers as well as raised questions over their psychological well-being. Tušl et al. (2021) found approximately 30% of surveyed employees reported their work and private life worsened. Lai et al. (2022) found an association between career stress resulting from the COVID-19 pandemic and the intention to leave one's job.

Indeed, preparing for and mitigating the impact of major disruptive events may be one of the most commonly neglected parts of the crisis management process within higher education (Zdziarski, 2006). To prepare for disasters or disruptions, Robinson (2005) suggested organizations develop contingency management teams in which individuals hold specified roles to develop disaster/disruption plans. Educational development teams might consider creating their own plans based upon and in conjunction with those disseminated by institutional administrators. Furthermore, during times of disruption, research suggests that effective teams work to promote high levels of cooperation, trust, role understanding, and effective communication while minimizing competition and conflict (Power, 2018). Organizational and team leadership can be influential in addressing the negative impacts of disruptions, and employee perceptions of organizational support may reduce the association between stress and the intention to leave one's

job (Lai et al., 2022). Simply allowing space for team members to talk about the impacts of crises and disruptions may be associated with higher levels of workplace harmony (Gelfand et al., 2006; Qin et al., 2021). Unfortunately, lessons learned from previous crises often do not result in the creation of new policies or shift existing protocols to prevent or mitigate the impacts of future disruptions (Pollock, 2013). It is therefore critical to examine the impact of disruptive events so academic institutions are better prepared should similar situations occur in the future.

Navigating Teamwork Within the Academy

Teamwork may be conceptualized as a collective of “people working together to achieve something beyond the capabilities of individuals working alone” (Marks et al., 2001, p. 356). Indeed, the success of a team cannot be attributed solely to the talents of its individual members and the resources available to them but must consider the interpersonal processes by which members interact to accomplish tasks (Marks et al., 2001). Having a team of EDs with a range of expertise is extremely important given that they are increasingly expected to collaborate with and support not only faculty and teaching assistants but also higher-level institutional administrators, technology experts, and curriculum designers (Dawson et al., 2010). Yet academia’s culture of independence and siloed disciplinary specializations often runs counter to teamwork (Lara & Hughey, 2008). Certainly, many characteristic features of academia that may impede teamwork—including desire for autonomy, boundaries drawn along academic disciplines, bias against departmental collaboration, complex and difficult-to-measure institutional or departmental goals, organizational and bureaucratic rules, and dysfunctional reward systems (Burgess, 1994)—continue to exist today (Singh & Kaur, 2020).

To encourage both internal and external departmental teamwork, leaders of educational development centers may develop SMART

(i.e., specific, measurable, achievable, relevant, and time bound) team goals, demonstrate transparency in decision-making and time management, set collective agendas, foster team development, allow for flexibility in workload, encourage multidisciplinary initiatives, and incentivize teamwork toward institutional goals (Burgess, 1994; Lara & Hughey, 2008; Posthuma & Al-Riyami, 2012; Woodfield & Kennie, 2008). Regardless of institutional size, educational development centers may be called upon to ensure curricula and pedagogical practices align with institutional missions and philosophies (Dawson et al., 2010; Sorcinelli, 2002). However, leaders within the field acknowledge possible limitations revolving around insufficient funding and staffing, especially for smaller institutions (Sorcinelli, 2002). Leveraging intentional strategies centered on collaboration across the academy may mitigate these limitations to best promote faculty development and student learning (Sorcinelli, 2002). Furthermore, research highlights that during both times of crisis and typical institutional operation individual and team reflection, peer coaching, and mentoring can be beneficial for EDs in prioritizing tasks within their role (Landy et al., 2022). Implementing the aforementioned strategies may be beneficial to team members given that successful teamwork, team spirit, trust, recognition, and rewards have been associated with improved employee performance (Manzoor et al., 2011). EDs may further benefit by drawing upon one another's skill sets to meet ever-growing demands for pedagogical and technological innovations (Grupp, 2014).

