

Journal of Applied Psychology

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Hoda Vaziri, Wendy J. Casper, Julie Holliday Wayne, and Russell A. Matthews

Online First Publication, August 31, 2020. <http://dx.doi.org/10.1037/apl0000819>

CITATION

Vaziri, H., Casper, W. J., Wayne, J. H., & Matthews, R. A. (2020, August 31). Changes to the Work–Family Interface During the COVID-19 Pandemic: Examining Predictors and Implications Using Latent Transition Analysis. *Journal of Applied Psychology*. Advance online publication. <http://dx.doi.org/10.1037/apl0000819>

Changes to the Work–Family Interface During the COVID-19 Pandemic: Examining Predictors and Implications Using Latent Transition Analysis

Hoda Vaziri
University of North Texas

Wendy J. Casper
University of Texas at Arlington

Julie Holliday Wayne
Wake Forest University

Russell A. Matthews
University of Alabama

Employees around the world have experienced sudden, significant changes in their work and family roles due to the COVID-19 pandemic. However, applied psychologists have limited understanding of how employee experiences of work–family conflict and enrichment have been affected by this event and what organizations can do to ensure better employee functioning during such societal crises. Adopting a person-centered approach, we examine transitions in employees' work–family interfaces from before COVID-19 to after its onset. First, in Study 1, using latent profile analysis ($N = 379$; nonpandemic data), we identify profiles of bidirectional conflict and enrichment, including beneficial (low conflict and high enrichment), active (medium conflict and enrichment), and passive (low conflict and enrichment). In Study 2, with data collected before and during the COVID-19 pandemic, we replicate Study 1 profiles and explore whether employees transition between work–family profiles during the pandemic. Results suggest that although many remain in prepandemic profiles, positive (from active/passive to beneficial) and negative (from beneficial to active/passive) transitions occurred for a meaningful proportion of respondents. People were more likely to go through negative transitions if they had high segmentation preferences, engaged in emotion-focused coping, experienced higher technostress, and had less compassionate supervisors. In turn, negative transitions were associated with negative employee consequences during the pandemic (e.g., lower job satisfaction and job performance, and higher turnover intent). We discuss implications for future research and for managing during societal crises, both present and future.

Keywords: COVID-19, work–family conflict and enrichment, latent transition analysis, technostress, supervisor support and compassion


Supplemental materials: <http://dx.doi.org/10.1037/apl0000819.supp>

The COVID-19 pandemic has upended the lives of workers worldwide. As the pandemic unfolded and social distancing occurred, workers lost jobs (Beer, 2020; Tozzi, 2020), faced job insecurity (Blustein et al., 2020), lost boundaries between work and home (Fisher et al., 2020), and worried about their health and that of their families (Prime, Wade, & Browne, 2020). Overnight, workers began teleworking, many for the first time (Kramer & Kramer, 2020). Such shifts likely impacted work–family (WF)

conflict (i.e., incompatibility between work and family; Greenhaus & Beutell, 1985) and enrichment (i.e., positive spillover between work and family; Greenhaus & Powell, 2006), which are linked to employee attitudes and behavior (Amstad, Meier, Fasel, Elfering, & Semmer, 2011; McNall, Nicklin, & Masuda, 2010). Thus, it is critical to identify factors that affect transitions in the WF interface during this macro crisis and the implications for employee attitudes and behavior.

Because the extent and influence of the pandemic on the WF interface are unknown, critical questions abound: What were typical patterns of WF conflict and enrichment before the pandemic? How have patterns shifted during this event? While some people may fare worse (i.e., greater conflict and/or less enrichment), do others fare better (i.e., reduced conflict and/or greater enrichment)? What personal and work factors predict changes to the WF interface after the onset of COVID-19? Finally, what are the implications of these profile transitions during the COVID-19 event for worker attitudes and behaviors?

This research aims to address these questions, contributing to the literature in novel ways. First, organizational research, and WF scholarship specifically, has typically ignored societal crises (Kim

 Hoda Vaziri, Department of Management, University of North Texas; Wendy J. Casper, Department of Management, University of Texas at Arlington; Julie Holliday Wayne, School of Business, Wake Forest University; Russell A. Matthews, Department of Management, University of Alabama.

Additional online materials for Studies 1 and 2 are available at <https://osf.io/x9tv7>.

Correspondence concerning this article should be addressed to Hoda Vaziri, Department of Management, University of North Texas, 1155 Union Circle #305429, Denton, TX 76203. E-mail: hoda.vaziri@unt.edu

& Ployhart, 2014), a key oversight given the impact that events such as manmade and natural disasters, pandemics, war, and terrorism (Eby, Mitchell, & Zimmerman, 2016) can have on workers and families. Event systems theory (EST; Morgeson, Mitchell, & Liu, 2015) argues that events that are novel, disruptive, and critical result in changes in behavior, suggesting this is a key omission. In this study we explore whether the novel, disruptive, and critical event of COVID-19 is associated with changes in the WF interface as well as job attitudes and behavior.

Second, we adopt a person-centered approach. A variable-centered approach examines levels of bidirectional conflict and enrichment and their unique relationships with antecedents and outcomes, providing important insight into between-person experiences. Although useful, there is also value in person-centered methods to explore how combinations of variables define experiences for different people. Rather than examining conflict or enrichment separately, person-centered methods detect profiles that differ qualitatively or quantitatively in combinations of variables, offering novel insight (Wang & Hanges, 2011; Woo, Jebb, Tay, & Parrigon, 2018). In this research, we use latent profile analysis (LPA) to identify profiles of WF conflict and enrichment (e.g., Moazami, Nurmi, Mauno, Aunola, & Rantanen, 2019; Rantanen, Kinnunen, Mauno, & Tement, 2013) during a period without a macro crisis (Study 1, November 2014) and then validate these profiles with data from right before COVID-19 hit (Study 2, February 2020), providing insight into WF profiles during routine times.

Third, WF research often uses cross-sectional designs (Casper, Eby, Bordeaux, Lockwood, & Lambert, 2007; Lapierre & McMullan, 2016), ignoring WF changes over time (Allen, French, Braun, & Fletcher, 2019). Gathering data over time is vital to test whether events foster change (Eby et al., 2016). A person-centered approach, combined with data collected before and during the pandemic, describes how people transition between profiles over time to explore how COVID-19 impacts the WF interface. Bliese, Adler, and Flynn (2017) have called for examining transitions around discrete events with measures taken before and after an event. To this end, in Study 2 we surveyed workers just before COVID-19 hit the United States and again 6 weeks later. Applying latent transition analysis (LTA), we capture the extent to which peoples' WF experiences changed for better or worse during COVID-19.

Exploring intraperson transitions is important, given scholars know little about how societal crises impact the WF interface (Eby et al., 2016). Yet, it is also important to identify factors that promote, and the consequences of, such transitions. As such, we examine personal and work factors that explain why transitions occur (Shipp & Cole, 2015) to provide insight into how employers can reduce negative or promote positive effects of societal crises. Finally, we assess how profile transitions relate to job attitudes and behavior. As conflict and enrichment relate to many employee outcomes (e.g., satisfaction, commitment, performance; Amstad et al., 2011; McNall et al., 2010), we expect profile transitions to relate to key outcomes, indicating why employers should support workers during crisis events. Identifying outcomes associated with profile transitions enables an accurate assessment of the risk employers face when employees struggle to manage the WF interface during crisis events. Given the likely recurrence of COVID-19 and

other events like natural disasters or social unrest, our findings provide important insights for both workers and employers.

Study 1: Establishing Work–Family Experience Profiles

Studies of conflict and enrichment profiles are mixed in terms of the number and type of profiles found. Some report four profiles of active, passive, harmful, and beneficial (Moazami et al., 2019), whereas others report three of active, beneficial, and contradictory (Rantanen et al., 2013). Given mixed findings, in Study 1, we use an inductive approach (Woo & Allen, 2014) to establish WF profiles. A person-centered approach can identify quantitatively distinct profiles that differ in levels of conflict and enrichment (Spurk, Hirschi, Wang, Valero, & Kauffeld, 2020) as well as qualitatively distinct profiles varying on relative standing of conflict and enrichment. For instance, one profile may include people with high conflict and low enrichment, whereas another includes low levels of conflict and enrichment. In Study 1, we explore WF profiles with prepandemic data.

