Boundary Work as a Buffer Against Burnout: Evidence From Healthcare Workers During the COVID-19 Pandemic

Article *in* Journal of Applied Psychology · August 2021

DOI: 10.1037/apl0000951

CITATIONS
56

READS
1,288

3 authors:

Devin Rapp
San Diego State University
13 PUBLICATIONS **106** CITATIONS
SEE PROFILE

J. Matthew Hughey
University of Utah
5 PUBLICATIONS **56** CITATIONS
SEE PROFILE

Glen E. Kreiner
University of Utah
66 PUBLICATIONS **9,736** CITATIONS
SEE PROFILE

American Psychological Association

Journal of Applied Psychology

ISSN: 0021-9010

2021, Vol. 106, No. 8, 1169–1187
https://doi.org/10.1037/apl0000951

Boundary Work as a Buffer Against Burnout: Evidence From Healthcare Workers During the COVID-19 Pandemic

Devin J. Rapp, J. Matthew Hughey, and Glen E. Kreiner
David Eccles School of Business, Department of Management, University of Utah

Burnout represents a significant problem for many modern-day workers, but perhaps none more acutely than those in healthcare. Imbued with the chronic stressors that often accompany high-risk, interpersonal work, the healthcare industry is rife with stories of burnout, and the addition of a pandemic has intensified the challenges of an already demanding work environment. With an aim toward understanding the root causes of pandemic-exacerbated burnout, we document the experiences of 93 healthcare workers during the COVID-19 pandemic and, in doing so, explore an important link between burnout and work-nonwork boundaries. We find the contextual shock of the pandemic resulted in an increased incidence of boundary violations—undesired disruptions between work and other important life domains such as personal and family life. These boundary violations—which we classify as physical, temporal, or knowledge-based—frequently corresponded to greater reports of burnout manifested by exhaustion, detachment, and inefficacy. We detail specific patterns within the broader context of boundary violations whereby intrusion events are associated with increased job-related demands and distancing events are associated with reduced job-related resources. In addition to documenting the connection between burnout and boundary violations, we also reveal how workers utilized specific boundary work tactics in response to specific types of boundary violations to redefine boundaries and forestall burnout. Our grounded theorizing points to theoretical and practical implications for the impact of boundary work tactics on burnout and other stress-related phenomena.

Keywords: burnout, boundary violations, boundary work tactics, work-nonwork conflict, COVID-19 pandemic

The COVID-19 pandemic has dramatically altered the work-nonwork interface and amplified job stress and burnout across a wide swath of occupations (Campbell & Gavett, 2021; Moss, 2021; Vaziri et al., 2020). As a consequence of the pandemic, workers are experiencing "major simultaneous shifts" to their work environments and "carefully crafted" work-family interfaces (Vaziri et al., 2020). Recent studies suggest a significant decline in home and workplace well-being (Campbell & Gavett, 2021). Many are reporting unprovoked feelings of burnout evidenced by classic signs and symptoms such as increased job demands, emotional exhaustion, and workplace disengagement (Campbell & Gavett, 2021; Moss, 2021). In a recent study (Campbell & Gavett, 2021), 56% of participants cited increased job demands as a contributor to their diminished workplace well-being. Among those respondents, nearly 70% cited a loss of work-life separation, increased workload, and increased work hours as causative factors (Campbell & Gavett, 2021). In short, the pandemic has left a majority of workers feeling unusually stressed and like their lives are "out of balance" (Moss, 2021; Vaziri et al., 2020).

The healthcare sector has been particularly affected by the pandemic, with recent research suggesting over half of healthcare workers (HCWs) are experiencing burnout (Barello et al., 2020; Chor et al., 2020; Duarte et al., 2020; Jalili et al., 2020; Khasne et al., 2020; Lievens, 2021; Morgantini et al., 2020; Wu et al., 2020), a concerning figure considering burnout is often a harbinger of increased absenteeism and turnover (Leiter & Maslach, 2005; Maslach et al., 2001). HCWs are also expressing elevated levels and symptoms of burnout, with some evidence indicating elevated physical manifestations (e.g., increased irritability, reduced appetite; Barello et al., 2020; Duarte et al., 2020). Of the significant findings of late related to HCWs and the pandemic, evidence reveals that proximity to patients and acute care settings are common contributors to burnout, both in frequency and magnitude (Barello et al., 2020; Chor et al., 2020; Duarte et al., 2020; Khasne et al., 2020; Ruiz-Fernández et al., 2020). Not only do HCWs commonly express fear about contracting the virus at work, but they have also expressed concern and worry about bringing the virus home (Khasne et al., 2020). Likewise, researchers have found a significant association between work spilling over into home life and HCW burnout in the COVID era (Morgantini et al., 2020).

Burnout represents a response to mental and emotional stress processes, evinced by three dimensions: Overwhelming emotional exhaustion (being emotionally "drained" of resources with nothing left to give), detachment and cynicism (cognitive distancing to disengage from the job), and inefficacy (a worker's sense of failure

Devin J. Rapp https://orcid.org/0000-0002-0906-3505

We have no known conflict of interest to disclose. We express our gratitude to Kristina Diekmann, Kylie Rochford, Elaine Hollensbe, and Madison Whitehead for their insights on this project. We also thank our research participants, whose generosity with their time during a busy and difficult time of their lives made this research possible.

Correspondence concerning this article should be addressed to Devin J. Rapp, David Eccles School of Business, Department of Management, University of Utah, 1655 East Campus Center Drive, Salt Lake City, UT 84112, United States. Email: devin.rapp@eccles.utah.edu

or incompetence; Maslach, 1982; Maslach & Jackson, 1981). While burnout can happen in any profession, the emotional and interpersonal demands of caring for people in need, often with limited job resources, make HCWs especially vulnerable to burnout (Bakker & Demerouti, 2007; Maslach & Jackson, 1984; Zapf et al., 2001). As a result of the pandemic, HCWs around the world are grappling with increased work demands and the loss of important work and nonwork resources. The job demands-resources (JD-R) model of occupational stress predicts that burnout is likely to manifest when job demands are exceedingly high and/or job resources are threatened or lost (Demerouti et al., 2001). *Job demands* consist of organizational, physical, psychological, and social components of work that require physical and mental effort. In contrast, *job resources* represent the components of work that support goal accomplishment and reduce the burdens associated with job demands. Burnout, according to the JD-R model, stems from an imbalance of these two conditions. Excessive job demands, for instance, can overtax workers to the point of chronic fatigue and are particularly and positively associated with emotional exhaustion. On the other hand, insufficient resources elicit self-protective instincts that reduce employee motivation and workplace engagement (Bakker et al., 2005; Demerouti et al., 2001). The loss of valued resources is thus associated with increased employee disengagement and cynicism.

Believing healthcare workers might be experiencing increased workplace engagement as a result of increased occupational prominence and societal acclaim (i.e., being considered "healthcare heroes"; Hennekam et al., 2020), our initial aim was to explore how the pandemic might be attenuating burnout. We noted quite the opposite, however. Healthcare workers routinely complained of feelings and symptoms of burnout. Further, they identified these feelings as stemming from novel work- and nonwork-related threats that breached their desired boundaries. Following grounded theory, which allows researchers to discover new concepts and relationships abductively using the voices of those studied (Charmaz, 2014), we therefore adapted our data collection efforts toward these interesting emergent findings and started asking more systematically about burnout, boundaries, their dimensions, and what HCWs were doing to forestall or mitigate burnout. In the course of our abductive analytic process, we discovered the pandemic was disrupting work-nonwork boundaries in unprecedented ways. Therefore, we turned to boundary theory to assess both the work and nonwork factors contributing to burnout.

Researchers have invoked boundary theory to explore a wide variety of workplace dynamics, including work-nonwork balance, individual identity, and professional identification (Allen et al., 2000; Kossek & Ozeki, 1999; Kreiner et al., 2006; Langley et al., 2019; Reichl et al., 2014). Boundary theory demonstrates how people simplify and classify the world around them by socially constructing boundaries or mental categories, such as the boundaries between "home" and "work," or "self" and "other" (Ashforth et al., 2000). These boundaries vary in thickness and permeability, such that *thick/impermeable* boundaries are relatively closed to influence across domains and entities, whereas *thin/permeable* boundaries are more open to influence and change (Ashforth et al., 2000; Clark, 2000). Individuals vary in their preference toward *integrating* or *segmenting* life domains and facets of their workplace (Kossek et al., 2012; Kreiner et al., 2006; Leslie et al., 2019; Vaziri et al., 2020). Indeed, boundary theory posits that individuals and collectives can actively shape, interpret, reinforce, or change these perceived and actual boundaries (Kreiner et al., 2009; Nippert-Eng, 1996). Boundary dynamics, however, are frequently characterized by conflict from one domain to another. For example, when the demands of one area negatively affect the other or when unwanted elements of one domain creep into others ("work-home conflict") or when elements of the workplace impinge on worker identity ("work-self conflict"; Allen et al., 2020; Greenhaus & Beutell, 1985; Kreiner et al., 2006). Such conflicts have been operationalized as both steady-state and episodic (French & Allen, 2020; Greenhaus & Beutell, 1985). As a result, individuals can experience *boundary violations*, which refer to "an individual's perception that a behavior, event, or episode either breaches or neglects an important facet of the desired ... boundary" (Kreiner et al., 2009). Boundary violations are highly problematic, in part because they exacerbate stress and work-nonwork conflict by reminding workers of the tensions and lack of fit between their life domains (Kreiner et al., 2009; Rothbard et al., 2005). *Boundary work*, on the other hand, refers to individual or collective efforts to influence the social, symbolic, material, or temporal demarcations between two or more entities or domains (Gieryn, 1983; Hirschi et al., 2019; Langley et al., 2019; Nippert-Eng, 1996). Past work (e.g., Kreiner et al., 2009) has found various categorizations of such boundary work, including physical, temporal, behavioral, and communicative. Contextual alterations (like an exogenous shock event) and collective boundary work (such as changing policies) can also influence a previously static boundary equilibrium (Crawford et al., 2019; Rothbard et al., 2005; Shockley et al., 2021; Vaziri et al., 2020). How individuals navigate workplace-related boundaries can directly affect a host of important individual and organizational outcomes, including job satisfaction, stress, identification, commitment, work-nonwork conflict, and performance (e.g., Allen et al., 2014; Faraj & Yan, 2009; Grandey & Cropanzano, 1999; Kossek et al., 2006; Kreiner et al., 2009; Vaziri et al., 2020).

Based on our findings, we contend that boundary theory provides an important and novel framework to understand not only the problem of increased burnout but also a possible remedy. Most theoretical lenses examining burnout are limited to causes and solutions *within* the workplace, an inherently limited approach given that workers spend much of their lives *outside* the workplace, and nonwork issues can undoubtedly affect worker behavior. Further, while research suggests that work-nonwork conflict is associated with burnout (Allen et al., 2000; Kossek & Ozeki, 1999; Reichl et al., 2014), such scholarship has yet to explore how job-related influences impact burnout outside of the workplace or how negotiating boundaries can ameliorate burnout. These are surprisingly understudied linkages that are consistent with recent calls for examining how work-nonwork dynamics affect burnout (Casper et al., 2018; Tone Innstrand et al., 2008).

While undeniably lamentable, the simultaneous, systemic shock of the pandemic offers researchers a rare opportunity (Morgeson et al., 2015) to observe and theorize about: (a) how contextual shocks and boundary dynamics contribute to burnout and (b) how boundary work can be utilized to respond to burnout. We contribute to the burnout and boundary work literatures by providing a rich description of healthcare workers' endurance of a rare contextual shock event and the abrupt modification of their boundaries, job demands, and job resources. Using boundary theory and the JD-R model, we construct an integrated model of burnout and develop

new theory to explain how a contextual shock event like the COVID-19 pandemic can trigger boundary violations (i.e., intrusion and distancing events) and exacerbate burnout by increasing job demands and diminishing resources. We also contribute to the literature by documenting how, in response to such boundary violations, workers generally employed one of two categories of boundary work tactics: Segmentation tactics (which often followed intrusion events) and integration tactics (which often followed distancing events). Finally, along with physical and temporal boundaries (Kreiner et al., 2009), our participants also identified knowledge (a previously undescribed boundary) as a salient and consequential boundary.