The Individual Within the Team: Our Guiding Theoretical Framework

While frameworks on the dynamic interrelationships of team features exist, they do not delve into the personal-psychological elements constructing one's role or the complex processes involved in it, all of which frame the individual's actions and, consequently, the team's successful functioning. Therefore, we use the Dynamic Systems Model

of Role Identity (DSMRI; Kaplan & Garner, 2017) to examine the individual team members who are nested within the larger team system. Role-identity may be defined as any social position or formal role one occupies that comprises conventional (i.e., shared cultural meanings) and idiosyncratic (i.e., unique or personal meaning) dimensions (Stets, 2010).

The DSMRI captures the following interrelated components that comprise an individual's role-identity system: *ontological beliefs* are beliefs, assumptions, and emotions related to what a person holds to be true about the world (e.g., "Faculty require additional support to be successful"); *epistemological beliefs* reflect the degree of certainty and credibility related to one's ontological beliefs (e.g., "I know additional support is needed given the increase in consultation requests"); a person's primary sense of *purpose* in their role (e.g., "I want to serve as a resource to help them succeed"); *goals* involve objectives, aims, and desires related to one's purpose in their role (e.g., "I help address specific challenges unique to underrepresented faculty"); *self-perceptions* involve personal and social characteristics including interests, values, personality attributes, perceived abilities, and self-efficacy (e.g., "I was not comfortable using certain technological tools"); *self-definitions* involve self-characteristics and one's social identities (e.g., "I am a technology specialist"); and *perceived action possibilities* involve awareness of strategies, tactics, and other behaviors related to one's role as well as behaviors already being implemented or perceived as possible to implement in one's role (e.g., "I attend conferences on pedagogy and attend professional development workshops").

These components are nested within the sphere of knowledge related to one's role (i.e., *domain*); relatively stable physical and psychological tendencies (i.e., *disposition*); one's immediate social or physical environment, which influences social interactions and behaviors (i.e., *social context*); and collective customs, values, beliefs, practices, and achievements of specific social groups (i.e., *culture*). The DSMRI further considers the *content* (i.e., variation, difference, or change in

components of one's role-identity system), *structure* (i.e., variation and differences in the degree of harmony and tension within and between components of the system), and *process* (i.e., the nature by which content and structure of components change) of the role-identity system. For additional information on the DSMRI, readers are encouraged to review Kaplan and Garner (2017) and Garner and Kaplan (2019).

Typically, the components of an individual's role-identity system are relatively stable. However, the content, structure, and process of these components might experience greater variability when influenced by the complexity associated with disruptions. If there is greater variability in an individual's role-identity system during times of disruption, the larger network of team members' role-identity systems may be impacted. Therefore, better understanding the ED role-identity and possible shifts influenced by disruptions is critical within the context of ED team functioning.

Purpose of the Present Study

Educational development centers are critical for disseminating evidence-based pedagogy and improving teaching practices (Schroeder et al., 2010); therefore, understanding the impact that disruptions may have on team functioning within these centers could have wide-reaching implications. Yet there is a paucity of research examining the impacts of major disruptions for this field. In fact, extant research has not explored the intersection between teamwork and EDs themselves from their perspective. Scholarship on teamwork has identified a need for more illustrative and comparative case studies (Mathieu et al., 2017) and calls for "in the wild" examinations of teams situated within organizations (Salas et al., 2008, p. 54). Additionally, Shuffler et al. (2015) argued that team research should focus more on attitudes and cognitions that influence team members' behavior, use an interdisciplinary lens, and involve holistic investigatory approaches. Investigating individuals themselves, their experiences, and the meanings

they construct in their role may generate new insights that help prepare institutions for possible crises.

Addressing these needs, the present, novel study follows a psychological-phenomenological methodology examining pedagogy- and technology-focused EDs before and during a major disruption. A psychological-phenomenological methodology is a systematic, scientific approach that aims to study phenomena by investigating participants' understanding and meaning-making of their own experiences using psychological constructs (Brock, 2020; Starks & Trinidad, 2007; Vagle, 2014; van Manen, 1990). Our study aims to address the following questions: (1) How might EDs' engagement with faculty differ during typical institutional operation and during times of disruption? (2) How might disruptions to institutional operation impact EDs' sense of self, and how might this impact reframe their priorities and engagement with faculty? (3) How might disruptions to institutional operation impact EDs' perceptions of teamwork, and how might this impact reframe their priorities and engagement with faculty?