Research Question (RQ) 1: How many distinct conflict and enrichment profiles are there and what is their nature?

Method

Participants were recruited through Amazon Mechanical Turk (MTurk) and were required to work at least 32 hr per week and live in the United States (Bowling Green State University Institutional Review Board [IRB] Protocol 680818; Wayne, Matthews, Odle-Dusseau, & Casper, 2019). Initially 620 respondents were screened. Of these, 149 did not meet study qualification and were not allowed to access the survey. Participants who failed one or more of the attention-check items ($N = 91$) were omitted (Huang, Curran, Keeney, Poposki, & DeShon, 2012). Listwise deletion of missing data on conflict and enrichment ($N = 1$) resulted in 379 complete responses. Participants were primarily Caucasian (79%), female (54%), and married/cohabiting (88%); 63% had children living at home and they were, on average, 37 years old. Of participants, 12% were in computer and mathematical occupations; 11% were in sales and related occupations; 10% were in education, training, and library occupations; and the remaining participants were working in a variety of other occupations, such as office and administrative support, health care support, business and financial operations, and so forth. Table 1 provides information on our measures.

LPA was used to identify profiles (Morin, Morizot, Boudrias, & Madore, 2011; Woo & Allen, 2014) using Mplus 7.4 (Muthen & Muthen, 2015). Per Nylund, Asparouhov, and Muthén (2007), we started with a model where two latent profiles were specified and added profiles until there was no further improvement in model fit. To compare model fit, we examined log likelihood (LL), Akaike information criterion (AIC), Bayesian information criterion (BIC), sample-size-adjusted BIC (SSA-BIC), consistent AIC (CAIC), Lo-Mendell-Rubin likelihood ratio test (LMR; Lo, Mendell, & Rubin, 2001), and entropy. A best fitting model includes lower LL, AIC, BIC, SSA-BIC, and CAIC, higher entropy, and significant LMR ($p < .05$), indicating that the specified k-profile solution is significantly better than the k-1-profile solution. Given these in-

Table 1
Scales Used to Measure Variables

Study and variable	Number of items	Scale citation	Sample item
Studies 1 and 2			
Conflict and enrichment			
Work-to-family conflict	5	Netemeyer, Boles, and McMurrian (1996)	The demands of my work interfere with my family life.
Family-to-work conflict	5	Netemeyer et al. (1996)	The demands of my family or spouse/partner interfere with work-related activities.
Work-to-family enrichment	3	Kacmar, Crawford, Carlson, Ferguson, and Whitten (2014)	I have to put off doing things at work because of demands on my time at home.
Family-to-work enrichment	3	Kacmar et al. (2014)	My involvement in my family puts me in a good mood and this helps me be a better worker.
Study 2			
Personal characteristics			
Segmentation preference	4	Kreiner (2006)	I don't like work issues creeping into my home life.
Problem-focused coping ^a	4	Endler and Parker (1994)	I analyze the problem before reacting.
Emotion-focused coping ^a	4	Endler and Parker (1994)	I blame myself for not knowing what to do.
Demands			
Technology overload	5	Tarafdar, Tu, Ragu-Nathan, and Ragu-Nathan (2007)	I am forced by the technology we are using to do more work than I can handle.
Technology invasion	3	Tarafdar et al. (2007)	I have to be in touch with work after hours due to this technology.
Technology incompatibility	4	Moore and Benbasat (1991)	Using the available technology is compatible with my work.
Resources			
Family-supportive supervisory behaviors	4	Hammer, Ernst Kossek, Bodner, and Crain (2013)	My supervisor makes me feel comfortable talking to him/her about my conflicts between work and nonwork.
Leader compassion	3	Shiota, Keltner, and John (2006)	During the COVID-19 pandemic my supervisor takes care of people who are vulnerable.
Employee outcomes			
Job satisfaction	3	Cammann, Fichman, Jenkins, and Klesh (1979)	All in all, I am satisfied with my job.
Organizational commitment	4	Meyer and Allen (1991)	I feel "emotionally attached" to my current organization.
Turnover intentions	4	Bentein, Vandenberghe, Vandenberg, and Stinglhamber (2005)	I frequently think of quitting my job with this organization.
Organizational citizenship behaviors	6	Lee and Allen (2002)	I willingly give of my time to help others who have work or nonwork problems.
Job performance	4	Williams and Anderson (1991)	I perform well in the job tasks that are expected of me.

Note. For all measures (except noted), response anchors were 1 (*strongly disagree*) to 5 (*strongly agree*).

^a Response anchors for problem-focused and emotion-focused coping were 1 (*never*) to 5 (*very often*).

dices are sometimes contradictory, we also used elbow plots of the BIC and CAIC to examine where the curve flattens (Chawla, MacGowan, Gabriel, & Podsakoff, 2020; Morin & Marsh, 2015).

Results

Table 2 provides descriptive information for study variables. Per Table 3, although other solutions had lower LL, AIC, BIC, and SSA-BIC, we retained the three-profile solution as LMR statistic for the other solutions was not significant. In addition, the elbow plot of BIC and CAIC (see Figure 1) shows that the slope of the curve flattens around three profiles. Together, these visual and statistical criteria suggest that there are three profiles in our data.

Table 4 and Figure 2 show means of bidirectional conflict and enrichment for each profile. Most employees (59%) belonged to a profile with low conflict and high enrichment. Given conflict is a negative experience with negative consequences and enrichment is positive, this high positive/low negative spillover profile is desirable; we labeled it *beneficial* (Moazami et al., 2019). We labeled a second

profile of moderate conflict and enrichment (22%) *active*, and the third profile of low conflict and enrichment (19%) was labeled *passive* (Moazami et al., 2019). Because passive and active profiles are a mix of desirable (moderate enrichment or low conflict) and undesirable spillover (moderate conflict or low enrichment), they are less desirable than the beneficial profile. Results suggest three quantitatively (passive and active) and qualitatively (beneficial) different profiles (RQ1).

Study 2: Replicating and Exploring Transitions Between Work-Family Profiles

In Study 2, we collected data before and during the COVID-19 pandemic. We first sought to replicate Study 1; we expected to find the same three profiles.

Hypothesis 1 (H1): There are three WF conflict and enrichment profiles that differ quantitatively (passive and active) and qualitatively (beneficial).

Table 2
Means, Standard Deviations, and Correlations Among Study 1 Variables

Variable	<i>M</i> (<i>SD</i>)	1	2	3	4	5	6	7	8	9	10	11	12
1. Age	36.52 (9.20)	—											
2. Gender ^a	.54 (.50)	-.02	—										
3. Race ^b	.79 (.40)	.21**	.01	—									
4. Married/cohabiting ^c	.88 (.33)	-.04	-.10	-.03	—								
5. Children ^d	1.32 (.47)	-.26**	.01	.03	.19**	—							
6. Work hours	41.82 (6.69)	.05	-.09	.15**	.03	-.01	—						
7. Work-to-family conflict	2.13 (1.05)	.01	-.02	.06	-.15**	-.05	.22**	—					
8. Work-to-family enrichment	3.47 (1.02)	.03	.10	-.08	.05	-.15**	.01	-.29**	—				
9. Family-to-work conflict	1.86 (.90)	.00	-.01	.01	-.09	-.13*	.03	.49**	-.04	—			
10. Family-to-work enrichment	3.82 (.88)	-.02	.21**	-.08	.06	-.12*	-.03	-.33**	.54**	-.31**	—		
11. Passive profile ^c	.19 (.39)	-.01	-.08	.05	-.06	.17**	-.05	.15**	-.73**	-.16**	-.46**	—	
13. Active profile ^c	.22 (.42)	-.03	-.05	-.01	-.07	-.13**	.10*	.46**	-.04	.78**	-.26**	-.26**	—
12. Beneficial profile ^c	.59 (.49)	.03	.10*	-.03	.11*	-.02	-.05	-.51**	.62**	-.53**	.59**	-.58**	-.64**

Note. *N* = 379. Values on the diagonal represent scale reliability.

