COVID

Article

Examining the Relationships Between Workplace Policies and Practices, PTSD, and Distress Among Working Parents During the COVID-19 Crisis

Samantha A. Meeker [1,*], Alicia Modestino [2], Jamie Ladge [3], Beth E. Molnar [4] and Alisa K. Lincoln [4]

[1] Parkinson School of Health Sciences and Public Health, Loyola University Chicago, Maywood, IL 60153, USA
[2] School of Public Policy and Urban Affairs, Northeastern University, Boston, MA 02115, USA; a.modestino@northeastern.edu
[3] Management and Organization Department, Boston College, Chestnut Hill, MA 02467, USA; ladge@bc.edu
[4] Institute for Health Equity and Social Justice Research, Northeastern University, Boston, MA 02115, USA; b.molnar@northeastern.edu (B.E.M.); al.lincoln@northeastern.edu (A.K.L.)
* Correspondence: smeeker@luc.edu

Abstract: While the COVID-19 pandemic's impact on mortality and morbidity is becoming more understood, the severity of the long-term effects remains unknown: this includes medical sequelae of long COVID but also the impact of the social and economic upheaval on population health. Working parents faced many challenges during the pandemic, and the impact of these on the mental health and well-being of parents has been demonstrated. However, the extent of trauma-related symptoms among working parents who have faced unique challenges related to the virus itself and the social and structural consequences of containment efforts remains underexamined. Using data from a national panel survey of fworking parents (n = 1941), we explored the relationship between workplace policies and practices and COVID-19-related PTSD and psychological distress. Results demonstrate that nearly 50% of working parents experienced COVID-19-related PTSD as measured by the Impact of Events Scale-6, and over 60% had moderate to high levels of psychological distress. We examined mechanisms to understand the impact of job support on employees' levels of PTSD and distress and found that both socio-demographic factors and workplace support related to levels of PTSD and distress among working parents. Our study highlights the distress and PTSD levels experienced by working parents in the early stages of the pandemic, underscoring the impact of workplace support on mental health outcomes.

Keywords: PTSD; distress; working parents; COVID-19; workplace support

Academic Editor: Anna Puigdellívol-Sánchez

Received: 20 December 2024
Revised: 5 February 2025
Accepted: 14 February 2025
Published: 22 February 2025

Citation: Meeker, S.A.; Modestino, A.; Ladge, J.; Molnar, B.E.; Lincoln, A.K. Examining the Relationships Between Workplace Policies and Practices, PTSD, and Distress Among Working Parents During the COVID-19 Crisis. *COVID* **2025**, *5*, 28. https://doi.org/10.3390/covid5030028

1. Introduction

With over 6.8 million deaths worldwide and over 1.1 million deaths in the United States from March 2020 to March 2023, the impact of the COVID-19 pandemic has been ubiquitous [1]. Even those who have not contracted the illness have felt its effects through the loss of loved ones, isolation, changes in jobs, consistent disruption to workplaces, schools, and childcare, and the ever-present fear of becoming ill. These stressors are magnified for parents who must also be concerned about the physical safety and mental health of their children [2]. The stress among working parents, who are trying to manage multiple disruptions in the workplace, schools, and caring for their children, has been severely exacerbated [2,3]. This stress and exposure to multiple traumatic events have specifically increased the risk of developing post-traumatic stress disorder (PTSD), psychological distress, and other mental health problems associated with COVID-19 [4,5].

The strong negative psychological impacts of COVID-19 on adults have been well demonstrated, including increases in PTSD-related symptoms. A study of over 500 US adults in April 2020 found that 86% experienced at least one trauma symptom and 94% experienced at least one grief symptom [6]. Another study conducted in April 2020 found that among parents who reported experiencing psychological impacts due to COVID-19, there were higher levels of parental burnout [7]. Evidence also suggests that parents are deeply impacted by the pandemic with mothers especially affected by job and/or income loss [8] and worsening mental health [9]. While this study examines the immediate impact of COVID-19, understanding these initial effects is essential for contextualizing future research on its long-term consequences.