Method

Study Context and Design

Using a complex, psychological-phenomenological design, we investigated the professional role-identity of participants and their perceptions of teamwork. All participants were colleagues who worked in the same educational development center housed within a large research university in a metropolitan area of the eastern United States. At the time of study, the center employed 17 full-time staff, including directors, EDs, researchers, and administrators. All staff were asked to complete surveys due to the urgency of the COVID-19 crisis, however, EDs ($n = 8$) were the focus for the present study. Participants were not provided additional compensation or incentives for participating. The university Institutional Review Board (IRB) deemed that this study did not

constitute human subjects research (i.e., formal submission to the IRB was not required). Two of the study's authors were colleagues of participants at the time of data collection. Participants were assured that any identifying information and data would remain confidential. Given the professional relationship one of the two authors held with participants, this individual was never provided identifying data. To not bias results and conclusions, the study's first author, who was not employed by the center at the time of data collection, was the researcher who primarily coded and analyzed data.

Data Collection

Surveys used for this study model the format of a preliminary, unpublished instrument created by the DSMRI authors. The first survey was administered by this study's second author to probe participants' understanding of their role-identity and beliefs related to teamwork prior to the disruption caused by the COVID-19 crisis. A second survey was administered by this same author two weeks later to examine these constructs during the disruption. Three weeks following administration of the second survey, an additional extended-response reflection was administered by this author. The reflection asked participants to consider their previous responses in relation to how they might perceive themselves in their role in the future at the center.

Coding and Analysis

The data from open-ended response items and extended-response reflections were analyzed via Kaplan and Garner's (n.d.) *DSMRI Analysis Guide and Codebook*. Steps for analysis include reading written responses to obtain a holistic understanding of participant reflections; identifying various role-identities within the written responses; identifying themes, sub-roles, and other meaning-units relevant to the study; coding each role-identity according to the DSMRI's components; drafting an analytical synthesis of each role's content, structure,

and process; writing a summary of each role-identity and the actions within it; conducting cross-case comparisons among all participants; and generating themes across all data. While the *Analysis Guide and Codebook* is presently unpublished, its authors have demonstrated its utility via an illustrative case example (see Garner & Kaplan, 2019) and have described DSMRI coding and analytic processes used by several authors (see Kaplan & Garner, 2018), lending further credibility to this coding and analytic process.

Coding and analysis were conducted by this study's first author via a deductive approach in which a priori components of the DSMRI framework were first identified to inductively generate emergent themes. Upon completion of each step of the coding and analysis process, the second author reviewed the first author's interpretations, and any discrepancies were mutually and collaboratively resolved. In addition to this iterative process, trustworthiness and credibility to our data analysis and interpretation process was further ensured by adherence to participants' language and stories, utilization of a theoretical model to guide all aspects of the study, and internal auditing of analytic interpretations—all of which are supported in phenomenological research literature (Brock, 2020).

Results

Participant Demographic Data

Data from two EDs were excluded from analysis because they did not complete both surveys. Resulting participants ($n = 6$) held one of two specialties (i.e., pedagogy or educational technology). The mean age for participants during initial data collection was 46.32 and the median age was 47.33. There was an even split between participants who identified as male or female, the sample was predominantly White ($n = 5$), and half identified as being an early-career ED—for this study, defined as the first 10 years of one's career. While additional demographic

data were collected, that data is not being reported out of the utmost caution to protect participants' identities. Additionally, gender-neutral pseudonyms and gender-neutral terminology are used throughout the manuscript to further protect participants' identities.

Case-by-Case Analyses

In accordance with guidelines from the DSMRI *Analysis Guide and Codebook* and practical application available in extent literature (see Garner & Kaplan, 2019), each participant's case analysis is included to provide a more thorough phenomenological understanding of each individual's experience during the disruption at their institution during the COVID-19 pandemic.