^a 0 = male, 1 = female. ^b 1 = Caucasian, 0 = others. ^c 0 = no, 1 = yes. ^d 1 = yes, 2 = no.

* *p* < .05. ** *p* < .01.

How Do Employees Transition Between Profiles During COVID-19?

Employees are active agents in managing the work–home interface (Nippert-Eng, 1996), which has often been crafted with key resources (e.g., childcare, eating out) to ensure it is manageable (ten Brummelhuis & Bakker, 2012). Some employees rely on colleague support to stay efficient and keep work hours modest. Others create boundaries between work and home to prevent conflict (Ashforth, Kreiner, & Fugate, 2000; Bulger, Matthews, & Hoffman, 2007). For many, the COVID-19 pandemic was a shock to a carefully crafted WF interface. In the United States, after a national health emergency was announced on March 13, 2020, workers either worked from home, often using untried technology, or in potentially unsafe workplaces with risk of exposure. According to EST, a novel, disruptive, and critical event like COVID-19 should have a major impact on employee perceptions and behav-

iors, including the WF interface. Bliese et al. (2017) noted that events evoking a transition response should be studied by contrasting measures before the event and shortly after it. Relative to right before, this novel event (COVID-19) disrupted work and home, likely creating a transition response. As such, we expect negative transitions toward greater conflict and/or lower enrichment between work and home, reflected in transitions from beneficial to active or passive profiles.

Yet despite the stresses of COVID-19, with many obligations paused, some workers may face an improved WF interface. As social distancing ended long commutes and social obligations, the pace of life slowed for some. Remote work can reduce exposure to issues exacerbated by on-site work (e.g., toxic colleagues), and some workloads may decrease. Consistent with EST, suggesting people react differently to the same macroevent (Morgeson et al., 2015), some workers may experience lower interference and

Table 3
Fit Statistics for Profile Structures in Study 1 and Study 2

Number of profiles	LL	FP	AIC	BIC	CAIC	SSA-BIC	Entropy	LMR(<i>p</i>)
Study 1 (<i>N</i> = 379)								
2	-1956.56	13	3939.11	3990.30	4003.30	3949.06	.771	<.001
3	-1902.44	18	3840.88	3911.76	3929.76	3854.65	.811	<.001
4	-1867.78	23	3781.57	3872.13	3895.13	3799.15	.843	.080
5	-1848.13	28	3752.26	3862.51	3890.51	3773.67	.790	.272
6	-1824.18	33	3714.36	3844.30	3877.30	3739.60	.864	.731
7	-1810.42	38	3696.85	3846.47	3884.47	3725.91	.862	.377
Study 2 (<i>N</i> = 583)								
2	-3016.83	13	6059.66	6116.45	6129.45	6075.18	.811	<.001
3	-2882.82	18	5801.64	5880.27	5898.27	5823.12	.791	.006
4	-2812.34	23	5670.68	5771.15	5794.15	5698.13	.798	.070
5	-2720.32	28	5496.64	5618.95	5646.95	5530.06	.843	.002
6	-2670.42	33	5406.85	5551.00	5584.00	5446.24	.870	.261
7	-2636.49	38	5348.98	5514.97	5552.97	5394.33	.900	.767

Note. LL = log likelihood; FP = free parameters; AIC = Akaike information criterion; BIC = Bayesian information criterion; CAIC = consistent AIC; SSA-BIC = sample-size adjusted BIC; LMR(*p*) = *p*-value for the Lo, Mendell, and Rubin (2001) test.

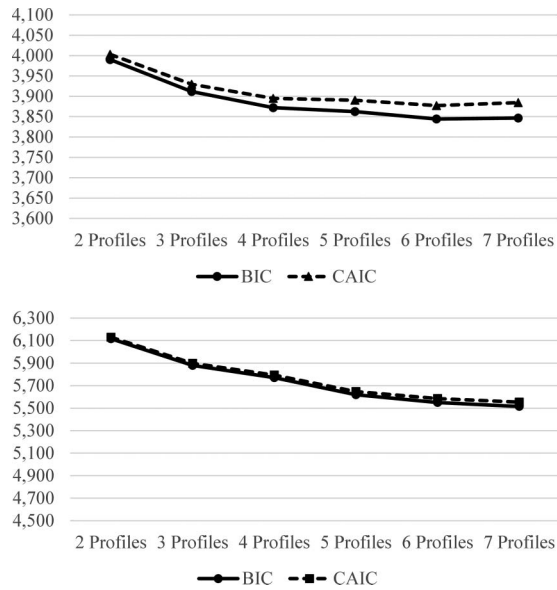


Figure 1. Elbow plot for Bayesian information criterion (BIC) and consistent Akaike information criterion (CAIC) for Study 1 (top panel) and Study 2 (bottom panel).

greater positive spillover and as such, transition to more desirable profiles (i.e., from active or passive to beneficial).

RQ2: How do employees transition between profiles of work-family conflict and enrichment following the onset of the COVID-19 pandemic?

What Factors Relate to Transitions Between Profiles?

Although we expect some employees experience positive, and others negative profile transitions, there are several factors, including personal (segmentation preferences, coping), work demands (technostress), and resources (family supportive supervision, leader compassion) that may predict whether and how people transition between profiles during societal crisis events.

Table 4
Means and Standard Deviations of Conflict and Enrichment for Each Profile

Work-family variable	Passive	Active	Beneficial
	<i>M (SD)</i>	<i>M (SD)</i>	<i>M (SD)</i>
Study 1			
Work-to-family conflict	2.54 (.23)	3.10 (.12)	1.74 (.07)
Family-to-work conflict	1.63 (.11)	3.21 (.10)	1.52 (.05)
Work-to-family enrichment	2.05 (.14)	3.43 (.12)	4.02 (.06)
Family-to-work enrichment	3.11 (.12)	3.47 (.12)	4.28 (.06)
Study 2			
Work-to-family conflict	2.71 (.19)	3.72 (.09)	1.81 (.07)
Family-to-work conflict	1.67 (.10)	3.52 (.15)	1.41 (.04)
Work-to-family enrichment	2.67 (.17)	3.54 (.13)	4.09 (.09)
Family-to-work enrichment	2.82 (.12)	3.65 (.12)	4.13 (.10)

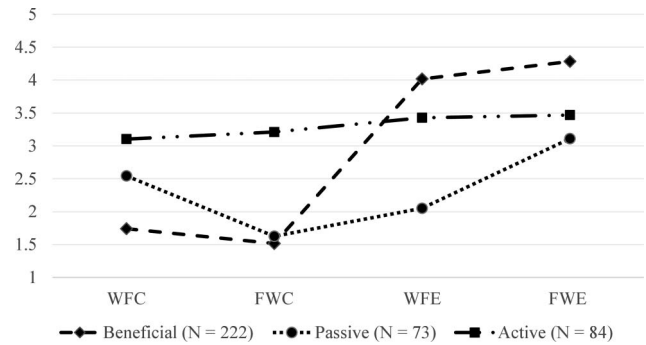


Figure 2. Latent profiles of bidirectional work-family conflict and enrichment for Study 1. WFC = work-to-family conflict; FWC = family-to-work conflict; WFE = work-to-family enrichment; FWE = family-to-work enrichment.

Segmentation preference. People differ in whether they prefer to keep home and work separate (segmentors) or integrate across roles (integrators; Nippert-Eng, 1996). Because integrators prefer weak boundaries between work and home and have experience integrating roles as required by remote work, COVID-19 should be less novel or disruptive, so they should face similar or even less conflict and higher enrichment, moving to (or staying in) a beneficial profile. In contrast, because remote work does conflicts with segmentors’ desire to separate work and home, and they may have less experience integrating roles, segmentors should experience more conflict and less enrichment, moving to (or staying in) active or passive profiles.