For some parents, this has been further exacerbated by work. In a study based in Japan, researchers found that 50% of workers across a wide range of occupations were worried about becoming infected with COVID-19 at their workplace and that this worry was associated with moderate and severe psychological distress [10]. Yet, researchers have found that enabling employees to work from home (WFH) mitigated employees' COVID-19-related stress [11,12]. These findings align with prior studies that have shown that lower work–family conflict (WFC) and/or supporting family roles outside of the workplace are associated with these supportive policies [13–16]. Such practices, including flexible work arrangements, dependent care assistance, and paid time off (PTO), have been the focus of attention of academics, practitioners, and policymakers alike, as they can influence critical outcomes for employees, organizations, and society overall [16].

While these relationships have been widely studied during pre-pandemic times, less is known as to how utilization of specific types of work–family support, beyond remote work and supportive supervision, might mitigate the impacts on employee mental health in times of significant crisis such as the case of the current COVID-19 pandemic. As such, in this study, we considered the role of workplace policies, manager support, and coworker support as signals to employees that may help reduce the impact of COVID-19 on mental health. This may, in the future, help us better understand the role of workplace policies and support during times of major upheaval or widespread disruption.

1.1. Theoretical Foundations Between Workplace Support and Psychological Distress and PTSD Among Working Parents

We engage with signaling theory, which asserts that organizations can use observable actions to convey less observable characteristics to their employees, stakeholders, and others [17,18], to help understand the impact of workplace policies and practices on mental health and well-being. Organizations have long provided work–family support that helps to ease employees' WFC and support their family roles outside of the workplace [13,15,16]. Yet, one of the key challenges is that such formal support often goes underutilized if employees believe they are not supported by their supervisors or co-workers [19,20]. Indeed, many working parents fear that taking advantage of such policies and practices gives the appearance that they are less committed and unable to live up to the high workplace expectations of ideal worker standards [21–23]. To mitigate these fears, managers may informally signal their support for employees' well-being and work–family balance.

While prior research has examined the effects of family-supportive supervisor behaviors on well-being outcomes [24], we have little understanding as to which forms of organizational support are most impactful, particularly in times of significant crisis such as the case of the current COVID-19 pandemic. The pandemic has brought about both economic and childcare crises simultaneously, leaving working parents concerned for their financial future, which heightens workplace expectations on the one hand while also increasing their family's care needs on the other. Here, we seek to understand how several different types of workplace support (formal and informal) affect working parents' mental

health amid a public health and caregiving crisis. Drawing from signaling theory [17,18], we test how formal support as well as informal support including manager and coworker support can serve as signals to employees that reduce psychological distress and PTSD, particularly in the face of increased work–family balance challenges. Prior work–family research drawing from signaling theory indicates that the availability of organizational work–family support signals caring and increases employee attachment to the organization [25]. In this study, we seek to expand on these findings by considering the effects of potentially mixed signals that employees receive from a range of workplace support during the pandemic on psychological distress and PTSD among working parents.

1.2. Formal Support and Psychological Distress and PTSD

Formal organizational support is the support that is provided in the form of finance, services, or time [26]. Research suggests that by merely offering this support, organizations may signal concern for employees [26]. This support, related to work–family policies, plays a role in the overall mental health of employees. Prior research contends that WFC can lead to job distress and eventually to an increase in turnover intentions, life distress, and physical health problems [27–31]. Among working parents, this conflict can be exacerbated by their parental duties [31]. Research from Rosin and Korabik [32] and Fiksenbaum [33] found that higher satisfaction with family-friendly policies was associated with a decrease in WFC, which reduced stress and increased work satisfaction and organizational commitment. Even if parents do not use the available support, studies have found that the perceptions of organizational support can impact employee outcomes [31,34]. Research also found that positive perceptions of organizational support were associated with higher job satisfaction, lower WFC, greater organizational commitment, and greater family functioning [20,35]. Thus, we would expect greater organizational support to be associated with lower levels of PTSD and psychological distress.

The research around the impact of signaling in times of heightened stress is limited, and therefore, our research looks to expand on what is known by asking how these more formal workplace practices impact levels of distress and PTSD related to COVID-19 among working parents.