Charlie (Pedagogy Specialist)

Prior to the disruption, Charlie held an ontological belief that for faculty to be successful in their role, they "must be able to reflect critically on both their teaching practice and their experience as students." Therefore, Charlie's purpose in their role was to create intellectually-generative spaces in which faculty could "feel safe to think new thoughts and try new things." However, Charlie described a self-perception that their own skills were "an illusion created out of ad hoc solutions and pure luck." Charlie set goals to further their own teaching- and learning-related knowledge so that they could "actively work to broaden [their own] understanding" of teaching and learning to best serve the faculty with whom they worked. When the disruption did occur, however, Charlie described a shift in their own role's purpose—from a faculty focus to a team focus, noting they wanted "to provide support" to their team members. While Charlie held an ontological belief prior to the disruption that communication was "vital to the success of the team," they also expressed that, during the disruption, too much information could be "overwhelming for team members."

Charlie also noted an expansion to their own ontological beliefs about what faculty themselves needed both personally and professionally in times of crisis: "They needed to be reassured everything was going to be okay." Charlie described having a goal "to project calm and confidence despite [Charlie's] personal misgivings about the [disruption]" and "long-term struggle with imposter feelings." Although Charlie's self-perceived confidence in educational technology went "way up" during the disruption, they felt "completely out of touch with [their own] internal state . . . almost to the point of dissociation." Furthermore, the disruption forced Charlie to deliver solutions to problems "just in time." Charlie conveyed an ontological belief that their role may change in the future, as they no longer viewed educational technology and pedagogy as a "simple binary."

Morgan (Pedagogy Specialist)

One aspect of Morgan's purpose was to help faculty "find a sense of belonging and community," ultimately wanting to help faculty "better support [their] students" and "treat [faculty] with respect, care, and compassion." Additionally, Morgan held purpose in "supporting [their] fellow team members" to fulfill the center's mission. Following the onset of the disruption, Morgan noted a primary purpose to "offer options for [faculty] and to remind them to readjust their goals and expectations for themselves and their students." Morgan conveyed a goal of being patient and understanding toward faculty who may possess varying levels "of comfort or familiarity . . . with technology," noting an ontological belief that faculty were "anxious." Morgan described a self-perception that they "did not have enough tech expertise" but held an ontological belief in alignment with this self-perception "that it was ok to not be perfect and to make mistakes." Morgan described an evolving ontological belief that pedagogy and educational technology "were not separate" and their goal to learn "as much as [they] could" from their teammates who specialized in educational technology, as Morgan felt the team, as a whole,

experienced “some confusion and gaps in knowledge.” Furthermore, Morgan did report feeling like they and the team were “constantly ‘on’” and that it was difficult to balance “work-family demands.” Although Morgan continued to hold the ontological belief that team coordination, communication, cooperation, and trust were “essential” to success, there were times when they felt the team needed more consistent communication “because so much [was] changing rapidly.”

Tyler (Pedagogy Specialist)

Tyler’s purpose prior to the disruption was to support faculty’s teaching-related professional growth, but this shifted during the crisis to focus more on supporting team members who specialized in educational technology. Prior to the disruption, Tyler noted a self-perception that their skills to perform role-required duties were “still improving.” Following the disruption, this self-perception magnified, as Tyler reported being “overwhelmed,” further describing that their own skills “were not enough to be of value to faculty”. Therefore, they developed a goal to “express empathy and overcome [their own] fears” and “lack of knowledge of online learning.” Tyler also reported ontological beliefs about team coordination, communication, and cooperation being “no different than before,” finding them to be “essential” to the center’s success.

Drew (Educational Technology Specialist)

Drew described a self-perception that they were “an extremely self-critical person” who often worried that they didn’t “deserve to or have the ability to occupy a role more advanced” than their current position and described the belief that they “would not be as effective” in a different role. During the disruption, Drew—a “generally calm and relaxed” person—described a self-perception that they were “nervous but determined.” When discussing teamwork, Drew expressed that conflict “does not have to be a bad thing IF the conflict

grows from holding different perspectives on a common goal in an environment that promotes open communication." Within the context of the disruption, however, Drew expressed an ontological belief that conflict "was not productive, since [the team] was in a crisis situation that could not easily accommodate conflict." That being said, most of Drew's beliefs regarding team coordination, communication, cooperation, and trust remained positive, especially given the "time sensitive nature . . . of moving the university online." Drew conveyed the purpose of being "someone who continues to bridge" divides between educational development specialties (i.e., pedagogy and educational technology); Drew developed the ontological belief that "educational technology should be informed by pedagogy." Drew also described how their purpose shifted within the context of the disruption from helping "faculty become more comfortable with—and more effective at—using educational technologies" to being "as supportive and kind as possible to faculty who almost surely [were] overwhelmed."