Method

Given our research interests and the exploratory nature of our work, we adopted a grounded theory methodology (Corbin & Strauss, 2008; Glaser & Strauss, 1967). Grounded theory takes an iterative approach to data collection and analysis, and is a fruitful method for "theory elaboration" in which a study builds on extant theory (Charmaz, 2014). This approach allowed for more detail regarding participants' lived experiences than a quantitative study or an open-ended questionnaire because we could structure our open-ended interview questions strategically, ask multiple follow-up questions to clarify meaning, and dive deep into emerging themes within and across interviews. We selected a career field and a context that would be "extreme" (to help us see processes more clearly) and yet transferable (Eisenhardt, 2021; Eisenhardt & Graebner, 2007)—healthcare workers amidst the COVID-19 pandemic.

Our primary source of data consists of 93 semi-structured interviews conducted with HCWs during the summer and fall of 2020 (for a list of sample questions, see Appendix). We also drew on a variety of secondary sources such as organizational and individual communications shared by participants (i.e., emails, social media posts, etc.) to help inform our research. Additionally, the first two authors previously worked in healthcare (one in administration and one as a first responder), providing us a lens of prolonged engagement with our studied population (Lincoln & Guba, 1985). Beginning with personal networks, we used a mix of convenience, snowball, and theoretical sampling, to interview a total of 87 HCWs from all five regions of the United States and, to explore transferability, six from South America (Argentina, Brazil, and Chile). Table 1 includes detailed information on our interviewees. Participation was strictly voluntary and the study was given an exemption by an institutional review board for minimal risk to participants. The data presented in this article were part of a broader data collection effort.

We recorded and transcribed remote interviews (88 via Zoom), which lasted an hour on average. We used NVivo to code and organize our interviewee responses into conceptual categories that were organized via a coding dictionary we created (Saldaña, 2009). We wrote reflections following interviews and joint coding meetings, compared and reconciled findings, documented evolving ideas, and updated our interview protocol to reflect emerging themes and potential theoretical contributions (Charmaz, 2014; Corbin & Strauss, 2008; Kreiner, 2015). After completing our interviews, we presented emerging theory and observations to several of our participants ("member checks") to ensure our developing story reflected their experience and to gain new insights and nuance.

Table 1
Sociodemographic Characteristics of Participants

Characteristic	*n*	%
Location		
United States	87	94
South America	6	6
Gender		
Female	63	68
Male	30	32
Age		
M	36	
Median	35	
Range	22–61	
Have children living at home	50	54
Cohabitating or married	74	80
Racioethnic minority[a]	30	32
Healthcare experience		
M	11	
Median	9	
Range	0–36	
Role		
Physician or physician assistant	16	17
Nurse	42	44
Administrator	26	28
"Other" clinician	9	11
COVID exposed[b]	67	72
Frontline[c]	68	73
Leadership role	52	56
Exiting or transitioning[d]	5	5

Note. $N = 93$.
[a] Interviewees who self-reported as either non-white or Hispanic. [b] Cared for known or suspected COVID patients. [c] Indicates work-related duties that must be performed onsite and in close proximity (<6 feet) to patients. [d] Indicates the HCW has exited HC, transitioned from critical care, or has expressed an immediate intention to do so.

Table 2 documents how we upheld qualitative trustworthiness and the key tenets of grounded theory. The interplay of our coding processes, memo writing, and case comparisons culminated in our grounded theory, presented in Figure 1 and outlined in detail throughout the section "Findings." Tables 3–5 contain supplementary supporting data.

Findings

Our data suggest why burnout has increased so precipitously among HCWs during the pandemic (Duarte et al., 2020; Jalili et al., 2020; Khasne et al., 2020). Admin #1, a nursing home administrator who experienced 53 of his 59 residents becoming infected, told us the "hardest and heaviest" part of his experience was "dealing with the burnout of so many employees who were ready to quit." We found the pandemic represented a contextual shock event (Crawford et al., 2019), which disrupted how workers managed work and nonwork boundaries. Interviewees, including these two nurses (#4 and #59, respectively), described their inability to segment work and nonwork:

> It's just heavy emotions, and seeing literally so many people die and so sick compared to normal is really exhausting … When I come home, I'm exhausted. I felt like I had nothing else to give to anyone else emotionally … I hated watching TV because it was all about COVID and trying to portray how rough it is for nurses and doctors, and I just

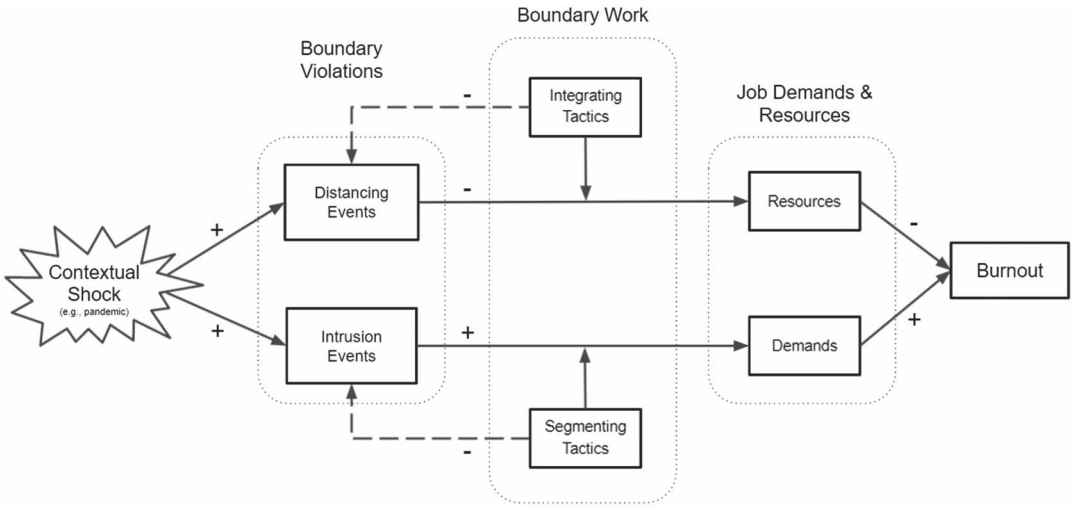
Table 2
Criteria for Trustworthiness & Rigor

Criteria	Definition	Steps taken in this study
	Criteria for Trustworthiness and Rigor[a]	
Credibility	• Demonstrated by showing approval of sample population	• *Prolonged engagement*: Two members of the research team have industry experience in health care • *Member checks*: We conducted 21 member checks in which we shared our central findings with interviewees, checking for conceptual agreement. We did not have any respondents challenge or disagree with our central findings that boundary violations exacerbated burnout
Transferability	• Refers to the ability to transfer or apply the principles of the findings to other populations/contexts/ groups	• *Thick description*: We provide numerous quotes, vignettes, and stories in the findings section and supplementary table, which allows readers to envision how the grounded theory can apply elsewhere; we explain the context of the pandemic and how such contextual shocks can affect boundaries and burnout • *Applying findings beyond the studied context*: We show in our Findings and Discussion how our model linking boundary work and burnout can transfer to other occupations beyond health care context and to other events beyond the pandemic
Dependability	• Demonstrates that the findings are stable from multiple data points and vantage points	• *Interrater reliability*: We had two doctoral students unfamiliar with the study perform an interrater reliability test in which they coded 30 passages of data from our interviews; 98% agreement • *Joint coding*: More than a quarter of the interviews were jointly coded, and the dictionary was co-created by all three authors as the study progressed • *Triangulation/multiple data sources*: We complemented our 93 interviews with secondary data, including organizational and individual communications (e.g., emails, websites, social media posts); we also interviewed 6 HCWs in South America and found similar patterns to our North American sample
Confirmability	• Established by providing a "trail of breadcrumbs" of the research process that other researchers can replicate	• *Audit trail*: We kept track of all major decisions throughout the research process along with rationale for them; we took notes on each interviewee for case comparisons (in addition to the formal coding process) and wrote theoretical memos • *Transparency*: We report in our Methods section and this table the major steps taking in design, data collection, and analysis so that other researchers could follow a similar process
Tenets	Definition	Steps taken in this study
	Tenets of grounded theory[b]	
Theoretical sampling	• Strategy for seeking, collecting, and analyzing pertinent data to refine categories in the emerging theory • Can occur before, during, and/or after data collection	• *Before data collection*: Initial data sampling strategy was to seek out a wide variety of health care workers and administrators in order to identify key theoretical and in-vivo issues facing them during the pandemic • *During data collection*: Early insights in the data analysis informed whom to interview next (i.e., types of healthcare workers, geographic locations across the U.S. and in South America) • *After data collection*: We identified the most promising themes for building theory (e.g., burnout and boundaries) and re-examined the coded data for further insights
Theoretical saturation	• Answers the question, "how much data is enough data?" • Evidenced by diminishing returns in data collection and developing a rich theoretical model	• *Subsequent data incidents provide no new information*: After the 59th interview, no new codes were found in the data • *Theoretical model "dripping" with richness*: Coding structure/dictionary had multiple layers or "children codes," suggesting conceptual density • The minimum number of interviewees mentioning any major theme in the paper was 21 (out of 93, which is 22.5%).
Theoretical memos	• Documenting/analyzing ideas about codes and relationships among them • A pivotal intermediate step between data collection and analysis	• *Individual researcher memos*: Authors wrote various types of analytic memos, including notes after interviews and theoretical memos elaborating on insights from comparing data points/interviewees • *Shared researcher memos*: Authors shared their memos with each other and also developed memos jointly; this occurred before, during, and after joint coding meetings
Constant comparison	• Deriving insights by comparing researchers' insights from data with existing academic literature • Iterating between data and theory	• *Iterate between data and literature*: We performed data collection in "batches," and after each batch of interviews, we derived and refined promising emerging themes and compared them to existing literature for overlaps and potential contribution • *Iterate between early data and emerging data*: We compared each batch of new data with the earlier data to see what insights were emerging and how that would inform subsequent data collection and the developing theory

[a] Sources: Lincoln and Guba (1985), Morrow (2005), and Rheinhardt et al. (2018). [b] Sources: Charmaz (2014), Locke (2001) and Treviño et al. (2014).

Figure 1

Grounded Model of Boundary Work as a Buffer to Burnout



didn't have any unwind time away from COVID because it's everywhere and the only thing talked about.

> Most everybody that I work with has experienced a level of burnout that we didn't really anticipate. There is a lot of extra and added mental stress that's really hard to quantify and put into words … The staff are dropping like flies because they're so burned out … Honestly, this year is the first time in my 6 years of working in healthcare that I have not been able to leave work at work … all of [it] comes home with healthcare workers … Nurses during this pandemic have had their personal and professional boundaries tested like never before. All of that has caused the burnout and exhaustion level of nurses to increase exponentially. (Full quote in Table 5)

For reasons of parsimony, and congruent with our interviewees' expressions of boundaries related to burnout, we explore the boundaries between "work" and "nonwork" (typically studied in the work-family literature) and the boundaries between "self" and "work" (typically studied in the identity literature; see Table 5). We identified three types of boundary violations stemming from the contextual shock of the pandemic that threatened baseline boundaries and contributed to feelings of burnout. Violations of these boundaries—*physical, knowledge,* and *temporal*—commonly constituted either an *intrusion event*—wherein a boundary violation imposes more-than-desired integration between the worker and elements of the workplace (e.g., the threat of physical contamination at work)—or a *distancing event*—wherein a boundary violation imposes more-than-desired segmentation between the worker and elements of the workplace (e.g., policies requiring workers to eat lunch alone; Katherine, 1991; Kreiner et al., 2009). We observed that HCWs often implicated such violations as contributing to a general state of burnout. Nevertheless, there were important, nuanced patterns in the data that we identified. Descriptions of intrusion events, for example, were often accompanied by reports of increased workplace demands and were cited as especially emotionally exhausting. Admin #76 explained: "My work-life encroached on home life. There was little separation between work and home … This led to exhaustion." On the other hand, distancing events were often reported alongside the loss of essential and previously relied upon coping resources, which contributed to participants' increased feelings of detachment and cynicism. Nurse #59 explained why his team of COVID unit nurses was experiencing so much burnout:

> Now reduce the trained staff, reduce the resources, add in false and empty praise from management, take away lunch and bathroom breaks, don't provide any compensation for the change in workload, and take away important benefits, and you have a frustrated, overworked, underpaid, and under-appreciated staff that quite literally can't continue to show up to work and feel like they are worth anything.