Hypothesis 2 (H2): Those with lower segmentation preference are more likely to transition to or stay in the beneficial profile.

Coping strategy. Stress involves a cognitive appraisal, so how a person views a stressor event is vital to a person’s response (Lazarus & Folkman, 1984). There are a variety of strategies people may use to cope with crisis events. Problem-focused coping is an active form of coping in which people reduce or remove a stressor through problem-solving, cost-benefit analysis, and time management (Lazarus & Folkman, 1984). It is negatively related to WF conflict (Lapierre & Allen, 2006; Mauno & Rantanen, 2013) and positively related to role engagement and cross-domain enrichment (Mauno, Rantanen, & Tolvanen, 2014). As such, it should relate to a transition to (or staying in) a beneficial profile. Emotion-focused coping, a passive form of coping, tries to “reduce stress through emotional responses, self-preoccupation, and fantasizing.” It is less adaptive (Austenfeld & Stanton, 2004, p. 1339) and associated with more WF conflict (Rantanen, Mauno, Kinunen, & Rantanen, 2011). Thus, people who use emotion-focused coping should transition to (or stay in) the active profile.

Hypothesis 3 (H3): Those higher in problem-focused coping are more likely to transition to or stay in the beneficial profile.

Hypothesis 4 (H4): Those higher in emotion-focused coping are more likely to transition to or stay in the active profile.

Technostress. Although information and communication technology (ICT) can help employees work more efficiently, it can also have a negative impact on employees (Wang, Liu, & Parker, 2020).

When ICT is introduced to support telework, training on technology fosters adjustment (Lautsch, Kossek, & Eaton, 2009), but such training was likely not possible with the sudden onset of COVID-19. When employees must use new technology without preparation, they may experience technostress (Ragu-Nathan, Tarafdar, Ragu-Nathan, & Tu, 2008) such as technology overload, invasion, and incompatibility. *Technology overload* refers to pressure “to work faster and longer,” whereas *technology invasion* refers to feeling a need to be available at all times, blurring boundaries between work and home (Tarafdar, Tu, Ragu-Nathan, & Ragu-Nathan, 2007). *Technology incompatibility* refers to a perception that new technology does not fit one’s needs (Moore & Benbasat, 1991). These forms of technostress can foster inefficiency and blur WF boundaries (e.g., work e-mails after business hours), such that employees experience more WF conflict (Butts, Becker, & Boswell, 2015; Chen & Karahanna, 2018; Leung & Zhang, 2017). As such, people who experience greater technostress should transition to (or stay in) active profiles.

Hypothesis 5 (H5): Those who experience higher levels of technostress, including (1) overload, (2) invasion, and (3) incompatibility are more likely to transition to or stay in the active profile.

Leader behavior. Leaders are key sources of support employees may use to cope with stressors like COVID-19. Leaders who engage in family-supportive supervisor behaviors (FSSBs) help employees manage work and family roles (Crain & Stevens, 2018), fostering lower conflict or higher enrichment (Hammer, Kossek, Yragui, Bodner, & Hanson, 2009; Odle-Dusseau, Britt, & Greene-Shortridge, 2012). FSSBs are critical during societal crises when people face more family demands. Thus, employees with access to FSSBs during COVID-19 are more likely to transition to or stay in a beneficial profile. Similarly, when workers face anxiety over COVID-19, a compassionate supervisor who empathizes and recognizes employee concerns can relieve stress and generate positive emotions (Davenport, 2015; Dutton, Workman, & Hardin, 2014; Peng, Chen, Xia, & Ran, 2017), resulting in less conflict and greater enrichment (i.e., staying in or transitioning to the beneficial profile).

Hypothesis 6 (H6): Those with leaders exhibiting higher (1) FSSBs and (2) compassion are more likely to transition to or stay in the beneficial profile.

What Are the Implications of Profile Transitions?

Transitions in WF profiles during societal crisis should have implications for work attitudes (job satisfaction, commitment, and turnover intentions) and job performance (organizational citizenship behaviors [OCBs] and in-role performance). The beneficial profile (i.e., low conflict with high enrichment) is the most desirable given the greater positive and fewer negative experiences across work and family (Demerouti & Geurts, 2004; J. Rantanen et al., 2013); thus, this profile should relate to most positive outcomes. Accordingly, transitioning from a passive or active to beneficial profile during a crisis event should drive positive employee outcomes.

Hypothesis 7 (H7): Those who transition from passive or active profiles to beneficial experience more positive chang-

es—higher (1) job satisfaction, (2) organizational commitment, (3) OCBs, and (4) job performance, and lower (5) turnover intentions during the crisis. Conversely, those who transition from beneficial to passive or active experience more negative changes.

The implications of transition between active and passive profiles are more equivocal. People transitioning from a passive to an active profile encounter both more enrichment (desirable) and more conflict (undesirable). Likewise, when they transition from an active to a passive profile, they experience both less conflict and less enrichment. Thus, it is not clear whether increased conflict outweighs increased enrichment or vice versa. The one study comparing passive and active profiles on employee outcomes (i.e., turnover intentions; Moazami et al., 2019) did not find differences between these two groups. Accordingly, we pose a research question.

RQ3: What are the implications of transitioning between passive and active profiles in terms of employee outcomes?

Method

Participants, design, procedures, and measures. The data presented for this study were part of a broader data collection effort conducted at Wake Forest University under IRB Protocol 00023673 (Project Title: “Balance Scale Construct Validation and COVID 19”). Participants, recruited through Qualtrics, were required to work at least 32 hr per week and live in the United States. Wave 1 (W1) data were collected in the second week of February 2020 when COVID-19 was present in the United States but not yet a widespread concern. Initially 1,468 respondents were screened. Of these, 303 did not meet study qualification and were not allowed to access the survey. Participants who failed one or more of attention-check items ($N = 564$) or completed the survey in less than 7.5 min ($N = 1$; average response time of 23 min) were omitted. Listwise deletion of missing data on conflict and enrichment ($N = 17$) resulted in 583 complete respondents, who were primarily Caucasian (85%), female (57%), and married/cohabiting (62%). Most (61%) had children. They were, on average, 54 ($SD = 11.00$) years old and worked 42.25 ($SD = 6.67$) hr each week. Of participants, 17% were in education, training, and library occupations; 14% were in health care support and technical occupations; 7% were in office and administrative support occupations; and the remaining participants were working in a variety of other occupations, such as production and manufacturing, business and financial operations, management, and so forth.

The COVID-19 crisis presented an opportunity to conduct a naturally occurring quasi-experiment using a one-group pretest–posttest design (Cook & Campbell, 1979). On February 21, approximately 1 week after we completed W1 data collection, the Centers for Disease Control and Prevention (CDC) indicated no community spread but were preparing for this possibility. On March 13, a national health emergency was declared, calling for social distancing, sending thousands of Americans home to work remotely. By March 26, the United States led the world in number of COVID-19 cases; on March 27, the Coronavirus Aid, Relief, and Economic Security (CARES) Act was signed, and on April 1, the United States had over 200,000 cases of COVID-19. When we