Jordan (Educational Technology Specialist)

Prior to the disruption, Jordan's purpose was "to help instructors understand how technology could help enhance their teaching and students' learning." When the disruption occurred, Jordan described a shift in purpose to "get instructors trained on fundamental edtech tools as quickly and efficiently as possible" to meet faculty's more urgent teaching needs by providing them "very clear and concise instructions." To do so, Jordan illustrated a goal of completing work-related tasks "as soon as they arose." This shift conflicts with Jordan's previously held ontological belief that "if an instructor is only looking for a quick fix/cure-all solution," they will not have quality, long-term development. Concerning the urgency Jordan experienced, they described an ontological belief in alignment with a self-perception that the crisis and the consequential disruption "greatly affected" their own "work mindset." Regarding teamwork during the disruption, Jordan held ontological beliefs that communication needed to be "super clear and

straightforward" and cooperation between team members involved immediate and coordinated adaptation. They believed trust among team members during the crisis "was incredibly high." Despite this affirmation, Jordan described a certain level of uncertainty regarding the entire team, stating that they did not "know what the future look[ed] like for [the] department." Indeed, their ontological belief regarding the mission and vision of the center changed from helping faculty "become the best instructors they can be in order to provide a quality education to the students" to "help[ing] instructors get the fundamentals for moving to teaching online."

Sam (Educational Technology Specialist)

Sam's purpose was to "provide outstanding service." They held the ontological belief that their position was "just as important as everyone else's role." When the disruption occurred, Sam expressed that their role "was not as relevant" as other team members' roles, yet this ontological belief shifted, noting they "quickly learned [that they brought] as much to the table as everyone else." Sam also described a shift in purpose to "adjust to working from home" so that they may "effectively do [their] job remotely." When discussing aspects of teamwork within the period of disruption, Sam conveyed multiple ontological beliefs about communication being "paramount" to success, cooperation being "the glue that held [the team] together," and the educational development center's mission being "crucial to day-to-day operations." Sam conveyed ontological beliefs that conflict between team members was "virtually non-existent" and that, ultimately, the disruption "made [the team] stronger." Sam's ontological belief regarding team coordination did shift from being team oriented as "necessary for the efficient operation of the unit" to needing "a good balance of leadership at the top of the team." Sam noted an ontological belief that the disruption was still evolving, which may mean individuals would have to take on "additional responsibilities and duties."

Cross-Case Thematic Analysis

As outlined in the *DSMRI Analysis Guide and Codebook* and demonstrated in Garner and Kaplan (2019), after generating case-by-case analyses, we conducted a cross-case thematic analysis across all participants to obtain the following themes.

Providing Support

Both before and during the disruption, participants found purpose in supporting others. However, both the content and process of providing support shifted during the crisis. For example, prior to the disruption, participants provided skill-related or technical support to faculty. For example, Jordan described purpose “to help instructors understand how technology could help enhance their teaching and students’ learning.” Charlie noted that one of the most important aspects for educational development during the crisis was for instructors “to be reassured everything was going to be okay,” as participants felt that they needed to project calm and confidence for faculty. This finding aligns with research conceptualizing the COVID-19 pandemic as a traumatic disruption for faculty, students, administrators, and staff, requiring EDs to adopt a trauma-informed approach grounded in active listening, compassion, and empathy (Bessette & McGowan, 2020; Harder & McGowan, 2020). This approach may be critical during future disruptions, as mass shootings, environmental disasters, and health-related emergencies all provide the potential for traumatic experiences (Rollo & Zdzarski, 2007). In addition, while participants noted faculty-focused purposes and goals prior to the crisis, during the disruption, they reoriented their support to also care for their team members. For example, Tyler and Charlie—both pedagogy specialists—explicitly noted their purpose to support their educational technology colleagues.