In short, our observations indicate a process whereby boundary violations provoke a change in job demands and/or job resources, contributing to increased reports of burnout. This process elaborates on JD-R theory (Demerouti et al., 2001) by integrating burnout with work-nonwork dynamics.

When boundary violations occurred, HCWs routinely responded by employing tactics meant to regain a preferred state of equilibrium. These *boundary work tactics*, generally diametric in nature, were effortful attempts to increase or decrease the distance (or boundary) between self (and/or home domain) and work. Similar to boundary violations, we categorized boundary work tactics according to whether the actor intended to create (a) greater self (and/or home) and work immersion (*integration tactics*—usually employed after a distancing event to increase resources and reduce detachment) or (b) greater self (and/or home) and work separation (*segmentation tactics*—usually employed after an intrusion event with the intent to reduce demands and emotional exhaustion). For example, when COVID-19 entered circulation—a contextual shock event—HCWs responded by wearing increased amounts of personal protective equipment (PPE) and utilizing physical barriers to increase the distance between themselves and potential carriers of the virus (e.g., patients and coworkers). Notably, we find that many boundary work tactics directly correspond to a specific type of boundary violation (e.g., a physical tactic for a physical violation), while others are multifunctional. We chose to focus on those boundary work tactics that directly corresponded to their boundary

Table 3
Supplemental Quotes of Boundary Violations and Boundary Work Tactics

Code	Description	Sample quotes
	Physical boundary violations	
Risk and fear of physical contamination of self	The risk and fear of workers for their personal and financial safety. Work-self boundary; physical intrusion event.	"I got a second life insurance policy in March because it wasn't something I hadn't thought about, but I found out that it was very, very important to my wife." (Physician [MD] #28) "It was really stressful, just never knowing whether a patient with a cough had COVID. And not knowing if you were walking into a death trap, you know, that's how I felt. And I was pregnant, for the worst part of it. So that was pretty scary for me … There is this level of fear, like, does my mask have the virus on it? And am I touching it when I take it off?" (Nurse #86) "Everyone [had] this collective terror about what was happening and how out of control we felt about it." (Nurse #87)
Risk and fear of physical contamination of family members and patients	The worker's risk, fear, and sense of responsibility to not bring work-aspects (i.e., virus) home and infect families. Work-nonwork boundary; physical intrusion event.	"My girlfriend and I didn't see each other for 3 months because we were worried about getting each other sick." (MD #47) *A supervisor at a skilled nursing facility chose not to allow her children to visit their father:* "His work did not take the precautions I felt were necessary, so I could not risk him exposing my kids; that would expose me to my high-risk patients." *We asked if this was hard for her children:* "They know my love for my patients and took on a role of protecting me by being safe themselves." (Nurse #40)
Intrusions from physical barriers	The intrusions of burdensome PPE and other physical demands that cause physical and emotional exhaustion. Work-self boundary; physical intrusion event.	"I think the worst part about work right now is, we all wear, obviously, masks all the time, but then we have facials … I swear I have a constant headache; everyone complains about having headaches at work all the time, and I think that's the main thing that we all dislike about work right now. I don't think that on my floor, we care that someone has Coronavirus; I don't think we're afraid of them. I think it's that we're so sick of all the garb we have to wear all the time." (Nurse #3) "I think my burnout mainly comes from just the PPE. Like, I don't want to wear a mask all day, every day. It's honestly really hard for me. It gets really hot, and my skin just feels kind of irritated, and I just feel like I can't really breathe appropriately. The eye shield, we're only supposed to have one. Mine is super scratched and beat up. And so, it's like I just constantly am putting my little goggles on my head because I'm like I don't want to wear these. They're so annoying. You can't even see what I'm doing. So, I feel a little bit burnt out in that aspect, but I know that those things, they even sent us an email yesterday saying that those things are not going away anytime soon." (Nurse #14) "You get minimal breaks because of the severity of how sick these patients are, carrying around a PAPR unit. For twelve hours or wearing an N95 mask for twelve hours a shift, minimal water breaks, minimal bathroom breaks, being asked to do more work … more work with less resources." (Nurse #59) "You know you have all this like weight on you. And then just coming out, it's like you take off your gown and gloves, you wash your hands, you take off your face shield, you wash your hands, you wash your face shield. You take off your first mask, wash your hands, take off your second mask. Wash your hands and then put another clean mask on and then wash your hands again. So that's just going in and out of one room." (Nurse #62)
Physical and relational distance between worker and clients/patients	When physical barriers and policies create distance and impede communication and connection with client/patient. Work-self boundary; physical distancing event.	"I used to go and kiss everybody, and now I have to be two meters apart … We cannot show our love. In Brazil, we touch, hug, and kiss … it's normal, so for us, it's very difficult, because we have to use masks, we have to use the face shield. And it's more difficult to show them our love and someone one time asked me, 'Don't you like me anymore?' I said, 'Yes, I do.' 'But why don't you hug me?' I said, 'No, I can't.' So this is, for me, the most difficult part because they don't all understand what is happening, and they ask, 'Why do you change?'" (Admin #30) "We had situations where we had too few PAPRs and things for a while. And I guess I, it's hard to make that decision between patient care and a PAPR. Like, do I not go into the code and help because they may or may not have COVID? Or do I wait for the PPE to arrive, and then I go in." (Nurse #54) "[PPE items] offer you the opportunity to protect yourself. But I feel like sometimes, as a nurse, the first thing that you want to do is act. And now, with this pandemic, you have to stop and think, OK, how do I protect myself and provide for this patient? So, like, you know, a specific example of that, like your oxygen saturations on COVID patients. They dump really fast when they're off of their oxygen, you know, their oxygen saturation will go from

Table 3 (*continued*)

Code	Description	Sample quotes
		the high 90s to the 60s really fast. And, you know, you want to offer like, OK, I'm going to throw them on this thing and it's like, OK, but now you need to have a filter. Otherwise, you're going to increase the risk for yourself. So, you've had to stop and say, OK, how do I protect myself and provide for this patient? I have to take a step back because I have to protect myself. There's nobody, you know, there's not people to take my job if I get sick … I had a patient who went into cardiac arrest … so for a good minute, while I was trying to put on protective equipment, they were in the middle of cardiac arrest. That's kind of hard. I feel like that's a specific example I have where … it's a good thing, but a lot of times, it does feel like a burden. Even though we are protecting ourselves." (Nurse #69)
Relational distance between worker and coworkers	When physical barriers and policies create distance and impede communication and connection with coworkers. Work-self boundary; physical distancing event.	"The pandemic definitely made me feel like I needed to isolate myself, even when at work. To help reduce my own exposure and possibly exposing others as well should I have contracted the virus. This meant avoiding people at work when I would have otherwise stopped to communicate. Avoiding patients as a courtesy." (Admin #22) "Especially the isolating, we used to have a team meeting every other week where we get together and have lunch and discuss patients with the doctor, kind of debrief. You know, because you lose people you're close to all the time, so when you compound death and isolation and all these new requirements … some of our folks really struggled." (Nurse #34) "Those kinds of policy changes have been frustrating because it's like now the one sense of camaraderie that you're going to have, now you can't have … There can only be one person in the break room. That's frustrating because if you want to take a break or talk to somebody, you've got to go somewhere else … you can't even have a human connection with your coworkers that are going through the same thing you are and sharing the same risk. So, I think there's the right theory behind it … but it's now just another thing that is out of our control … and your job is hard as it is." (Nurse #65)
	Physical boundary work tactics	
Segmenting physical elements of work and home	When workers create rituals to avoid contaminating the home.	"I have to stand outside of my door and take off all of my scrubs down into my underwear, take everything off. Leave them outside. Sneak into my side door, go wash my hands, and then I'm fine. Yeah, that's become a ritual … My little 9-year-old chewed me out the other day that I left my scrubs on her flip flops, and she said I could have given her flip flops COVID." (MD #28) "I have two bottles of alcohol. When I get home, I choose Lysol all over my body and my clothes and everything because I'm afraid. I don't touch anything. I get in the car, put the Lysol or alcohol, and now I can touch the wheel." (Admin #30)
Sacrificing self	When workers would immerse themselves deeper into their work to engage despite added risks and energy needed to do so.	"My staff member stayed, three hours after they clocked out just to sit in the room with the patient because the family lives in another state. And then to have a family member complaining about something afterward, like, "Oh, you didn't do this, you didn't do that." It's like, but Sandy sat here for three hours with your mom on her own time. Her kids waited for her to come home from work, and she sat there, so your mom didn't die alone." (Admin #10) One evening a grandson of a patient texted me around 11 pm to ask if I could call someone about his grandfather because he couldn't breathe. I was at home but ended up calling one of the overnight doctors to go check on the patient. It turned out he had not been wearing his oxygen mask and was subsequently delirious, and rather than use his call button to inform the staff, he called his grandson and told him to call 9-1-1. These boundaries made it more stressful, but I was happy to bend the rules if it meant making a difference in those patients lives … " (PA #25) "I was in the room for almost 40 min. I tried to console her, to hold her hand, and at the same time, being early in the disease, it was really scary for folks because you don't know what this disease is. You're exposed to it and being in a room for 40 min; obviously, everyone is thinking about those things. Ultimately, she was unconscious, but we were able to finally make an exception and get her husband in to be with her at the end of life, and she died within 15 min of him getting there, and I got just the sweetest letter, just about the hospital making that happen and having him be able to be there and say goodbye to her for the last 15 min, so that's how the pandemic started for me." (MD #28)

(*table continues*)

Table 3 (*continued*)

Code	Description	Sample quotes
Compensating for physical barriers	When workers would immerse themselves deeper into their work by innovating to find proactive ways to meet their patient/client's needs to overcome challenges imposed by physical barriers.	"Normally we don't give our cell phone numbers to anybody, and I was just giving it out left and right and calling patients' families from it, and they were calling and texting me … because patients would come to the hospital and not have their cell phone charger and they couldn't have visitors, so they were super alone and isolated. I would FaceTime with the family member with my phone in the room. Otherwise, they would have never seen them again in their entire life because they end up dying … which was probably the best thing and one of the most therapeutic things for me because it brought the patient and the family members so much joy … I really felt like I was doing more for the patient's health than any of the medicine or the treatments that we were giving them, which in the long run probably benefited them more and helps them to get better than the oxygen that they're wearing or the antibiotics that we are giving them." (PA #25) "I want to say another thing about the PPE. For us, the worst thing was attending patients with this PPE because they didn't see you. They were more feared than we are. In my hospital, for example, when you go in the hospital, you must go alone. Maybe this is the last time that you see your family, so we were the last people that they can see; for example, if they must go on intubation or connected to a ventilator, a mechanical ventilator, it was the most difficult thing. I have a picture here because we started a project. We put pictures of us in the equipment so the people can see [us]." (MD #43) "I think I just tried to still be as personal as I can, and try to just be extra kind because they're scared and going through a scary [and] a hard time. And so just trying to do whatever I can to make them feel comfortable and bridge that gap that has been put between us with all the PPE like spending extra time talking to them on the phone, or just trying to spend extra time in the room, but at a distance." (Nurse #86)
	Knowledge boundary violations	
Frustration of ignorance or misinformation	When the worker feels frustrated with ignorant beliefs and misinformation about elements related to their work. Work-nonwork boundary; knowledge intrusion event.	"I had my mask on, and my aunt walked in and said get that shit off your face, you know, half-joking, mostly not. I got harassed constantly [but] I felt like I was doing the right thing." (MD #28) People … who understand and still choose to not believe the story or believe that this is an actual issue or try to argue with you with their own non-healthcare experiences, such as the people who have said, you know, "Oh, I got COVID, and it was a cold, like, this isn't a big deal … No one needs to wear masks, open everything up, like; this doesn't matter." That's frustrating in a way that makes, like, turns to anger and knowing that you can't change their mind and that they are, you know, potentially putting other people in danger because they're choosing to not follow simple instructions, simple rules … wearing a mask is not a big deal. (Nurse #87)
Feeling misunderstood by others	The perception by workers that others do not understand their work and their experience. Work-nonwork boundary; knowledge distancing event	"I think ignorance is bliss. And I think it's easy for people to be like, Oh, yeah, it's fine. Like, I don't even know anyone who's gotten COVID. But I see it every day. And I see how miserable people are. And so, I feel like it influences my decisions a lot." (MD #49) "I mean, my husband is "case in point." He doesn't work in healthcare … he doesn't understand what it's like. He thinks this is a joke, and by November 4th, everything will be over. I just keep on trying to tell them these are real people, and someone like you or I could get it and not be here in a couple of days. There's no way to express it enough. You know, people would just have to see it." (Admin #74)
	Knowledge boundary work tactics	
Advocating with facts and science	When workers advocate (for facts, science, the role of their occupation, etc.) with ignorant outsiders.	"And I don't blame people because I wouldn't have understood it myself, and that's why I started emailing. I would write this weekly email and send it out to family and friends because I was just like, you can't even believe it. I could never even believe how crazy it was unless I went through it myself and the amount of people dying and everything, and it was just, at the time, in April or March, you heard on the news, people like, oh, this is not really going on, this is a political thing. Ten people that died this week from COVID. One of them was 32 years old. One of them was a couple that was 60. Just like nightmare after nightmare story … but yeah, it was therapeutic to sit down and write the emails and talk about the stories of people. I felt like I was getting their story out and getting them the attention and respect that they needed from people who wouldn't otherwise be taking it seriously." (PA #25)