Table 5
Means, Standard Deviations, and Correlations Among Study 2 Variables

Variable	M (SD)	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	
1. Age	54.39 (11.04)	—																	
2. Gender ^a	.54 (.50)	-.20**	—																
3. Race ^b	.86 (.35)	.13*	-.03	—															
4. Married ^c	.63 (.49)	.08	-.26**	.01	—														
5. Children ^d	1.37 (.48)	-.25**	.13*	-.05	-.30**	—													
6. Work hours	42.37 (6.81)	.05	-.13*	.05	.03	.07	—												
7. WFC W1	2.31 (1.11)	-.13*	-.03	.01	.03	.02	.17**	(.92)											
8. WFC W2	2.33 (1.03)	-.13*	-.03	.02	.09	-.02	.20**	.65**	(.91)										
9. FWC W1	1.76 (.87)	-.16**	-.04	-.04	.08	-.04	-.04	.64**	.46**	(.91)									
10. FWC W2	1.84 (.87)	-.20**	-.12*	-.09	.10	-.05	-.01	.42**	.66**	.52**	(.91)								
11. WFE W1	3.56 (.96)	.10	-.05	.02	.07	-.19**	-.07	-.34**	-.24**	-.12*	-.10	(.86)							
12. WFE W2	3.57 (.91)	.18**	-.07	-.01	.03	-.17**	-.05	-.30**	-.29**	-.22**	-.14**	.61**	(.92)						
13. FWE W1	3.62 (.90)	.06	-.01	-.02	.12*	-.24**	-.14**	-.30**	-.24**	-.16**	-.13*	.75**	.51**	(.85)					
14. FWE W2	3.61 (.81)	.09	-.09	-.05	.11*	-.25**	-.09	-.25**	-.26**	-.19**	-.13*	.45**	.67**	.55**	(.80)				
15. Segmentation preference	4.20 (.82)	-.03	.09	-.03	-.04	.01	-.09	-.05	-.01	-.13*	-.09	-.06	-.08	.08	.03	(.80)			
16. Problem-focused coping	3.28 (.88)	.09	-.06	-.06	.13*	-.16**	.01	-.11*	-.15**	-.03	-.07	.36**	.32**	.33**	.40**	-.03	(.89)		
17. Emotion-focused coping	1.89 (.84)	-.20**	.13**	-.08	-.06	.01	-.08	.33**	.35**	.38**	.47**	-.12*	-.13**	-.10	-.09	-.13*	.03	(.87)	
18. Technology incompatibility	3.57 (.99)	-.01	.12*	.01	-.03	.08	-.05	.18**	.12*	.14**	.08	-.13*	-.27**	-.16**	-.24**	.07	-.15**	.05	
19. Technology overload	2.24 (.89)	-.10	.06	-.10	.14**	-.04	.02	.31**	.37**	.32**	.43**	-.06	-.05	.01	.00	-.11*	.05	.29**	
20. Technology invasion	2.24 (.95)	-.08	.03	-.03	.12*	-.03	.08	.32**	.35**	.31**	.38**	-.12*	-.11*	-.06	-.07	-.13*	.00	.25**	
21. FSSB	3.62 (1.07)	-.02	-.07	-.04	.13*	-.09	-.09	-.19**	-.21**	-.12*	-.13*	.38**	.46**	.32**	.30**	-.10	.32**	.01	
22. Leader compassion	3.70 (1.04)	-.03	-.04	-.05	.09	-.09	-.11*	-.16**	-.23**	-.09	-.12*	.32**	.42**	.31**	.30**	-.06	.29**	.00	
23. Job satisfaction W1	3.98 (1.11)	.17**	-.11*	-.03	.13*	-.16**	.03	-.37**	-.26**	-.23**	-.16**	.63**	.54**	.43**	.29**	-.13*	.30**	-.20**	
24. Job satisfaction W2	3.95 (1.08)	.16**	-.06	-.02	.13*	-.13*	.02	-.32**	-.31**	-.21**	-.26**	.50**	.60**	.34**	.36**	-.12*	.27**	-.15**	
25. Job performance W1	4.61 (.53)	.16**	-.04	.11*	.00	-.05	.07	-.28**	-.23**	-.38**	-.36**	.29**	.23**	.22**	.15**	.09	.17**	-.36**	
26. Job performance W2	4.56 (.58)	.20**	-.01	.15**	.03	.02	.07	-.23**	-.31**	-.37**	-.51**	.20**	.25**	.16**	.17**	.20**	.17**	-.36**	
27. Turnover intent W1	2.12 (1.17)	-.32**	.12*	-.08	-.13*	.13**	-.02	.37**	.24**	.31**	.21**	-.36**	-.39**	-.20**	-.21**	.15**	-.17**	.29**	
28. Turnover intent W2	2.07 (1.16)	-.34**	.07	-.06	-.06	.11*	.00	.31**	.32**	.26**	.32**	-.30**	-.38**	-.18**	-.23**	.15**	-.18**	.26**	
29. Organizational commitment W1	3.17 (1.00)	.09	-.11*	.01	.14**	-.16**	.01	-.18**	-.16**	-.08	-.08	.49**	.48**	.39**	.33**	-.15**	.32**	-.02	
30. Organizational commitment W2	3.35 (1.02)	.11*	-.09	-.03	.13*	-.14**	.01	-.24**	-.20**	-.12*	-.12*	.48**	.57**	.39**	.41**	-.21**	.32**	-.05	
31. OCB W1	3.68 (.70)	.03	-.10	.02	.20**	-.17**	.02	-.13*	-.13*	-.08	-.16**	.43**	.35**	.42**	.32**	-.02	.39**	-.10*	
32. OCB W2	3.70 (.79)	.12*	-.04	.05	.13*	-.15**	.08	-.09	-.14**	-.12*	-.19**	.29**	.41**	.27**	.38**	-.16**	.36**	-.03	
33. Active profile W1 ^c	.15 (.36)	-.14**	-.03	-.02	.05	-.05	.01	.54**	.39**	.79**	.40**	-.04	-.10	-.07	-.11*	-.12*	.01	.30**	
34. Passive profile W1 ^c	.35 (.48)	-.11*	.04	-.01	-.07	.20**	.11*	.17**	.10*	-.11*	.00	-.66**	-.46**	-.64**	-.41**	.04	-.26**	-.06	
35. Beneficial profile W1 ^c	.50 (.50)	.20**	-.01	.03	.03	-.16**	-.11*	-.54**	-.38**	-.46**	-.29**	.66**	.51**	.65**	.46**	.04	.24**	-.16**	
36. Active profile W2 ^c	.22 (.41)	-.19**	-.09	-.10	.09	-.02	.07	.35**	.59**	.41**	.79**	-.05	-.06	-.07	-.06	-.08	-.02	.34**	
37. Passive profile W2 ^c	.30 (.46)	-.02	.12*	.11*	-.06	.23**	.04	.22**	.15**	.03	-.16**	-.44**	-.63**	-.38**	-.59**	.13*	-.27**	-.01	
38. Beneficial profile W2 ^c	.49 (.50)	.17**	-.04	-.02	-.02	-.19**	-.09	-.49**	-.63**	-.36**	-.51**	.44**	.63**	.41**	.59**	-.05	.26**	-.27**	

Note. Correlations reported based on matched data across Wave 1 (W1) and Wave 2 (W2). Values on the diagonal represent scale reliability. WFC = work-to-family conflict; FWC = family-to-work conflict; WFE = work-to-family enrichment; FWE = family-to-work enrichment; FSSB = family-supportive supervisor behaviors; OCB = organizational citizenship behaviors.

^a 0 = male, 1 = female. ^b 1 = Caucasian, 0 = others. ^c 0 = no, 1 = yes. ^d 1 = yes, 2 = no.

* $p < .05$. ** $p < .01$.

began Wave 2 (W2) data collection in the first week of April, the United States was in a major societal crisis.

Of the 583 W1 respondents, 508 completed the W2 survey (response rate: 85%). Those who failed attention checks ($N = 26$) or completed the survey in less than 10 min at W2 ($N = 8$; average response time of 40 min) were omitted, for a sample of 474. Of these, 71 (15%) lost their job or were missing work due to COVID-19 and were omitted.¹ Listwise deletion of missing data on conflict and enrichment resulted in a final sample of 371 workers who were primarily Caucasian (86%), female (54%), and married/cohabiting (63%). Most (63%) had children. They were, on average, 54 years old. The W2 sample worked an average of 42.37 and 38.32 hr per week at W1 and W2, respectively. We collected conflict, enrichment, and employee outcomes at both waves. Personal and work-related factors (i.e., segmentation preference, coping, technostress, and leader behaviors) were collected at W2. Table 1 provides information on our measures.