Uncertainty and Doubt

Some participants felt uncertain with the skills they possessed and expressed self-perceptions involving a lack of experience to effectively complete tasks. Prior to the disruption, Drew held the self-perception that they were “an extremely self-critical person” and worried that they “didn’t deserve to or [had] the ability to occupy a more advanced” role. Similarly, Charlie held the self-perception that their own skills were “an illusion created out of ad hoc solutions and pure luck.” When the disruption occurred, feelings of uncertainty were expressed by others who did not highlight them before. For example, Morgan described the ontological belief that they “did not have enough tech experience.” Uncertainty may have been magnified during the disruption given that EDs were often expected to reduce the instructional uncertainties held by faculty themselves during the disruption (Strawser & Looney, 2021). Being expected to quell the uncertainties of others while doubting one’s own abilities could have exacerbated these feelings.

Importance of Teamwork

Likely tied to self-perceptions of uncertainty and doubt, participants expressed the need to broaden their understanding to better fulfill their role during the disruption. For example, Morgan described a goal to learn “as much as [they] could” from colleagues who specialized in educational technology to more effectively fulfill their role during the crisis. Scholarship emerging from the COVID-19 crisis highlights EDs’ willingness to consult with colleagues to support gaps in knowledge or acknowledge one’s own limitations and connect faculty to these colleagues (Stanton & Young, 2022). Nonetheless, the content of EDs’ beliefs regarding teamwork both before and during the disruption remained largely consistent, and, within the context of the disruption, team-related phenomena were described to be essential. While instances of ineffective communication may have contributed to

"confusion and gaps in knowledge" within the team or too much information may have been "overwhelming," communication was, generally, "paramount" to success, and cooperation was "the glue that held [the team] together." Although one participant noted that conflict during the disruption "was not productive since [the team] was in a crisis situation that could not easily accommodate conflict," most team members noted that conflict within the educational development center was, for the most part, minimal. Indeed, the disruption "made [the team] stronger."

Time as a Constraint

The disruption introduced unexpected, high-priority tasks for EDs. Participants were required to take on additional duties and responsibilities that often resulted in an overwhelming workload. Coupled with this workload, multiple individuals felt that tasks needed to be completed more urgently, which impacted their work. For example, the content of Jordan's purpose shifted from promoting a faculty member's deep understanding on a given topic to training them "as quickly and efficiently as possible." In addition, Morgan expressed that they needed to be "constantly 'on.'" These changes led some individuals to yearn for a healthier work-life balance. This finding, while not necessarily unexpected given the urgency of the disruption, also lends cause for concern given the fact that if faculty are forced to transition to online learning in response to future disruptions, EDs might be expected to encourage faculty establishment of clearly defined work-life boundaries (Carpenter et al., 2020).

Blending of Professional Specialties

Prior to the disruption, participants often viewed their roles as being distinct in specialization (i.e., pedagogy or educational technology). However, during the crisis, they expressed that pedagogy and

educational technology specialties were not separate entities. For example, Drew expressed the belief that “educational technology should be informed by pedagogy” and found purpose during the disruption as “someone who continues to bridge the divide” between the two specialties. Similarly, while Charlie believed that their role may change in the future given the ever-evolving nature of the crisis, they no longer viewed educational technology and pedagogy as a “simple binary.” These sentiments align with extant literature emerging from this most recent disruption to the overarching higher educational landscape. Stanton and Young (2022, p. 213) highlighted how the COVID-19 disruption necessitated that EDs be “flexible generalists” who consider alternative approaches and perspectives given the unprecedented nature of the pandemic. Similarly, O’Toole et al. (2022, p. 210) believed the pandemic has changed the role of EDs to be akin to “bridge builders” or “brokers” between classrooms and administration.

Discussion and Future Directions

To help guide this investigation into the impact that crises may have on EDs, we posed three research questions: (1) How might EDs’ engagement with faculty differ during typical institutional operation and during times of disruption? (2) How might disruptions to institutional operation impact EDs’ sense of self, and how might this impact reframe their priorities and engagement with faculty? (3) How might disruptions to institutional operation impact EDs’ perceptions of teamwork, and how might this impact reframe their priorities and engagement with faculty? With these questions in mind, researchers used the DSMRI as a guiding theoretical framework to explore the reflections and perceptions of six EDs with different specialties (i.e., pedagogy or educational technology). EDs were asked to complete a three-part questionnaire to assess perceptions and beliefs before and during the crisis. Together, these

instruments mined into the professional role-identity of participants and their perceptions of teamwork.