Table 3 (*continued*)

Code	Description	Sample quotes
		"And so, we take it upon ourselves to combat pseudoscience in a way that isn't condescending, but it's informative to the general public too … but it feels like we do have a responsibility to do that … I knew that being in the realm that I was, being in the COVID ICU unit, seeing it first-hand, having that unique perspective. I did feel early on a very strong responsibility to just put things out there." (Nurse #59)
Accepting or ignoring ignorant others	When workers accept or ignore the ignorant outsiders rather than advocating.	"But they are getting the same information that they should be able to process, at least to some reasonable degree. And if they don't understand it, then ask somebody. So that's been just us kind of being OK with just letting go … Arguing endlessly with people who have these things in their mind isn't worth it. You just, again, you just feel exhausted. And you're like, you know what it's not, it's not worth my time, my effort, my breath, to try to change your mind because I can't." (MD #28) "I don't get into it too much with these people. I've learned through the years with anti-vaxers … that getting into that type of debate or trying to persuade or change their mind, it's never that productive, and it usually ends badly." (MD #49) "I don't know. I feel like I just don't engage anymore." (Nurse #62) "It's kind of frustrating, and it's almost not even worth bringing up when people are arguing about masking and social distancing and stuff. It's just it's become this, like, I don't even want to argue with you anymore. I think that those kinds of relationships with people have suffered." (Nurse #65) "Arguing endlessly with people who have these things in their mind isn't worth it. You just, again, you just feel exhausted, and you're like, you know what, it's not. It's not worth my time, my effort, my breath, to try to change your mind because I can't." (Nurse #87)
	Temporal boundary violations	
Spillover of work into time off	When workers are not able to segment time of work and non-work. Work-nonwork boundary; temporal intrusion event.	"It just weighs on them. The enormity of what they're doing, especially during this pandemic … It's a weight on them … I think a lot of our healthcare personnel carry that. I don't think a lot of people really realize that, but the day's not over after your eight-hour shift. It's not over after your seven-and-a-half-hour shift, if you're a CNA, or if you worked a double, it's not over after your 15 hours that you've been here. It stays with you. It goes home with you. Things that you see, things that you hear." (Admin #10) "So, it's just I feel like that part has been more frustrating, you know, turning it off when you go home. Now, all of a sudden, it's like your career choice is now in the news. Like we were never, as nurses, that, like, frontline in news stories every single day." (Nurse #65) "I did feel my work life encroached on home life. There was little separation between work and home … I can count the number of days off I had in all 2020 on one hand, and even on those off days, I would do some work from my phone. This led to exhaustion for sure." (Admin #76)
Client/patient rumination and prognosis effects	When workers ruminate about work aspects or voluntarily check on work aspects during time-off. Work-nonwork boundary; temporal intrusion event.	"We can log in from home to check on my patients like I was doing that all the time to see how they did and because people would go south so quickly. And like I found out this one patient that I really like got close to, and he was one of my first patients, and he was in the ICU for a month. He'd end up dying on a weekend that I was off work, and I was sort of slowly watching him kind of crash. And he passed away, which is hard. I remember sitting at my kitchen table and logging on and reading the note that he passed away at 1:00 a.m. It was hard … During the pandemic, it was especially difficult to "turn off" thoughts about my patients when leaving work for the day. Generally, in this line of work, you have to be able to compartmentalize the sad reality of illness, or you'd be trapped in a constant negative world. I like to have boundaries where I leave the patients' plight at the hospital. However, I found myself thinking about them around the clock. I was also giving out my personal cell phone number for family members to use to reach their loved ones since many of my patients did not have their cell phone chargers, and there were limitations on staff going in and out to facilitate phone calls. (PA #25) "My brain doesn't stop out. I don't know if someone is making something wrong [at the assisted living], and I can't protect them, so I feel all the time I'm worried." (Admin #30)

(*table continues*)

Table 3 (*continued*)

Code	Description	Sample quotes
	Temporal boundary work tactics	
Strengthening work-nonwork time boundaries	When workers utilize tactics to separate work and nonwork.	"I tried to really separate them more than I do normally, just to keep myself sane and keep from burning out … but I've proven to be burnt out. Like we have three shifts a week, and then I have four days off, and usually, I will work extra shifts, but during COVID, I was like, 'No, I can't handle more than three, and then I would have four days off to relax, and I would just literally sleep and do nothing on the four days. Made my husband do all the cleaning and grocery shopping because I was so exhausted, but it was a good way for me to prevent being burnt out. Three days, you can really do anything for three days, but more than that, I was like, 'no way!'" (PA #68) "One thing I've personally been working on is being able to separate work-life and home-life. Just because I feel like for a lot of health care workers, their home life, you know, or their work-life bleeds into every aspect of their home life … especially the education classes … I try to group them in with days I'm already working because, you know, if I'm home, I want to be home with my family, spending time with my family." (Nurse #69)
Debriefing with coworkers	Taking time to discuss work and debrief with others who understand.	"At work, you have the most support." (MD #46) "It also felt like we were the only ones that could understand what we were going through, so we wouldn't bother saying how work really was when asked because it wasn't worth having to describe what went on. Fatigue was just the result of multiple hard, sad, tragic shifts and not being able to talk about it." (Nurse #65)

violation counterparts and were appraised by the HCWs as effective at buffering the effects of burnout.

Physical Boundary Violations

Prior work (e.g., Kreiner et al., 2009) has noted that physical boundaries can focus on either physical objects (e.g., walls) or physical distance (e.g., commutes), as well as the meanings attached to them. In the healthcare context, by extension, we found the pandemic (i.e., the introduction of a novel virus into the work environment) created physical boundary violations via (a) the PPE and other organizational protocols established to reduce the risk of contagion between workers, coworkers, and patients and (b) the physical and relational distance that resulted from such requirements.

Physical Intrusion Effects

COVID-19 inspired *risk and fear of physical contamination of self*, which brought or intensified HCW exhaustion, as many contracted the virus or saw coworkers catch it. Admin #10, who spent weeks in an ICU and almost died, said about returning after, "I was kind of emotionally jacked up from it." Nurse #62 described the angst she and her coworkers felt: "Am I going to get exposed [or] have the right equipment? All that [was] weighing on you and then coming home, you were still anxious … There'd be nurses throwing up before their shifts; they were so worried." The risk and fear extended beyond themselves; HCWs also held *risk and fear of physical contamination of family members and patients*. Admin #37, a housekeeping supervisor, explained why he and his wife, also an HCW, slept apart: "We work in separate facilities, so we sleep in separate bedrooms." We heard many stories where HCWs chose to alter their nonwork lives to avoid bringing the virus into work (and infecting their patients) and/or from work to home (and infecting their families). Such efforts appeared to increase demands and reduce vital resources, exacerbating burnout. Another source of boundary violations was increased infection control requirements and *intrusions from physical barriers* like PPE. HCWs reported this as a violation between self and work that increased demands and emotional exhaustion, such as these two nurses:

> My burnout mainly comes from the PPE. I don't want to wear a mask all day, every day. It's honestly really hard for me. It gets really hot, and my skin feels irritated, and I just feel like I can't breathe appropriately." (Nurse #14, full quote in Table 3)

> I swear I have a constant headache. Everyone complains about having headaches at work all the time, and I think that's the main thing … I don't think that on my floor, we care that someone has COVID … I think it's that we're so sick of all the garb we have to wear all the time. (Nurse #3)

Distancing Effects of PPE

PPE and distancing protocols also represented a distancing boundary violation for HCWs between self and their traditional work, as they experienced greater separation from their patients and co-workers. First, such changes often increased *the physical and relational distance between the HCW and patient*, thereby decreasing HCW resources as workers lost opportunities for meaningful interactions. Nurse #65 commented on the relational effects, "There's no personal connection anymore with masking. You're wearing goggles … the only thing that they can somewhat see is your eyes." Nurse #69 recounted a time when a patient was in critical need: "For a good minute, while I was trying to put on (PPE), they were in the middle of cardiac arrest" (full quote in Table 3). He later lamented, "We've felt an overwhelming sense of moral injury due to not being able to properly care for patients." The distancing effects were intensified for HCWs treating patients with cognitive limitations such as dementia. Nurse #35 shared an account of a man with dementia, "I had a shield on once, and he ripped it off and was really scared … How do you see your patients if they're afraid of