Analytical approach. As in Study 1, LPAs were conducted to identify conflict and enrichment profiles based on W1 data ($N = 583$). We used W1 data because a larger sample size would provide more confidence replicating results due to smaller standard errors. We then used LTA (Collins & Lanza, 2009; Nylund et

al., 2007) on matched data from W1 and W2 ($N = 371$) to examine the probability of profile transition. We first examined the longitudinal invariance of profiles across two waves, which suggested the same number and type of profiles, $\Delta\chi^2(12) = 11.46, p = .49$ (Satorra, 2000). We used the invariance model to explore transition probabilities between profiles over time. To test H2 through H6 (i.e., predicting transitions), we calculated conditional transition probabilities (Muthén & Asparouhov, 2011) at high and low levels of each predictor ($\pm 1 SD$). We used the delta method (Raykov & Marcoulides, 2004) to examine whether conditional transition probabilities differed from one another at different levels of each predictor. Finally, we used paired-sample t tests to com-

¹ Attrition analyses suggested that those who did not respond to W2 reported higher WFC, FWC, and turnover intentions at W1. Also, those who lost jobs during the crisis reported higher turnover intentions at W1. In consideration of the potential for selective attrition bias, we conducted LTA using inverse probability weights as a function of bidirectional conflict and enrichment at W1 (for a similar approach, see Lang & Kell, 2019). Results were generally consistent with findings reported here (except for technology incompatibility), suggesting limited influence of selective attrition on our findings. Results are reported in Table S1 in online supplemental material.

Table 5 (Continued)

	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38
(.82)																					
.04	(.88)																				
.04	.77**	(.75)																			
-.20**	-.03	-.12*	(.93)																		
-.26**	.00	-.07	.87**	(.90)																	
-.16**	-.08	-.15**	.48**	.42**	(.96)																
-.26**	-.06	-.14**	.55**	.52**	.76**	(.95)															
-.14**	-.22**	-.22**	.21**	.21**	.44**	.31**	(.89)														
-.19**	-.19**	-.19**	.22**	.19**	.27**	.36**	.59**	(.89)													
.08	.16**	.15**	-.35**	-.29**	-.66**	-.58**	-.31**	-.27**	(.92)												
.10	.25**	.24**	-.42**	-.40**	-.60**	-.66**	-.35**	-.33**	.79**	(.92)											
-.12*	-.05	-.08	.49**	.46**	.68**	.62**	.27**	.23**	-.51**	-.49**	(.89)										
-.20**	-.05	-.08	.58**	.55**	.63**	.71**	.24**	.23**	-.53**	-.56**	.78**	(.89)									
-.18**	-.03	-.05	.38**	.36**	.45**	.36**	.36**	.25**	-.29**	-.27**	.51**	.46**	(.86)								
-.18**	.00	-.04	.41**	.42**	.38**	.45**	.27**	.30**	-.34**	-.38**	.46**	.56**	.60**	(.88)							
.07	.22**	.22**	-.09	-.08	-.19**	-.16**	-.26**	-.29**	.24**	.23**	-.05	-.06	-.04	-.08	—						
.10	-.06	.00	-.23**	-.19**	-.34**	-.31**	-.09	-.02	.20**	.15**	-.33**	-.34**	-.28**	-.22**	-.31**	—					
-.14**	-.11*	-.16**	.28**	.24**	.46**	.41**	.27**	.22**	-.37**	-.31**	.35**	.37**	.30**	.27**	-.43**	-.73**	—				
.03	.33**	.27**	-.07	-.09	-.11*	-.19**	-.24**	-.41**	.13*	.26**	-.05	-.08	-.09	-.14*	.42**	-.08	-.22**	—			
.20**	-.05	.00	-.25**	-.22**	-.31**	-.32**	-.05	.02	.19**	.16**	-.29**	-.34**	-.20**	-.21**	-.06	.47**	-.41**	-.34**	—		
-.21**	-.22**	-.23**	.29**	.27**	.38**	.45**	.25**	.31**	-.29**	-.37**	.30**	.38**	.26**	.30**	-.29**	-.36**	.55**	-.51**	-.63**	—	

pare changes in outcomes for those who transitioned between profiles. For the hypotheses, we used an alpha of .05; but to examine the research questions, we used a Bonferroni correction ($\alpha = .005$).

Results

Step 1: Replicating profiles. Descriptive statistics and correlations are reported in Table 5, and fit statistics for alternative latent profile structures in Table 3. As in Study 1, we selected the three-profile solution because it had lower LL, AIC, BIC, and SSA-BIC compared to the two-profile solution, in addition to significant LMR. In addition, elbow plot of BIC and CAIC (see Figure 1) suggested the curve flattened after the three-profile solution. Table 4 details the mean levels of conflict and enrichment for each profile. The three profiles corresponded with beneficial (54%), active (15%), and passive (31%) profiles found in Study 1, supporting H1. Notably, though not identical, the means are similar across our two samples.

Step 2: Transitions between profiles. Table 6 provides the transition probabilities of each profile before and during the COVID-19 crisis. Each cell represents the probability that a person

transitions from (or stays in) a profile in W1 to a different (or same) profile in W2. For example, the first cell indicates that if a person belonged to the active profile at W1, it is 82% likely they remained in that profile at W2. Whereas employees were 82%, 75%, and 87% likely to remain in the active, passive, and beneficial profiles, respectively, they were 19%, 25%, and 13% likely to transition to another profile at W2. The largest probability of transition was from passive to active (16%), followed by those who transitioned from active (11%) and beneficial (11%) to passive profile. The lowest probability of transition was from bene-

Table 6
Transition Probabilities of Work–Family Profiles Before and After COVID-19 Pandemic (Study 2)

Wave 1 profile	Wave 2 profile		
	1	2	3
1. Active	.815	.108	.077
2. Passive	.163	.749	.088
3. Beneficial	.021	.108	.871

ficial to active profile (2%). While these numbers may seem relatively small, transitioning between profiles (e.g., from passive to active) is a dramatic change as it requires simultaneous shifts in both conflict and enrichment. For example, about 40% of the sample experienced higher work-to-family conflict (WFC; ranging between .2 and 3.6; $\Delta M = .78, p < .05$) and another 38% reported lower WFC (ranging between $-.2$ and -2.8 ; $\Delta M = -.76, p < .05$) during the pandemic. We observed similar trends for family to-work conflict (FWC), work-to-family enrichment (WFE), and family to-work enrichment (FWE). However, only extreme changes in both conflict and enrichment at the same time foster profile transition (e.g., average decrease of 1.82 and 1.78 units in WFC and FWC, respectively, with an average increase of .69 and .65 units in WFE and FWE to transition from active to beneficial profile). Given this, and in response to RQ2, the extent of profile transitions suggests there were major simultaneous shifts in WF conflict and enrichment from W1 to W2 for some respondents. Notably, there were both positive (i.e., from active/passive to beneficial) and negative (i.e., from beneficial to active/passive) transitions during the COVID-19 event.

Step 3: Predicting transitions. Table 7 details conditional transition probabilities for each predictor. For segmentation preferences, though there was no difference in transition probabilities from passive to beneficial profiles, those with lower preferences for segmentation were more likely to transition from active to beneficial profiles (a positive transition, .11, $p < .05$) compared with those with higher preferences for segmentation (.03, $p > .05$), partially supporting H2. There was no difference in any conditional transition probabilities for higher and lower levels of problem-focused coping; H3 was not supported. Those with higher emotion-focused coping were more likely to transition from beneficial to active profiles (.28, $p < .05$) compared with those lower in emotion-focused coping (.03, $p > .05$), partially supporting H4.