RQ1: Both before and during the disruption, EDs found purpose in supporting instructors. During typical institutional operation, this took the form of providing skill-based or technical support, such as taking the time to help faculty truly understand educational technologies or providing reflective spaces to encourage their growth as instructors. However, when the crisis occurred and disrupted typical operation, the type of support and process by which it was delivered changed. Within the crisis, EDs were tasked with additional, unexpected responsibilities, and the type of engagement with faculty became constrained by time. Indeed, focus shifted away from long-term educational development to heuristic solutions. Previously, participants believed that instructors “looking for a quick fix/cure-all solution” to a given problem would not receive effective developmental support; given time constraints, however, participants felt their purpose was to train faculty “as quickly and efficiently as possible.” Furthermore, during the disruption, the process of support shifted to providing instructors emotional support, understanding that faculty were “overwhelmed” and “anxious.”

RQ2: Even prior to the disruption, some participants expressed self-perceptions and ontological beliefs that conveyed uncertainties and doubts in their role-related skills, their qualifications to occupy their role, and the importance of their position. When the crisis occurred, multiple participants expressed uncertainty in their own technology skills and, subsequently, their ability to help faculty transition to online learning. These self-perceptions were in conflict with the outward portrayal of “calm and confidence” that participants believed was necessary when working with faculty. Nonetheless, some participants were “driven, determined, and willing” to learn more about educational technology in order to effectively engage with faculty. Furthermore, despite holding doubts, during the disruption multiple EDs adopted ontological beliefs that pedagogy and educational technology specializations were one and the same.

RQ3: Despite the crisis bringing uncertainties in self-perceptions, participants' beliefs regarding the importance of teamwork were largely consistent both before and during the disruption. In addition to believing that communication, coordination, cooperation, and trust were highly essential across time points, participants also believed that it was important to support one another during the disruption. Some developed goals to draw upon the knowledge of team members from the complementary specialization to fill in gaps in their own knowledge to better support faculty during the transition to remote instruction. Results suggest that while team members may be more easily able to coordinate among one another during typical operation, during the crisis, participants perceived team coordination to originate from leadership.

Implications for Research and Theory

Data highlight the relationship between an ED's role-related purposes, goals, self-perceptions, and beliefs and how these personal-psychological factors interact with sociocultural factors (e.g., organizational expectations, role-related tasks, and interpersonal dynamics) during times of crisis. This relationship provides further support for Stets's (2010) conceptualization of role-identity in times of crisis. Given that data collection for this study occurred during what can be considered the early phases of a crisis, further research is needed to better understand how role-identity and team functionality may shift and impact EDs during prolonged crisis situations: During a prolonged period of disruption, do personal-psychological and team-related processes eventually shift back to what was once "typical," or do they persist as a "new normal?" Future research should seek to understand how leaders of educational development centers respond to disruption and manage EDs who may have burgeoning purpose, goals, self-perceptions, and beliefs: How do the actions of a director or leader of an educational development center during times

of crisis influence the role-identity of EDs? Further research is also needed to more explicitly explore the impact that time constraints may have on EDs' productivity during times of disruption.

The present study also contributes to extant scholarship on teamwork in multiple ways. From an organizational dynamics perspective, it is important to examine a diversity of fields and disciplines, as constructs related to teamwork may function differently depending on context. Prior to this study, research had yet to examine teamwork from the perspective of EDs, and there was a paucity of literature examining teamwork from the broader higher educational context. Furthermore, much of the foundational literature has examined teamwork via Input-Process-Output frameworks (e.g., Marks et al., 2001); has been confined to artificial settings that lose contextual influences (Power, 2018); or has studied complex, dynamic processes of collections of individuals but has not captured the nuances of individuals themselves (e.g., Bell et al., 2018; Mathieu et al., 2017). Using the DSMRI, the present study meaningfully contributes to scholarship on teamwork by highlighting the personal-psychological elements involved in team action during times of typical and disrupted institutional operation. Data generated provides initial evidence that the DSMRI may be a useful framework and tool to examine the role-identity of EDs and how their sense of self shifts or changes during times of crisis. Future research may seek to directly compare the DSMRI to existing frameworks to further validate its effectiveness in studying EDs.