Table 4
Supplemental Quotes on the Dimensions of Burnout

Overwhelming exhaustion
"Things really changed later on since [region] hit a surge in November and December. It got emotionally exhausting." (Nurse #4)
"Oh, man, could not tell you how many times I came home and just wanted to punch a wall . . . There was many times I came home. I had headaches. I was just overly tired, and it just got to the point where it was just really affecting my health and my sanity, and my mental health. I've always been someone motivated . . . I do Spartan Races. I do track ones. I love going hiking. I love doing things outdoors, and it was getting to the point, I just didn't want to do anything. I just wanted to go to work, come home, go to sleep. Go to work, come home, go to sleep . . . I mean, I felt a sense of relief on my very last day. I said, this is the very last day that I have to deal with this, and even that last day was rough." (Admin #22)
"Before, there were peaks and troughs in referrals and work. However, with COVID, it has been relentless, and I worry more now about burnout than ever in the past. No increased capacity was given to deal with the increase in referrals whilst simultaneously having a decrease in partners such as schools etc., to support children and families. It has been eight months of firefighting . . . It's been difficult to hire enough staff, so others do not have to work overtime. Burnout is real in the mental health and addiction sector." (Admin #55)
"Burnout has actually been a big topic I've been talking about with my coworkers. I feel like at least my coworkers, everyone's just kind of feeling burnt out now. Like, I mean, there's still good days. There's still, you know, a sense of fulfillment, but we're finding ourselves getting burnt out much, much faster and, you know, a typical nurse works three twelves a week, and so we do have days off to recharge, but I think a lot of my coworkers, I especially, we're feeling it, and it's, I mean, it's mentally exhausting some days." (Nurse #69)
"During the pandemic as a worker, we took on so many different roles and often pushed the limits of hours worked, numbers of patients [and] workers, safety measures that couldn't be taken due to lack of supplies and PPE. All of it just caused exhaustion." (Admin #74)
Feelings of cynicism and detachment from the job
"So, it's kind of sad because I never really want to objectify patients as just a number, but that just is what it turned into is just numbers at that point. It's unfortunate, but that's just, you have to numb yourself to it because otherwise, especially for nurses . . . if you get too emotional about it, you won't be able to provide the care that is necessary for that patient . . . just to help me, just not have to deal with it or cope with it. I just numb myself to it. It's easier. I don't think it's better, but sometimes it's just easier . . . I definitely think that numbing yourself can help, I guess, decrease those breakdowns, but I don't think it makes it better in the long run. I definitely think it increases burnout, most definitely." (Admin #22)
"I feel that I am caring less about non-critical patients than I used to . . . I'm not the only one. I have talked with others. We feel that we are not considering them as important as we used to . . . I think that it might be some symptom of burnout because we are taking care of these critical care patients for a really, really, really long time. I feel that it's not OK. I think that it might be some symptom of burnout. We are starting to complain about patients that we didn't complain about." (MD #46)
"And that's when you get things that are dangerous in nursing and in the healthcare profession, is when you move from burnout to compassion fatigue. You find yourself not caring about the outcome of the patient, or you find yourself not caring about staying on task and things like that. Once you've hit that point, that's a very hard point for somebody to hit, and it's very hard for somebody to accept in our profession that they're at that point, so doing everything you can to avoid getting there is huge." (Nurse #59)
"It's easy to get jaded too . . . It's easy some days to say, oh it doesn't matter . . . I've been a little saltier at times, and that's not the best mindset to have." (Nurse #69)
Sense of inefficacy and lack of accomplishment
"When the testing got done, and everything else and they told me you've got 28 patients out of 89. I said, like almost a full third of my patients are positive. And then a couple that with 26 out of 145 staff members, 26 are positive. That rocked us . . . part of it, honestly was, we felt, as a whole, we felt like we failed our patients. We did have a few of the patients pass away because of COVID. And I feel responsible for that to a certain level, not personally responsible, but just healthcare, just in general like, dude, like, what could we have done differently to prevent that? And you wrack your brain thinking about it. You wrack your brain trying to figure out how it got in. There's a big sense of personal responsibility . . . I felt like I let my staff down. They felt that same way." (Admin #10)
"We are not giving the best care. Not because we don't have the resources, but because we are [having an] attitude to those patients. And I have the feeling that it's because we are taking care of these critical care patients, like really, really, really long time. Then somebody is asking for a test or is complaining about something. That has really no importance. So, it's not an emergency diagnosis. And we are not giving our best to those patients now." (MD #46)
"Our lack of success in helping people get better at the rates we're used to and seeing people die alone and at rapid rates has led to deep moral injury. It feels a lot like PTSD in some ways, so it's a lot of complicated emotions to try and articulate . . . I guess the easiest way to explain it would be, imagine getting a job solely on the skills you've been working for years, you are very confident in your skills, but a problem comes along where no matter how precisely you practice those skills, you fail repeatedly . . . now customize that to healthcare, no matter how precise you practice your skills to keep people alive and make them better, they continue to get worse, and they keep dying . . . at alarming rates. Now reduce the trained staff, reduce the resources, add in false and empty praise from management, take away lunch and bathroom breaks, don't provide any compensation for the change in workload, and take away important benefits and you have a frustrated, overworked, underpaid, and under-appreciated staff that quite literally can't continue to show up to work and feel like they are worth anything." (Full quote in Table 5, Nurse #59)

you?" Admin #30, an assisted living owner in Brazil, similarly complained of how to explain social distancing to dementia patients, "It's more difficult to show them our love. [They ask], 'Don't you like me anymore?' So, this is, for me, the most difficult part because they don't all understand what is happening, and they ask, 'Why do you change?'" These distancing effects generally decreased resources because they impaired valued social connections, leading to a lack of involvement and greater detachment and a diminished sense of competence as caregivers and clinicians.

Similarly, we found policies implemented to limit co-contamination also unintentionally created greater *relational distance between worker and coworkers*, which crippled a critical source of coping resources for HCWs (Halbesleben, 2006). Many healthcare organizations eliminated or reduced in-person meetings and limited people taking breaks or meals with others to reduce the spread of infection. Nurse #65 spoke about the consequences of such protocols: "You can't even have a human connection with your coworkers that are going through the same thing you are." Both of

these distancing violations seemed to diminish resources and foster burnout as workers felt more isolated, unsupported, and detached from their work, patients, colleagues, and occupational identity.

Physical Boundary Work Tactics

Segmentation

In response to the physical violations, especially intrusive violations like PPE and threats of contamination, HCWs often sought distance and relief by *segmenting physical elements of work and home*. Segmentation tactics included routines or rituals designed to prevent the potential demands of physical contamination from work to home. MD #28, an ICU physician, said,

> I have to stand outside of my door and take off all of my scrubs down into my underwear, take everything off. Leave them outside. Sneak into my side door, go wash my hands, and then I'm fine. That's become a ritual.

Another reported putting a ladder from the side yard to the upstairs bedroom window. Nearly all of our participants had a routine, if not a ritual, that they followed when they came home from work during the pandemic.

Integration

Many HCWs observed the suffering of patients who were sick and more alone than normal because of all the distancing protocols. We learned of courageous stories of HCWs responding to these distance-related challenges by *sacrificing self* and *compensating for physical barriers*. MD #28 recounted:

> I was in the room for almost 40 min. I tried to console her, to hold her hand, and being in a room for 40 min; obviously, everyone is thinking about those things. Ultimately, we were able, she was unconscious, but we were able to finally make an exception and get her husband in to be with her at the end of life. And she died within 15 min of him getting there, and I got just the sweetest letter, just about the hospital making that happen and having him be able to be there and say goodbye to her for the last 15 min. So that's how the pandemic started for me.

We saw examples such as this where HCWs, instead of detaching, chose immersive actions to engage with their patients at their own risk or burden. Another example came from a physician in Chile (MD #43) who said, "The worst thing was attending patients with [PPE] because they didn't see you. They were [scared] … alone … and we were the last people they'd see." To compensate for these barriers, he added photos to all workers' name tags to humanize their interactions and shared this with others. Such engaging acts seemed to increase demands while paradoxically increasing resources as spirits were lifted, detachment reduced, and involvement increased.

Knowledge Boundary Violations

Knowledge boundaries refer to the limits or borders of a person or group's knowledge base concerning a different person or group (Hawkins & Rezazade, 2012). These disconnects can be based on ignorance, linguistic differences, or different world views. Whereas past research on knowledge boundaries has focused on intra- and inter-organizational levels (e.g., Carlile, 2002; Edmondson & Harvey, 2018; Faraj & Yan, 2009), we focus on the knowledge boundaries between occupational members and the general public as it relates to the work-nonwork boundary. HCWs experienced *frustration of ignorance and misinformation* as well as isolation from *feeling misunderstood by others* regarding the nature of their work. These knowledge boundary violations left HCWs feeling increasingly exasperated and exhausted by their efforts, detached from their larger communities, and cynical about their politicized role in the pandemic, as exemplified by this ICU nurse who touches on these themes:

> Now we are all exhausted from hundreds of hours of mandatory overtime or the dozens of people I have watched die alone, while the general population began to condemn us for taking things seriously. People told me, "We all have bad days at work. You signed up for this." People accused us of making the pandemic out to be worse than it really was. People called us sheep for wanting [or] taking vaccines. When really, we were desperate for help. (Nurse #7)

Intrusion Effects of Ignorant Beliefs

Many participants reported *frustration of ignorance and misinformation* from the media, government leaders, strangers, friends, and even close family members about conspiracies, accusatory questions, ignorance, and a blatant disregard for the expertise and knowledge of HCWs. Such ignorance and misinformation created intrusion events where nonwork elements (e.g., a relative's misinformed opinion or an ignorant social media comment) infringed on their work-related domain. Such intrusions gave a sense that workers were not only unable to get away from work-related matters, but that ignorant outsiders were questioning their competence and expertise. As Nurse #65 said, their work was suddenly a topic of conversation, and this intrusion violated traditional boundaries between work and nonwork:

> You're seeing … how sick people are and then people that are taking it so callously and then basically almost calling you a liar. That, 'Oh, it's not that bad.' And it's like, well, I've seen it. It is that bad. So, I feel like that part has been more frustrating, you know, turning it off when you go home. Now, all of a sudden, it's like your career choice is now in the news. Like we were never, as nurses, that, like, frontline in news stories every single day.

HCWs commented that such beliefs and disregard for their opinions and experience were especially intrusive and emotionally exhausting, given their sacrifices. HCWs reported feeling emotional exhaustion and inefficacy because they were "helpless" to prevent external influences from impacting their work domain and identity related to their role of saving lives and preserving wellness:

> I do continue to struggle with how the pandemic and medicine became politicized … We continue to have states and governments making decisions based on politics that will lead to more and more death … I have never felt so helpless to be at the mercy of whatever agenda the politicians have in managing my career and the health of America. (Doctor #28)

Distancing Effects From Isolated Experience

HCWs commonly complained of *feeling misunderstood by others* inside and outside their social circles about what they were

experiencing during the pandemic. Workers spoke of how this sense of isolation increased burnout as HCWs operated with fewer resources to cope. Physician assistant #68, who dealt with months of sacrifice and suffering in response to the initial New York City outbreak in the Spring of 2020, expressed her sense of separation from friends who were not HCWs and were concerned about postponing their weddings: "I sympathize with them because I do think a wedding is a special event, but the reality is that it's postponed because two hundred thousand people have died." HCWs often felt their experiences, compared to those of their family and friends, were frustratingly dissimilar, which meant carrying more of their burdens with fewer of the benefits of nonwork social support (Halbesleben, 2006).

Knowledge Boundary Work Tactics

Integration

Our participants had varied responses to the ignorance and feelings of separation, but the most common and intense was *advocating with facts and science*. In response to intrusive ignorance, HCWs regularly advocated for the existence of the COVID-19 virus, social distancing and masks, the role and importance of HCWs, and for science and trust in public health. Nurse #59 saw it as a responsibility:

> And so, we take it upon ourselves to combat pseudoscience . . . being in the realm that I was, being in the COVID ICU unit, seeing it first-hand, having that unique perspective, I did feel early on a very strong responsibility to just put things out there. (Full quote in Table 3)

Advocates usually sought to reduce the knowledge boundary between them and others in order to feel more understood and respected, which, when successful, increased resources and reduced detachment. When confronted with naysayers, Admin #26 said, "I educate. If I hear someone say they won't wear a mask or social distance, I just say I work with a vulnerable population . . . I think it's important to educate and lead by example." A physician assistant in New York City decided to educate her loved ones and ultimately found a way to cope with her emotional distress:

> I would write this weekly email and send it out to family and friends because I was just like, "You can't even believe it. I could never even believe how crazy it was unless I went through it myself." And the amount of people dying and everything and it was just, at the time, in April or March, you heard on the news, people like: "Oh, this is not really going on, this is a political thing." [Of my patients,] ten people died this week from COVID. One of them was 32 years old. One of them was a couple that was 60. Just like nightmare after nightmare story . . . It was therapeutic to sit down and write the email . . . about the stories of people. I felt like I was getting . . . them the attention and respect that they needed from people who wouldn't otherwise be taking it seriously. (PA #25)

Segmentation

Not all sought to reduce the knowledge boundaries between themselves and ignorant non-HCWs. Many reported that advocating was not worth the added demands of a fight and preferred *accepting or ignoring ignorant others* to reduce existing or potentially added emotional exhaustion. Whereas *accepting ignorant others* occurred once a conversation had started, *ignoring ignorant others* was about avoiding the conversation (in-person or virtually on social media) in the first place. MD #49 said, "I don't get into it too much with these people . . . getting into that type of debate or trying to persuade or change their mind, it's never that productive, and it usually ends badly." Another physician spoke about acceptance as a way to avoid the exhaustion of trying to change minds:

> But they are getting the same information . . . so that's been just us kind of being OK with just letting go . . . Arguing endlessly with people who have these things in their mind isn't worth it. You just, again, you feel exhausted. And you're like, you know what it's not, it's not worth my time, my effort, my breath, to try to change your mind, because I can't. (MD #28)

Temporal Boundary Violations

A temporal boundary violation in the work-nonwork boundary occurs when unwanted elements creep into a domain at unwanted times, such as work-related demands on one's day off (Kreiner et al., 2009). In our sample, a high number of HCWs reported feeling burned out because of all the unique ways that work intruded on nonwork time during the pandemic, such as *spillover of work into time off* and *client/patient rumination and prognosis effects*, intrusions that seemed to increase emotional exhaustion.