For technostress, those reporting higher technology overload and technology invasion were more likely to have a negative transition from beneficial to active profile (overload: .28, $p < .05$; invasion: .24, $p < .05$) compared to those with lower technology overload and invasion (overload: .01, $p > .05$; invasion: .03, $p > .05$). Further, those whose technology was less compatible with their work were more likely to transition from beneficial to passive profile (.24, $p < .05$), providing some support for H5. Employees with supervisors lower on FSSB were more likely to transition from active to passive profiles (.27, $p < .05$). In contrast, those with more compassionate leaders were more likely to transition from passive to beneficial profiles (a positive transition, .22, $p < .05$) and those with less compassionate leaders were more likely to transition from beneficial to active profiles (a negative one, .18, $p < .05$), partially supporting H6.

Step 4: Implications of transitions. Table 8 provides means and standard deviations of employee outcomes across profiles over time. Table 9 includes paired-sample *t* tests for changes in outcomes across transition groups. Transitioning from active or passive to beneficial profiles (a positive transition) was associated with more job satisfaction, and commitment, and lower turnover intent, while transitioning from beneficial to active profile (negative transition) was associated with lower job satisfaction and performance, and more turnover intentions, partially supporting H7. For RQ3, we compared outcomes for transitioning between active and passive profiles using a Bonferroni-adjusted alpha value

Table 7
Conditional Transition Probabilities Across Lower and Higher Levels of Predictors (Study 2)

Transition pattern	Segmentation preferences		Problem coping		Emotion coping		Technology overload		Technology invasion		Technology incompatibility		FSSB		Leader compassion	
	Lower	Higher	Lower	Higher	Lower	Higher	Lower	Higher	Lower	Higher	Lower	Higher	Lower	Higher	Lower	Higher
Active (no transition)	.75***	.83***	.78***	.71***	.55**	.79***	.55***	.83***	.69**	.75***	.92***	.85***	.70***	.80***	.70***	.77***
Active → Passive	.14	.15	.03	.15	.39*	.11*	.23	.11	.18	.17*	.00	.00	.27**	.04	.30*	.04
Active → Beneficial	.11*	.03	.19	.13	.06	.11*	.22	.07	.13	.09	.08**	.16	.03	.16	.00	.20
Passive (no transition)	.78***	.85***	.85***	.89***	.92***	.76***	.83***	.76***	.82***	.78***	.77***	.88***	.88***	.69***	.88***	.68***
Passive → Active	.10	.11*	.12**	.10**	.05	.15*	.07	.19	.06	.19	.14	.00	.11*	.10	.10	.09
Passive → Beneficial	.12	.04	.04	.01	.03	.09	.10	.05	.11	.03	.09	.12*	.01	.21	.02	.22*
Beneficial (no transition)	.87***	.86***	.91***	.64***	.96***	.68***	.97***	.70***	.95***	.75***	.83***	.70***	.80***	.91***	.82***	.93***
Beneficial → Active	.13**	.10*	.07	.18*	.03	.28***	.01	.28***	.03	.24***	.15	0.06	.15**	.08**	.18**	.07**
Beneficial → Passive	.01	.04	.01	.18	.01	.04	.02	.02	.02	.01	.02	.24*	.04	.01	.00	.00

Note. Values in boldface type represent significantly different probabilities across higher (+1 SD) and lower (-1 SD) levels of a predictor. FSSB = family-supportive supervisor behaviors. * $p < .05$. ** $p < .01$. *** $p < .001$.

Table 8
Means and Standard Deviations of Employee Outcomes Across Profiles Over Time (Study 2)

Outcome variable	Active		Passive		Beneficial	
	<i>M (SD)</i>		<i>M (SD)</i>		<i>M (SD)</i>	
	Wave 1	Wave 2	Wave 1	Time 2	Wave 1	Wave 2
Job satisfaction	4.04 (.10)	3.95 (.09)	2.15 (.19)	2.23 (.20)	4.51 (.04)	4.55 (.04)
Organizational commitment	3.34 (.16)	3.47 (.12)	2.26 (.12)	2.32 (.13)	3.69 (.07)	3.93 (.06)
Organizational citizenship behaviors	3.60 (.10)	3.52 (.11)	3.32 (.07)	3.34 (.10)	3.94 (.05)	4.00 (.06)
Job performance	4.06 (.15)	3.82 (.18)	4.64 (.06)	4.64 (.06)	4.77 (.03)	4.78 (.03)
Turnover intent	2.91 (.23)	2.72 (.18)	2.59 (.20)	2.46 (.20)	1.58 (.07)	1.50 (.08)

of .005. However, we did not find significant changes in any outcomes when employees transitioned between these two profiles.

Post hoc analyses. We conducted post hoc analyses to examine gender and parental status as predictors of WF profiles (see Table S2 in the online supplemental material) but could not detect differences in conditional transition probabilities. One trend was that men were 90% likely, and women 56% likely, to remain in the active profile. Yet this seemingly large difference was not statistically significant, suggesting inadequate power.

Discussion

In this study, we explored changes to employees' WF interface during the unfolding of the COVID-19 crisis, the personal and job factors related to WF changes, and how WF changes relate to job attitudes and performance. Our findings related to the COVID-19 event may offer insight into similar macrolevel crises, including a second wave of COVID-19, other pandemics which are expected to occur more often in the future (World Economic Forum, 2019), or potentially natural disasters and major social unrest. The current study sheds light on how employers and employees can better manage the WF interface during challenging events and contributes to a sparse body of research linking macrolevel events to individual well-being, attitudes, and behavior (Kim & Ployhart, 2014).

We accomplish these aims by taking a person-centered approach, identifying three WF profiles (Wang & Hanges, 2011; Woo et al., 2018)—*beneficial* (low conflict and high enrichment), *active* (medium conflict and enrichment), and *passive* (low conflict and enrichment). Although our profiles slightly differ from past research (Moazami et al., 2019; Rantanen et al., 2013), we replicated them in two data sets. A key question is whether such profiles change with societal events. Our results suggest that the number and nature of profiles may endure but that, as we discuss next, some people move to a new profile during macro events. However, it is not clear whether findings generalize beyond our sample (e.g., older employees) or study design (e.g., 6-week time lag), warranting future research.

Second, by collecting data before and during the COVID-19 pandemic as suggested by Bliese et al. (2017), we shed light on how employees' WF interfaces change during a macrolevel crisis, a topic on which there has been little empirical study (Eby et al., 2016). EST suggests that events that are novel, disruptive, and critical create behavior changes. By extension, we argue that COVID-19, as a negative exogenous event with these characteristics, should affect the WF interface. Consistent with EST, our results show that within a few weeks of the COVID-19 crisis, many, though not all employees, experienced shifts in the WF interface in terms of the combination of conflict and enrichment (Fisher et al., 2020; Kramer & Kramer, 2020). Transitions from

Table 9
Mean Levels (With Standard Errors) of Changes in Employee Outcomes Across Different Transitions in Study 2

Transition pattern	ΔM_{W2-W1} (SE)				
	Job satisfaction	Organizational commitment	Organizational citizenship behaviors	Job performance	Turnover intent
Active (no transition)	.06(.15)	.09(.15)	-.16(.11)	-.27(.12)*	.18(.17)
Active → Passive	-.03(.23)	.33(.24)	.02(.26)	-.09(.20)	-.39(.28)
Active → Beneficial	.38(.26)	.40(.16)*	.27(.21)	.25(.18)	-.72(.21)**
Passive (no transition)	.04(.08)	.08(.07)	.04(.06)	.04(.06)	-.14(.09)
Passive → Active	-.03(.19)	.11(.13)	-.08(.20)	-.18(.13)	-.08(.13)
Passive → Beneficial	.30(.11)**	.37(.13)**	.22(.13)	.00(.09)	-.31(.12)*
Beneficial (no transition)	-.03(.06)	.23(.05)***	.00(.06)	-.02(.03)	-.06(.05)
Beneficial → Active	-.51(.20)**	.25(.17)	.14(.13)	-.38(.16)*	.46(.21)*
Beneficial → Passive	-.20(.24)	.07(.20)	-.18(.12)	-.06(.09)	.11(.14)

Note. W2 = Wave 2; W1 = Wave 1.