Implications for Policy and Practice

Research on management suggests that for unexpected, complex events, leaders should facilitate interactions both within and between teams responding to the situation and promote adaptive responses (Jones et al., 2020). The present study suggests that during times of crisis, it is possible that breakdowns in communication may result in knowledge gaps throughout the team or too much information could overwhelm already taxed team members. Therefore, leaders at

educational development centers should aim to develop clear guidelines for disseminating information essential to EDs. These guidelines may be incorporated into the development of emergency preparedness and contingency plans, which Robinson (2005) highlighted as being critical during times of crisis. The present study also highlights that some EDs may develop a burgeoning purpose in supporting both faculty and colleagues during times of crisis; leaders may foster this sense of purpose by offering shared leadership opportunities (Jones et al., 2020). While most EDs in the present study expressed that conflict was minimal both before and during the disruption, one participant felt that conflict inhibited effective teamwork during the crisis and should be addressed in a timely manner. This discrepancy in reporting may highlight possible utility for leaders of educational development centers to hold individual check-ins with EDs to ascertain their perceptions.

Self-doubts and difficulties balancing home and work responsibilities expressed by participants lend further credence to calls for protecting the mental health of workers. Brooks et al. (2019) recommended that organization leaders actively raise awareness around mental health issues to reduce stigma that often surrounds this area. Examples include hosting workshops or psychoeducational training on mental health topics such as being able to recognize signs and symptoms of trauma and best practices for individuals experiencing trauma responses. These researchers also highlighted the importance of addressing mental health prior to crises or disasters arising. Bouchard and Meunier (2023) outlined that during times of crisis, some of the most beneficial actions that can be taken by management include allowing flexibility in work scheduling; providing advanced notice of important changes; reorganization of workload; checking in with employees about their workloads and any associated problems; and demonstrating a willingness to listen, among others. Furthermore, EDs should consider leaning on one another to help mitigate self-doubts; research emerging from the COVID-19 crisis suggests that it is beneficial not only to consult with colleagues when gaps in knowledge exist but also to directly refer

faculty to these team members when appropriate (Stanton & Young, 2022). This is especially salient given that EDs were often expected to manage and reassure faculty of uncertainties while also grappling with their own (Strawser & Looney, 2021). Universities may wish to further explore alternative avenues for supporting the emotional experience of faculty members during future crises given these findings.

Limitations

It is possible participants felt limited in what they could share given that data were collected at their place of employment. It is also possible they provided socially/culturally acceptable information; however, given the personal nature and granular detail of the data they did share, this is likely not the case. Given that all participants worked in the same unit within the same higher educational institute, our findings might not generalize to drastically different educational contexts. While all participants were EDs, given that they held different specialties (i.e., pedagogy and educational technology), it is possible that the generated data are relevant only to others with that same specialty; however, given the alignment and harmony demonstrated across participants, this may not be a limiting issue. Data yielded for this study were collected exclusively from written responses, which may have limited the depth and complexity of responses provided by participants. Therefore, future research may wish to utilize a combination of written responses as well as interviews. Additionally, data examined in this study were generated following disruption due to a major public health emergency; it is possible that in other forms of crisis (e.g., mass shootings, environmental disasters), additional findings may result. Therefore, current findings and implications may not generalize to all forms of crisis. Finally, given the complex phenomena under investigation in this study, as we have recommended, more research is needed to dive deeply into both the role-identity of the individual and the team to which they belong during other times of crisis as well as during more normative circumstances.

Closing Remarks

EDs are complex individuals who work on teams that operate as complex systems nested within larger systems at the institutional level and within the broader higher educational landscape. While each individual ED is unique and holds their own role-identity, team members share a superordinate purpose in supporting both faculty and team members during times of typical institutional operation and during disruption. They strive to fulfill this purpose despite self-reported limitations by improving upon self-perceived skill deficits or overcoming self-doubts. Given the wide-reaching impact EDs have at universities, it is of the utmost importance to further understanding on the personal-psychological processes and interpersonal team functioning that influences action in their role. This understanding is especially true during times of crisis, as EDs strive to develop faculty as instructors so that all students may reach their full potential and successfully complete their journey through higher education.

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