Intrusions of Non-Work Time

Many HCWs were forced to deal with a *spillover of work into time off* by either having extra work demands, work-related items being inescapable because of their salience (e.g., frequent news coverage of the pandemic), or because of emotional exhaustion impacting time off. In many cases, the pandemic exacerbated staffing shortages and led to increased patient loads, affecting HCWs' time off work by forcing them to stay later or take work home. PA #29 told us, "That's where you get more burnout, because I'm taking 16 notes home that I still have to finish, so I'm at home now doing 2–3 hr' worth of work, whereas, before the pandemic, it wasn't as bad." A physician described the emotional exhaustion that intruded on his time off when he wanted to be recuperating with family:

> You come home emotionally, mentally drained . . . I'm so fried by the time I get home that I become a zombie . . . I want my mind and my heart to be at home as much as at work, and it's gone by the time I get home. And my kids are excited to see me . . . but, you know, it's tough. (MD #28)

Another emotionally exhausting intrusion stemmed from HCWs' genuine concern for their patients' well-being, contributing to *client/patient rumination and prognosis effects*. Many HCWs had access to electronic medical records, allowing them to check on their patients during time off. The lingering uncertainty over patient outcomes sometimes meant patients who seemed to stabilize or improve when workers' shifts ended suddenly worsened or even died. PA #25 could not resist checking in on a specific patient whom she was worried about: "I remember sitting at my kitchen table and logging on and reading the note that he passed away at 1 a.m. It was hard" (full quote in Table 3). These intrusions to temporal work-nonwork boundaries added emotional exhaustion as HCWs struggled ever to feel "off work."

Temporal Boundary Work Tactics

Segmentation

In the face of violated temporal boundaries, we observed that many HCWs fought back, *strengthening work-nonwork time boundaries* by utilizing temporal segmentation tactics to separate work and nonwork and decrease demands and emotional exhaustion as much as possible. While staffing shortages exacerbated the need for overtime work, several HCWs spoke of the need to set boundaries on how much they worked, often for the first time in their careers. PA #68 remarked, "We have three shifts a week, and usually I will work extra, but during COVID, I [didn't] because I was so exhausted, but it was good for me to prevent being burned out." Additionally, workers purposely stopped reading emails or attending the many off-day meetings about COVID-related protocols to segment their time. Another tactic that HCWs reported being successful was *debriefing with coworkers* while at work. Utilizing this tactic paradoxically aided after-work segmentation because it provided an outlet to discuss the increased demands of pandemic work with knowledgeable, sympathetic others. It seemed to kindle a "discharge" that helped our interviewees let go of pervasive concerns instead of taking them home. Our interviewees reported that this was most successful when there were established outlets at work so HCWs could fight off emotional exhaustion and encroaching thoughts of work by telling themselves they would consider such thoughts at designated times—a temporal compartmentalization that allows the worker to postpone unwanted attention to work issues until back in the workplace. MD #46, a physician in Chile, said: "Many times [I] start talking with other colleagues, so I feel that I don't have the need to think about my patients at home because I know that I have other places where I can solve those problems."

Integration

Given the pervasiveness of the pandemic, we were not surprised that most of the temporal strategies were segmenting. But, reinforcing the issue of individual proclivities for boundary work, we found some integration where discussing, complaining, and *debriefing with coworkers* who understood their unique experiences occurred during nonwork time. In response to the distancing protocols discussed previously, HCWs reported this integration of work and nonwork time as increasing coping resources that were sorely needed. Nurse #35 spoke of late-night calls with a fellow hospice nurse:

> It's really easy to bounce things off her . . . because one of us has been there usually, and so it's healthy . . . She can relate and tell me a story . . . I just really appreciate my team and being able to talk through it . . . I don't think I could have gotten through some of those hard, dark days.

Discussion

Our findings provide a holistic and in-depth analysis of how HCWs experienced work during the contextual shock of the COVID-19 pandemic. Consistent with grounded theory principles, we elaborate theory (Charmaz, 2014; Eisenhardt, 2021; Fisher & Aguinis, 2017) on boundary work and burnout by developing a model of how workers experience boundary violations and burnout, as well as how workers can employ boundary work tactics to reduce and avoid such burnout. Our analysis demonstrates specific relationships between intrusion and distancing events and job-related demands and resources. In addition, we identify the potential of boundary work tactics to reshape boundaries and reduce burnout. Our findings have substantial implications for a wide array of occupations and contexts.

Implications for Theory

Burnout Literature

First, our work confirms and expands upon recent quantitative work indicating the pandemic exacerbated burnout in HCWs, and answers calls for greater qualitative inquiry into the causal mechanisms of burnout (Jalili et al., 2020). Whereas most related research during the pandemic has focused on measuring the prevalence of burnout (Barello et al., 2020; Chor et al., 2020; Duarte et al., 2020; Jalili et al., 2020; Khasne et al., 2020; Lievens, 2021; Morgantini et al., 2020; Ruiz-Fernández et al., 2020; Wu et al., 2020), our qualitative findings provide a rich depth of specific examples detailing *how* and *why* burnout increased and, importantly, what can be done in response. Second, our approach examines the lived experiences of workers holistically. Burnout research has traditionally confined itself to explorations of the employee as situated in the organization. And yet, the workplace is only one facet of a worker's life, which means much of traditional burnout research overlooks a vast swath of a worker's extra-organizational life. In our application of boundary theory, we offer researchers a novel approach that integrates individuated causes of burnout with important contextual determinants (Ashforth & Lee, 1997). In doing so, we also contribute to promising research linking work-nonwork conflict to burnout (Allen et al., 2000; Kossek & Ozeki, 1999; Reichl et al., 2014; Tone Innstrand et al., 2008) by highlighting how specific boundary violations exacerbate burnout (i.e., via job demands and resources). Indeed, by integrating the JD-R model and boundary theory, we suggest that intrusion events may increase job demands, which in turn may increase emotional exhaustion. Distancing events, on the other hand, may deplete resources and lead to greater feelings of detachment and cynicism. Third, our findings contribute to the burnout literature by providing boundary work as a new category of options for workers to buffer the effects of burnout and perhaps even forestall it. By documenting how workers respond to boundary violations following a contextual shock, our research expands the field's knowledge of tactics that can be effectively employed to counteract burnout (Cordes & Dougherty, 1993). Specifically, we illustrate in our findings the patterns of segmenting tactics being utilized to respond to intrusion events and the integration tactics being used to respond to distancing events. We also shed light on how these boundary work tactics ameliorate burnout dimensions in specific ways (e.g., segmenting tactics decrease demands, which decreases emotional exhaustion). Fourth, our subcategories of integrating boundary work tactics provide rich examples of workers responding to the threat of burnout by immersing themselves deeper into work, answering calls by Maslach et al. (2001), and others to identify burnout interventions that increase engagement from meaningful interpersonal work (Lilius, 2012). This contribution adds nuance and complexity to our understanding of burnout: Simply avoiding demands is not the only answer to addressing burnout. Fifth, our findings contribute to research related to the JD-R model of

Table 5
Examples of Boundary Violations Exacerbating Burnout (Including Code and Boundary Type)

Boundary type	Sample quotes
	Intrusion events associated with increased job demands
Physical work-self boundary	After being asked if they experience burnout: "Of course. I saw a brand-new nurse leave healthcare entirely. I saw a 5–6-year nurse throw up before every shift and then quit hospital nursing, and myself. I have 14 years' experience and had to start anti-anxiety medication because I started having panic attacks. The things we saw in the spring last year and then again in November are the things nightmares are made of. So, to do that and face that day after day gets hard, and it's not like we can take a vacation or getaway to recharge our batteries. We are stuck at home or at work, and that's it. It was super tough." (Nurse #62)
Knowledge work-nonwork boundary	"Now we are all exhausted from hundreds of hours of mandatory overtime. Or the dozens of people I have watched die alone, while the general population began to condemn us for taking things serious. People told me, "we all have bad days at work. You signed up for this." People accused us of making the pandemic out to be worse than it really was. People called us sheep for wanting [or] taking vaccine. When really we were desperate for help." (Nurse #7) "It is weird how health professionals are more prone to give the extra mile for their jobs, sacrificing personal and family time. The pandemic exacerbated the needs from our job places [with] covering sick colleagues, overwhelming waves of critical patients, and having the media all over our jobs, etc." (Doctor #47) "I am so sick and tired of people asking me about COVID. I think that's the other thing. It's like, oh, you're a nurse. Oh, what's COVID like at your hospital? Oh, do you work with COVID patients, and they want the inside details, and I'm just too tired to give people inside details." (Nurse #87)
Temporal work-nonwork boundary	"An area of specific exhaustion as an executive nursing leader during the pandemic was the virtual ongoing daily length of work-life imbalance. What I mean by that is we had early zoom and WebEx meetings and then late into the evening updates. The nature of electronic work often required "consistent availability at all hours of the day and night and even on the weekends." (Admin #6) "I would say most everybody that I work with has experienced a level of burnout that we didn't really anticipate . . . There is a lot of extra and added mental stress that's really hard to quantify and put into words. It's just that part of the brain that doesn't speak. You can't really describe it. The staff are dropping like flies because they're so burnt out . . . Honestly, this year is the first time in my 6 years of working in healthcare that I have not been able to leave work at work. The mental stress of being on a COVID ICU, increased patient workload, being a family's only lifeline to the patient, being short-staffed, management unwilling to listen or act on staff grievances, terrible compensation, public scrutiny, political agendas; all of that comes home with healthcare workers . . . Nurses during this pandemic have had their personal and professional boundaries tested like never before. All of that has caused the burnout and exhaustion level of nurses to increase exponentially. (Nurse #59) "My husband and I do not talk about work. I like to close that piece on my way home. He can always tell when it's been a bad or good day just by the way I walk in. The part that changed is I needed more from him during the height of COVID. I had so much anxiety after work that I struggled to sleep. He would rub my arm until I fell asleep. I normally do not have any sleeping issues. I'm not normally super needy, physically or emotionally. Due to the pandemic, I was very needy emotionally and physically. I also took long naps on my off days. Recuperating from workdays took a lot more time than usual. I always thought about work and was I going to bring COVID home to my family." (Admin #74)
	Distancing events associated with reduced resources
Physical work-self boundary	"The pandemic definitely made me feel like I needed to isolate myself, even when at work. To help reduce my own exposure and possibly exposing others as well should I have contracted the virus. This meant avoiding people at work when I would have otherwise stopped to communicate. Avoiding patients as a courtesy, sort of thing." (Admin #22) It kind of feels like we were in this wartime, where we had to help out our fellow coworkers because we were the only ones that knew what those conditions felt like. It also felt like we were the only ones that could understand what we were going through, so we wouldn't bother saying how work really was when asked because it wasn't worth having to describe what went on. Fatigue was just the result of multiple hard/sad/tragic shifts and not being able to talk about it. (Nurse #65)
Knowledge work-nonwork boundary	"It's just frustrating to walk away from a conversation like that and feel like that you haven't helped change anything. You haven't fixed anything, because I think in health care, we often want to fix things, and we want to, you know, change the course for the better, and in talking with some of these people, you can't do that and you just kind of feel like you failed at your job to try to spread correct information to the public." (Nurse #87)

burnout (Demerouti et al., 2001) by suggesting how intrusion events may have increased job demands and how distancing events seemed to reduce previously held resources (e.g., being able to complain and debrief at work with coworkers); and thus, exacerbate burnout (Steed et al., 2021). Finally, while past research has shown social support to be a resource to buffer burnout and/or work-nonwork conflict (e.g., French et al., 2018; Halbesleben, 2006; Maslach et al., 2001), our work confirms this, but also shows that social support is only one component of a larger story. Overall, we show how boundary work can be done intrapsychically, interpersonally, and collectively to forestall burnout.