* $p < .05$. ** $p < .01$. *** $p < .001$.

some profiles were more likely (i.e., passive) than were others (i.e., beneficial). People with little conflict or enrichment (i.e., passive) before COVID-19 were more likely to face greater conflict and enrichment, transitioning to the active profile. In other words, people who started off in an undesirable low-activation profile were likely to transition to an undesirable high-activation profile during the COVID-19 crisis. In addition to EST, this is consistent with conservation of resources (COR; Hobfoll, 1989) theory's application to traumatic events (those that are unexpected, make excessive demands, are outside resource utilization strategies, etc.) which are particularly threatening and result in rapid resource depletion (Hobfoll, 1991).

Importantly, people with a beneficial profile (low conflict and high enrichment) often sustained this profile, even after the onset of COVID-19, counter to anecdotal reports of the widespread, disruptive nature of COVID-19 to the WF interface. These findings have at least three important implications. First, the stability of the beneficial profiles suggests that societal crisis does not always translate into personal crisis (Eby et al., 2016) and consistent with EST, people may interpret the same event differently (Morgeson et al., 2015). Second, these findings are perhaps best explained by COR theory's tenets of resource gain spirals (Hobfoll, 1989). The continuity of many beneficial profiles suggests that most people who fared well before the pandemic were able to avert significant distress at least during the initial stages of this event, perhaps due to coping or other resources, which are critical to recovery from natural disasters (Benight et al., 1999). COR theory suggests that people with more resources are better positioned to protect resources during adverse events (Hobfoll, 1989, 2011). In this study, before the pandemic, people in the beneficial profile had the resources to manage WF demands. The ability to invest resources to foster resource gain spirals once the pandemic hit seemingly enabled them to avert an undesirable profile transition. Merging theory with practice, these results reinforce arguments that employer-provided WF support is always vital, not only during crisis events. By proactively supporting WF needs, employers can better position employees to navigate WF roles effectively before and during macrolevel crisis events (see Table 10). A final implication is the importance of studying events before and after their onset (Bliese et al., 2017) given much "disaster research" only examines people's responses over time after an event (e.g., Benight et al., 1999). Our research indicates that people's tendencies to change profiles during societal crisis differed depending on whether they started in a relatively resource rich (beneficial) or resource poor (passive) profile, shedding new light on principles of COR.

In light of the EST notion that people differ in their reactions to macro events (Morgeson et al., 2015), we go beyond describing WF profile transitions to examine personal and work factors that predict such transitions to guide employers on best practices. Emotion-focused coping, technology overload, and technology invasion were associated with transition from a beneficial to an active profile (a negative transition). Yet, a compassionate leader was associated with a positive transition from a passive to beneficial profile. Perhaps because of their comfort integrating work and home, employees with lower segmentation preferences (i.e., integrators) were more likely to benefit during COVID-19 by transitioning from an active to beneficial profile. Employees whose leaders exhibited fewer FSSBs were more likely to transi-

tion from an active to passive profile but showed no transition to/from beneficial profiles. While unexpected, perhaps supervisors who exhibit FSSBs after the onset of COVID-19 also did so pre-pandemic; thus, no transition might be observed. Future research should examine this possibility.

Collectively, our results suggest ways employees and employers (see Table 10) might improve the negative effects of macrolevel crises. Employers that identify technology-related needs, provide technology training in advance, and offer technology support during periods of turmoil might offset the negative effects of technostress. Likewise, employers can train supervisors on the importance of compassion, and develop "employee health first" plans to help workers manage work and family. These actions may especially be needed by people who use emotion-focused coping or prefer segmentation, as they are likely to face more adverse changes in the WF interface.

Our research also highlights why employees and employers should care about workers' WF struggles. As expected, negative transitions (i.e., from beneficial to active/passive) have negative effects on worker outcomes. Yet, we found no changes in outcomes with transitions between passive and active profiles, perhaps due to small samples (and low power) in transition groups. Future research may explore the nuances of conflict and enrichment profiles in terms of employee outcomes, but our study suggests that conflict and enrichment should be considered in tandem to explore how combinations of these variables relate to key outcomes. Still, we suggest that employers who offer instrumental (e.g., technology support) and emotional (e.g., compassion) support to employees during adverse events should help them manage work and family, and benefit with better employee attitudes and behaviors.

As with any study, ours has limitations. Our data come from workers recruited via MTurk and Qualtrics. Although our samples included many industries, findings may not generalize to all people. Notably, most Study 2 participants had grown children rather than young children, so findings may not generalize to parents of young children. We explored effects of gender, parental status, and children at home but did not find differences in transition probabilities, likely due to low power. Thus, we encourage future research to include strata of participants with young children. More than half of our participants changed from onsite to remote work during COVID-19. However, our data did not differentiate people without a change in work location by remote versus onsite work with risk of exposure to COVID-19, so we could not examine effects of high-risk work, another important area for future research. Also, a 6-week lag was chosen in part due to time needed to update the study protocol and obtain IRB approval. Shorter or longer lags may have identified distinct profile transition relationships. Further, predictors were only collected at W2; however, the use of pre-post data for other variables reduces common method variance concerns. Although we had systematic attrition, attrition analyses suggested little influence on results, except for technology incompatibility findings, which should be interpreted cautiously.

Finally, our analytical methods (i.e., LPA and LTA) have their own criticisms. Notably, these methods are prone to interpretation bias in identifying profiles (Morin, Meyer, Creusier, & Biétry, 2016), and overextraction of profiles and alternative explanation of population heterogeneity (Bauer & Curran, 2003a, 2003b). Beyond

Table 10

Recommendations for Organizations on Best Practices in Managing Societal Crisis Events

Prior to event
1. Develop policies and practices to help employees manage work and family effectively
2. Train managers on the importance of compassion during societal crisis events
3. Recognize and reward compassionate supervisor behaviors
4. Proactively adopt new technologies that support remote work in general and in times of societal crisis events specifically
5. Provide support services (e.g., a help desk) and training to employees on new technologies
6. Train employees on various coping mechanisms (e.g., emotion- vs. problem-focused) and appropriate situations to use them
During event
1. Emphasize to leaders the importance of compassion and reward leaders who display it
2. As an act of compassion, make an “employee health first” policy and then walk the talk
3. Recognize employee technostress and provide on-demand support service to ameliorate it
4. Be supportive of employee preferences to keep work and family separate and provide tips or training on how employees can create boundaries between work and home when working remotely (e.g., a “no after hour” email policy to foster segmentation)
5. Provide real-time coping tips that emphasize problem-solving coping (e.g., time management) and reduce use of emotion-based coping (e.g., ruminating on crisis events)

Note. Prior to event recommendations are based on the findings of the study during the crisis event. These recommendations help employers plan and lay the foundation in advance of a societal crisis.

that, these techniques are sample-specific and require relatively large heterogeneous samples to be stable and generalizable (Woo et al., 2018). However, to deal with concerns about sample-specific findings, we replicated our profiles across two distinct samples. That said, although a variable-centered approach could be used to examine the combination of conflict and enrichment (i.e., via interaction terms), we are unaware of a variable-centered approach that would allow us to examine such combinations as outcomes, as done here. Given the nature of our research questions (e.g., examining profile transitions during a societal crisis), LPA and LTA were appropriate analytical tools to provide novel insights (Cudeck & Henly, 2003). Still, we see these challenges as areas of opportunities for future research. Researchers may wish to collect additional waves of data with even larger samples of respondents during societal-crisis events. This would allow scholars to replicate the profiles and profile transitions found here.

In short, the current study explores how societal crises impact employees' WF interface. Employees who transition to a more negative WF profile during such events have more negative job attitudes and report fewer positive work behaviors. As such, employers have good reason to help workers manage work and home during societal turmoil. Those that offer emotional support from compassionate supervisors and instrumental support for new technology may ease WF transitions and benefit with committed employees who remain long after societal turmoil passes.

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Received June 8, 2020

Revision received July 10, 2020

Accepted July 11, 2020 ■