Boundary Theory Literature

Whereas past research has focused on the types of tactics used in *response* to boundary violations, we contribute to the various literatures that draw on boundary theory (specifically, the work-nonwork, work-self, and boundary work literatures) by articulating the *sources* of boundary violations more precisely. In particular, we show the effects of a contextual shock on boundary violations. Further, we elaborate boundary theory by exploring in great detail the highly promising dichotomization of violations (intrusion vs. distance), which had been raised in previous research

(e.g., Kreiner et al., 2009) but undertheorized. Moreover, we tie these two types of boundary violations to specific dimensions of burnout. We also contribute to the boundary work literature by documenting what individuals do with regard to work-nonwork and work-self boundaries in response to violations and, moreover, what specific tactics they believe to be successful. We also note that whereas Kreiner et al. (2009) studied work-nonwork dynamics during a steady-state situation (ongoing day-to-day living of clergy), we show how a systemic shock affects these boundary dynamics. We also contribute to boundary theory-related literature by demonstrating the linkages between *knowledge* boundaries and work-nonwork and work-self dynamics. Past work has overlooked how knowledge does or does not pass through the work-nonwork or work-self boundary, focusing instead on intra-team, inter-team, or inter-organization levels of analysis (e.g., Carlile, 2002; Edmondson & Harvey, 2018; Faraj & Yan, 2009; Hawkins & Rezazade, 2012). By contrast, we show how knowledge boundaries can directly affect work-nonwork and work-self dynamics and expect this to be a promising path for future research to follow. In doing so, we add knowledge boundary work to the four-part model of Kreiner et al. (2009), who also featured physical and temporal dimensions (as do we), along with communicative and behavioral dimensions. Hence, our work both extends and replicates Kreiner et al.'s (2009) findings.

Future Research

In addition to the ideas provided above, we encourage future research to explore additional applications of boundary work to address burnout. Specifically, future research should operationalize strategies in work and nonwork settings and quantitatively test which tactics prove most effective under varying circumstances (e.g., types of workplaces, individual preferences for integration or segmentation). Researchers should also consider personal "micro-shocks" to see how workers experience personally disruptive life events as boundary violations and explore how they utilize boundary work to ameliorate burnout. Studies could also examine how work-at-home policies during and after the pandemic influence(d) boundary violations and burnout across different occupations and organizations (Bourdeau et al., 2019). Given that post-COVID workplace arrangements are currently unknown, future research can examine boundary violations as the "return to the workplace" process unfolds (i.e., how boundary work will play out as workers get back to their places of work).

Implications for Practice

An exploration of boundary theory can provide practitioners with additional burnout prevention and response tactics that have demonstrable effects in real organizations and are likely transferable to other industries. Our findings highlight how critical it is for healthcare and other organizations to be aware of how shocks like the COVID-19 pandemic can provoke boundary violations in their workforce. As we noted, such violations often create additional hardships on an already beleaguered workforce. Awareness of these added stressors and burdens allows for empathy and relevant action (Kanov, 2021), which should be individualized and especially sensitive to marginalized or underprivileged groups (see Table 6 for specific recommendations for organizations and managers). Armed with this knowledge, management can help facilitate boundary work, particularly when employee burnout is known to be present. Offering employees opportunities to either separate or integrate work and nonwork as desired (instead of forcing integration or segmentation) could attenuate burnout.

Table 6
Practical Recommendations for Organizations and Managers During Shock Events

Recommendations
1. In the presence of a shock event, organizational leaders ought to consider the second-order side effects of the organization's response(s) on the workforce. A new program or policy may be beneficial in one respect (e.g., reducing pathogen transmission), but harmful in another (e.g., reducing workforce interaction).
2. Organizational leaders ought to reconsider existing policies and procedures in light of a shock event. Shock events have the capability of transforming once-beneficial policies into counterproductive burdens on the workforce.
3. Organizational leaders ought to carefully re-evaluate employee workloads and resources following a systemic shock, realizing an imbalance in any one (or both) of these dimensions can contribute to increased feelings of exhaustion, detachment, cynicism, and inefficacy (i.e., burnout). It is important for organizational leaders to recognize that once-stable employees may begin to evidence signs and symptoms of burnout following a shock event (whether personal or systemic).
4. During and/or following a shock event, offer employees outlets with which to express newfound stressors to co-workers or similar others who can comprehend and empathize with their lived experience(s).
5. Train managers and workers to identify different facets of burnout. Workers with high levels of exhaustion may need more distance from work (i.e., time-off). Workers evidencing symptoms of detachment and/or cynicism may benefit from additional resources that empower them to engage more with their work.
6. Empower workers to craft their job experience in ways that will encourage greater engagement on their part. Workers in lower-status positions might especially need empowerment to have their ideas heard and for them to feel included.
7. When resources are threatened by a shock event, organizational leaders may facilitate work and nonwork interaction like allowing voluntary opportunities to work from home or by inviting family/friends to social gatherings.
8. Consider increasing monetary or other benefits, even temporarily, to show appreciation for workers taking on additional burdens and responsibilities during shock events.
9. During shock events, organizational leaders may encourage the voluntary adoption of temporary routines, which serve to segment work and nonwork and reduce demands away from work.
10. Provide opportunities and psychological safety for workers to admit emotional exhaustion. Empower managers to encourage exhausted workers to take time off, leave early, or extend break times, whenever possible.

References

Allen, T. D., Cho, E., & Meier, L. L. (2014). Work–family boundary dynamics. *Annual Review of Organizational Psychology and Organizational Behavior*, *1*(1), 99–121. https://doi.org/10.1146/annurev-orgpsych-031413-091330

Allen, T. D., French, K. A., Dumani, S., & Shockley, K. M. (2020). A cross-national meta-analytic examination of predictors and outcomes associated with work-family conflict. *Journal of Applied Psychology*, *105*(6), 539–576. https://doi.org/10.1037/apl0000442

Allen, T. D., Herst, D. E., Bruck, C. S., & Sutton, M. (2000). Consequences associated with work-to-family conflict: A review and agenda for future research. *Journal of Occupational Health Psychology*, *5*(2), 278–308. https://doi.org/10.1037/1076-8998.5.2.278

Ashforth, B. E., Kreiner, G. E., & Fugate, M. (2000). All in a day's work: Boundaries and micro role transitions. *Academy of Management Review*, *25*(3), 472–491. https://doi.org/10.5465/amr.2000.3363315

Ashforth, B. E., & Lee, R. T. (1997). Burnout as a process: Commentary on Cordes, Dougherty and Blum. *Journal of Organizational Behavior*, *18*(6), 703–708. https://doi.org/10.1002/(SICI)1099-1379(199711)18:6<703::AID-JOB847>3.0.CO;2-1

Bakker, A. B., & Demerouti, E. (2007). The job demands-resources model: State of the art. *Journal of Managerial Psychology*, *22*(3), 309–328. https://doi.org/10.1108/02683940710733115

Bakker, A. B., Demerouti, E., & Euwema, M. C. (2005). Job resources buffer the impact of job demands on burnout. *Journal of Occupational Health Psychology*, *10*(2), 170–180. https://doi.org/10.1037/1076-8998.10.2.170

Barello, S., Palamenghi, L., & Graffigna, G. (2020). Burnout and somatic symptoms among frontline healthcare professionals at the peak of the Italian COVID-19 pandemic. *Psychiatry Research*, *290*, Article 113129. https://doi.org/10.1016/j.psychres.2020.113129

Bourdeau, S., Ollier-Malaterre, A., & Houlfort, N. (2019). Not all work-life policies are created equal: Career consequences of using enabling versus enclosing work-life policies. *Academy of Management Review*, *44*(1), 172–193. https://doi.org/10.5465/amr.2016.0429

Campbell, M., & Gavett, G. (2021, February 10). What covid-19 has done to our well-being, in 12 charts. *Harvard Business Review*. https://hbr.org/2021/02/what-covid-19-has-done-to-our-well-being-in-12-charts

Carlile, P. R. (2002). A pragmatic view of knowledge and boundaries: Boundary objects in new product development. *Organization Science*, *13*(4), 442–455. https://doi.org/10.1287/orsc.13.4.442.2953

Casper, W. J., Vaziri, H., Wayne, J. H., DeHauw, S., & Greenhaus, J. (2018). The jingle-jangle of work-nonwork balance: A comprehensive and meta-analytic review of its meaning and measurement. *Journal of Applied Psychology*, *103*(2), 182–214. https://doi.org/10.1037/apl0000259

Charmaz, K. (2014). *Constructing grounded theory: A practical guide through qualitative analysis* (2nd ed.). Sage Publications.

Chor, W. P. D., Ng, W. M., Cheng, L., Situ, W., Chong, J. W., Ng, L. Y. A., Mok, P. L., Yau, Y. W., & Lin, Z. (2020). Burnout amongst emergency healthcare workers during the COVID-19 pandemic: A multi-center study. *The American Journal of Emergency Medicine*. Advance online publication. https://doi.org/10.1016/j.ajem.2020.10.040

Clark, S. C. (2000). Work/family border theory: A new theory of work/family balance. *Human Relations*, *53*, 747–770. https://doi.org/10.1177/0018726700536001

Corbin, J., & Strauss, A. (2008). *Basics of qualitative research: Techniques and procedures for developing grounded theory*. Sage Publications. https://doi.org/10.4135/9781452230153

Cordes, C. L., & Dougherty, T. W. (1993). A review and an integration of research on job burnout. *Academy of Management Review*, *18*(4), 621–656. https://doi.org/10.5465/amr.1993.9402210153

Crawford, W. S., Thompson, M. J., & Ashforth, B. E. (2019). Work-life events theory: Making sense of shock events in dual-earner couples. *Academy of Management Review*, *44*(1), 194–212. https://doi.org/10.5465/amr.2016.0432

Demerouti, E., Bakker, A. B., Nachreiner, F., & Schaufeli, W. B. (2001). The job demands-resources model of burnout. *Journal of Applied Psychology*, *86*(3), 499–512. https://doi.org/10.1037/0021-9010.86.3.499

Duarte, I., Teixeira, A., Castro, L., Marina, S., Ribeiro, C., Jácome, C., Martins, V., Ribeiro-Vas, I., Pinheiro, H. C., Silva, A. R., Ricou, M., Sousa, B., Alves, C., Oliveira, A., Silva, P., Nunes, R., & Serrão, C. (2020). Burnout among Portuguese healthcare workers during the COVID-19 pandemic. *BMC Public Health*, *20*(1), Article 1885. https://doi.org/10.1186/s12889-020-09980-z

Edmondson, A. C., & Harvey, J. F. (2018). Cross-boundary teaming for innovation: Integrating research on teams and knowledge in organizations. *Human Resource Management Review*, *28*(4), 347–360. https://doi.org/10.1016/j.hrmr.2017.03.002

Eisenhardt, K. M. (2021). What is the Eisenhardt method, really? *Strategic Organization*, *19*(1), 147–160. https://doi.org/10.1177/14761270209 82866

Eisenhardt, K. M., & Graebner, M. E. (2007). Theory building from cases: Opportunities and challenges. *Academy of Management Journal*, *50*(1), 25–32. https://doi.org/10.5465/amj.2007.24160888

Faraj, S., & Yan, A. (2009). Boundary work in knowledge teams. *Journal of Applied Psychology*, *94*(3), 604–617. https://doi.org/10.1037/a0014367

Fisher, G., & Aguinis, H. (2017). Using theory elaboration to make theoretical advancements. *Organizational Research Methods*, *20*(3), 438–464. https://doi.org/10.1177/1094428116689707

French, K. A., & Allen, T. D. (2020). Episodic work-family conflict and strain: A dynamic perspective. *Journal of Applied Psychology*, *105*(8), 863–888. https://doi.org/10.1037/apl0000470

French, K. A., Dumani, S., Allen, T. D., & Shockley, K. M. (2018). A meta-analysis of work-family conflict and social support. *Psychological Bulletin*, *144*(3), 284–314. https://doi.org/10.1037/bul0000120

Gieryn, T. F. (1983). Boundary-work and the demarcation of science from non-science: Strains and interests in professional ideologies of scientists. *American Sociological Review*, *48*(6), 781–795. https://doi.org/10.2307/2095325

Glaser, B. G., & Strauss, A. (1967). *The discovery of grounded theory: Strategies for qualitative research*. Aldine-Athestor.

Grandey, A. A., & Cropanzano, R. (1999). The conservation of resources model applied to work–family conflict and strain. *Journal of Vocational Behavior*, *54*(2), 350–370. https://doi.org/10.1006/jvbe.1998.1666

Greenhaus, J. H., & Beutell, N. J. (1985). Sources and conflict between work and family roles. *Academy of Management Review*, *10*(1), 76–88. https://doi.org/10.5465/amr.1985.4277352

Halbesleben, J. R. B. (2006). Sources of social support and burnout: A meta-analytic test of the conservation of resources model. *Journal of Applied Psychology*, *91*(5), 1134–1145. https://doi.org/10.1037/0021-9010.91.5.1134

Hawkins, M., & Rezazade, M. (2012). Knowledge boundary spanning process: Synthesizing four spanning mechanisms. *Management Decision*, *50*, 1800–1815. https://doi.org/10.1108/00251741211279611

Hennekam, S., Ladge, J., & Shymko, Y. (2020). From zero to hero: An exploratory study examining sudden hero status among nonphysician health care workers during the COVID-19 pandemic. *Journal of Applied Psychology*, *105*(10), 1088–1100. https://doi.org/10.1037/apl0000832

Hirschi, A., Shockley, K. M., & Zacher, H. (2019). Achieving work-family balance: An action regulation model. *Academy of Management Review*, *44*(1), 150–171. https://doi.org/10.5465/amr.2016.0409

Jalili, M., Niroomand, M., Hadavand, F., Zeinali, K., & Fotouhi, A. (2020). *Burnout among healthcare professionals during COVID-19 pandemic: A cross-sectional study*. medRxiv. https://doi.org/10.1101/2020.06.12.20129650

Kanov, J. (2021). Why suffering matters! *Journal of Management Inquiry*, *30*(1), 85–90. https://doi.org/10.1177/1056492620929766

Katherine, A. (1991). *Boundaries: Where you end and I begin*. MJF Books.

Khasne, R. W., Dhakulkar, B. S., Mahajan, H. C., & Kulkarni, A. P. (2020). Burnout among healthcare workers during COVID-19 pandemic in India: Results of a questionnaire-based survey. *Indian Journal of Critical Care Medicine : Peer-Reviewed, Official Publication of Indian Society of Critical Care Medicine*, *24*(8), 664–671. https://doi.org/10.5005/jp-journals-10071-23518

Kossek, E. E., Lautsch, B. A., & Eaton, S. C. (2006). Telecommuting, control, and boundary management: Correlates of policy use and practice, job control, and work–family effectiveness. *Journal of Vocational Behavior*, *68*, 347–367. https://doi.org/10.1016/j.jvb.2005.07.002

Kossek, E. E., & Ozeki, C. (1999). Bridging the work-family policy and productivity gap: A literature review. *Community Work & Family*, *2*(1), 7–32. https://doi.org/10.1080/13668809908414247

Kossek, E. E., Ruderman, M. N., Braddy, P. W., & Hannum, K. M. (2012). Work–nonwork boundary management profiles: A person-centered approach. *Journal of Vocational Behavior*, *81*(1), 112–128. https://doi.org/10.1016/j.jvb.2012.04.003

Kreiner, G. E. (2015). "Tabula Geminus": A "both/and" approach to coding and theorizing. In K. D. Elsbach & R. M. Kramer (Eds.), *Handbook of qualitative organizational research: Innovative Pathways and Methods* (pp. 350–361). Taylor and Francis.

Kreiner, G. E., Hollensbe, E. C., & Sheep, M. L. (2006). On the edge of identity: Boundary dynamics at the interface of individual and organizational identities. *Human Relations*, *59*(10), 1315–1341. https://doi.org/10.1177/0018726706071525

Kreiner, G. E., Hollensbe, E. C., & Sheep, M. L. (2009). Balancing borders and bridges: Negotiating the work-home interface via boundary work tactics. *Academy of Management Journal*, *52*(4), 704–730. https://doi.org/10.5465/amj.2009.43669916

Langley, A., Lindberg, K., Mørk, B. E., Nicolini, D., Raviola, E., & Walter, L. (2019). Boundary work among groups, occupations, and organizations: From cartography to process. *The Academy of Management Annals*, *13*(2), 704–736. https://doi.org/10.5465/annals.2017.0089

Leiter, M., & Maslach, C. (2005). A mediation model of job burnout. In A. S. G. Antoniou & C. L. Cooper (Eds.), *Research companion to organizational health psychology* (pp. 544–564). Edward Elgar.

Leslie, L. M., King, E. B., & Clair, J. A. (2019). Work-life ideologies: The contextual basis and consequences of beliefs about work and life. *Academy of Management Review*, *44*(1), 72–98. https://doi.org/10.5465/amr.2016.0410

Lievens, D. (2021, February 10). How the pandemic exacerbated burnout. *Harvard Business Review*. https://hbr.org/2021/02/how-the-pandemic-exacerbated-burnout

Lilius, J. M. (2012). Recovery at work: Understanding the restorative side of "depleting" client interactions. *Academy of Management Review*, *37*(4), 569–588. https://doi.org/10.5465/amr.2010.0458

Lincoln, Y. S., & Guba, E. G. (1985). *Naturalistic inquiry*. Sage Publications. https://doi.org/10.1016/0147-1767(85)90062-8

Locke, K. D. (2001). *Grounded theory in management research*. Sage.

Maslach, C. (1982). Understanding burnout: Definitional issues in analyzing a complex phenomenon. In W. S. Paine (Ed.), *Job stress and burnout: Research, Theory andIntervention Perspectives* (pp. 29–40). Sage Focus Editions.

Maslach, C., & Jackson, S. E. (1981). The measurement of experienced burnout. *Journal of Organizational Behavior*, *2*(2), 99–113. https://doi.org/10.1002/job.4030020205

Maslach, C., & Jackson, S. E. (1984). Burnout in organizational settings. *Applied social psychology annual*, *5*, 133–153.

Maslach, C., Schaufeli, W. B., & Leiter, M. P. (2001). Job burnout. *Annual Review of Psychology*, *52*, 397–422. https://doi.org/10.1146/annurev.psych.52.1.397

Morgantini, L. A., Naha, U., Wang, H., Francavilla, S., Acar, Ö., Flores, J. M., Crivellaro, S., Moreira, D., Abern, M., Eklund, M., Vigneswaran, H. T., & Weine, S. M. (2020). Factors contributing to healthcare professional burnout during the COVID-19 pandemic: A rapid turnaround global survey. *PLOS ONE*, *15*(9), Article e0238217. https://doi.org/10.1371/journal.pone.0238217

Morgeson, F. P., Mitchell, T. R., & Liu, D. (2015). Event system theory: An event-oriented approach to the organizational sciences. *Academy of Management Review*, *40*(4), 515–537. https://doi.org/10.5465/amr.2012.0099

Morrow, S. L. (2005). Quality and trustworthiness in qualitative research in counseling psychology. *Journal of Counseling Psychology*, *52*(2), 250–260. https://doi.org/10.1037/0022-0167.52.2.250

Moss, J. (2021, February 10). Beyond burned out. *Harvard Business Review*. https://hbr.org/2021/02/beyond-burned-out

Nippert-Eng, C. E. (1996). *Home and work: Negotiating boundaries through everyday life*. University of Chicago Press. https://doi.org/10.7208/chicago/9780226581477.001.0001

Reichl, C., Leiter, M. P., & Spinath, F. M. (2014). Work–nonwork conflict and burnout: A meta-analysis. *Human Relations*, *67*(8), 979–1005. https://doi.org/10.1177/0018726713509857

Rheinhardt, A., Kreiner, G. E., Gioia, D. A., & Corley, K. (2018). Conducting and publishing rigorous qualitative research. In C. Cassell, A. Cunliffe, & G. Grandy (Eds.), *Sage handbook of qualitative business and management research methods* (pp. 515–531). Sage Publications.

Rothbard, N. P., Phillips, K. W., & Dumas, T. L. (2005). Managing multiple roles: Work-family policies and individuals' desires for segmentation. *Organization Science*, *16*(3), 243–258. https://doi.org/10.1287/orsc.1050.0124

Ruiz-Fernández, M. D., Ramos-Pichardo, J. D., Ibáñez-Masero, O., Cabrera-Troya, J., Carmona-Rega, M. I., & Ortega-Galán, Á. M. (2020). Compassion fatigue, burnout, compassion satisfaction and perceived stress in healthcare professionals during the COVID-19 health crisis in Spain. *Journal of Clinical Nursing*, *29*(21–22), 4321–4330. https://doi.org/10.1111/jocn.15469

Saldaña, J. (2009). *The coding manual for qualitative researchers*. Sage Publications.

Shockley, K. M., Clark, M. A., Dodd, H., & King, E. B. (2021). Work-family strategies during COVID-19: Examining gender dynamics among dual-earner couples with young children. *Journal of Applied Psychology*, *106*(1), 15–28. https://doi.org/10.1037/apl0000857

Steed, L. B., Swider, B. W., Keem, S., & Liu, J. T. (2021). Leaving work at work: A meta-analysis on employee recovery from work. *Journal of Management*, *47*(4), 867–897. https://doi.org/10.1177/0149206319864153

Tone Innstrand, S., Melbye Langballe, E., Arild Espnes, G., Falkum, E., & Gjerl⊘ w Aasland, O. (2008). Positive and negative work-family interaction and burnout: A longitudinal study of reciprocal relations. *Work and Stress*, *22*(1), 1–15. https://doi.org/10.1080/02678370801975842

Treviño, L. K., den Nieuwenboer, N., Kreiner, G. E., & Bishop, D. (2014). Legitimating the legitimate: A grounded theory study of legitimacy work among ethics and compliance officers. *Organizational Behavior and Human Decision Processes*, *123*, 186–205. https://doi.org/10.1016/j.obhdp.2013.10.009

Vaziri, H., Casper, W. J., Wayne, J. H., & Matthews, R. A. (2020). Changes to the work-family interface during the COVID-19 pandemic: Examining predictors and implications using latent transition analysis. *Journal of Applied Psychology*, *105*(10), 1073–1087. https://doi.org/10.1037/apl0000819

Wu, Y., Wang, J., Luo, C., Hu, S., Lin, X., Anderson, A. E., Bruera, E., Yang, X., Wei, S., & Qian, Y. (2020). A comparison of burnout frequency among oncology physicians and nurses working on the frontline and usual wards during the COVID-19 epidemic in Wuhan, China. *Journal of Pain and Symptom Management*, *60*(1), e60–e65. https://doi.org/10.1016/j.jpainsymman.2020.04.008

Zapf, D., Seifert, C., Schmutte, B., Mertini, H., & Holz, M. (2001). Emotion work and job stressors and their effects on burnout. *Psychology & Health*, *16*(5), 527–545. https://doi.org/10.1080/08870440108405525

(*Appendix follows*)

Appendix

Sample Interview Protocol Questions

1. How long have you worked in healthcare?
2. If someone asked you for words to describe how you felt about your job in healthcare before the pandemic, what would you say?
3. How, if at all, has your job and experience as a health care worker changed since the pandemic? Are any worse now? Better?
4. How has the pandemic changed how you feel about being in healthcare?
    a. How, if at all, do you think the pandemic has changed the way other people view your job?
5. Do you think they understand what you're going through (in the pandemic)?
    a. [If they report that people don't get it] How do you deal with that feeling that people don't get it? [Probe possibly for emotional responses/coping mechanisms, pragmatic ones, cognitive ones (e.g., reframing)].
    b. So, those are some negative things coming your way. What, if anything, do you do in response to that? How do you respond to others when these issues come up?
6. Have you felt burned out, stressed, or detached since the pandemic, and if you have, what do you think might be the cause? What has that looked like for you?
7. Tell me about your transition coming home from work each day. How do you experience the process—that is, do you enjoy it? Is it a burden?
    a. Are there certain routines or rituals you follow? If so, what is the purpose or meaning behind them?
    b. [If living with others] How is your transition different now in terms of interacting with the important people in your life (kids, spouse, parents, etc.)?
    c. Is there anything about the pandemic that's kind of changed that boundary between the two?
8. Have you had any COVID cases/patients? If so, what's that been like?
9. How worried are you—on a scale of 1–10—about contracting the virus at work?
    a. How do you cope with that possibility?
10. What's your experience with increased PPE been like?
    a. How are you coping with increased PPE requirements?
11. During our interview, you've shared some things that can be hard to deal with. What, if anything, have you found helpful as you cope with the challenges we've talked about? We could even probe for things like, "Are there certain other people who have helped with your coping? Who has helped, and what did that look like?"
12. Is there anything else you would like to add or any questions you feel I didn't ask but should have?

Note. As is typical with grounded theory, questions evolved during data collection and analysis, reflecting our increasing understanding of the studied phenomena. These questions represent those asked in later interviews. Early interviews did not include questions about burnout; that issue emerged during data collection.

Received January 29, 2021
Revision received June 30, 2021
Accepted July 1, 2021 ■