1.3. Informal Support and Psychological Distress and PTSD

Informal organizational support, which is provided through social relationships such as manager and coworker support [26], has also been shown to help reduce WFC, which in turn can help reduce stress. Supervisor support has been associated with lower WFC [36,37], while low managerial support is linked to increased WFC, which leads to lower job satisfaction, stronger turnover intention, and greater stress [31]. Coworker support can also play a role in mental health among employees. Research finds that social support from colleagues is associated with less emotional exhaustion [38–40] and with lower levels of psychological distress [41,42]. Therefore, support from both managers and coworkers is expected to be associated with lower levels of psychological distress and PTSD.

Increased manager and coworker support can signal to employees that the organization cares about the health and well-being of both them and their families. These positive signals may be reinforced when offered in conjunction with more formal policies or may offset any signals that suggest a lack of more formalized support. Conversely, when support from managers and co-workers is absent, employees may be discouraged from utilizing formal support, further impacting their levels of distress and PTSD, particularly among working parents. Research shows that social context matters in employees' decisions to use work–family policies [43]. As such, our study also considers how both manager and

coworker support, in addition to formal support, may reduce psychological distress and PTSD among working parents during the COVID-19 pandemic. We hypothesized that both formal support and informal support in the form of manager and coworker support will be associated with reduced levels of psychological distress and PTSD related to COVID-19.

2. Materials and Methods

2.1. Data Collection

The initial survey consisted of 2452 working parents and was conducted in May and June 2020 after receiving IRB approval from the Northeastern University Institutional Review Board. The pool of respondents came from an online national panel assembled by Pure Spectrum, a market research firm that draws from an integrated network of over 50 panels from around the world, including millions of U.S. respondents. For these analyses, 511 respondents were excluded from analyses based on having worked 0 h during or prior to the pandemic and having had no change in work status (13); self-identified as a gig worker or as self-employed (227), since they would not be expected to have the organizational support studied in this project; or if they identified as furloughed (271), as they would be currently employed, but not working or accessing organizational support. The sample that was dropped from the dataset was demographically different from the rest of the dataset. This was unsurprising, as those who are gig workers are more likely to be younger with less education compared to those who are not. Please see Appendix A for a table comparison of the demographics.

The demographic characteristics of our sample are summarized in Table 1. Among the remaining 1941 respondents, 87% were between the ages of 26–55, with about half identifying as female. Most were married, White, and had 1–2 children, and about half had at least one child under the age of 5. Education level and income were higher than the national average of the general public [44,45]; however, working parents on average are older, more educated, and have higher household incomes than the general population. Just over half of the respondents had a 4-year or graduate degree and an income of $75,000 or more. Most respondents worked full time and from home at the time of the survey. Nearly 70% of respondents had a change in work status since the pandemic began: 41% of respondents had reduced work hours, 10% had increased work hours, 6% were laid off, and 1% became employed.

Table 1. Demographics, work characteristics, and organizational policies among study respondents.

Variable	Frequency (n = 1941)	Precent	p-Value for PTSD Mean	p-Value for K6 Distress Mean
Age			<0.0001	<0.0001
18–25	174	9.00		
26–35	548	28.35		
36–45	828	42.83		
46–55	308	15.93		
56–65	65	3.36		
66+	10	0.52		
Gender			<0.0001	0.0061
Male	939	48.58		
Female	988	51.11		
Other	6	0.31		

Table 1. *Cont.*

Variable	Frequency (n = 1941)	Precent	p-Value for PTSD Mean	p-Value for K6 Distress Mean
Race			0.0282	0.0580
African American	231	12.00		
Asian	113	5.87		
Hispanic	278	14.44		
Native American	7	0.36		
Multiracial	75	3.90		
Other	39	2.03		
White	1182	61.40		
Number of Children under 18 Living with Participant			0.4252	0.1744
0	8	0.41		
1	880	45.62		
2	757	39.24		
3	214	11.09		
4	55	2.85		
5	4	0.21		
6	3	0.16		
8	3	0.16		
10	2	0.10		
11	3	0.16		
Children Under 5			0.0002	<0.0001
Yes	926	47.95		
No	1005	52.05		
Education Level			<0.0001	<0.0001
Less than High School	33	1.75		
High School	273	14.50		
Some College or 2-year Degree	622	33.03		
4-year College Degree	543	28.84		
Graduate Degree	412	21.88		
Marital Status			<0.0001	0.0047
Single	312	36.55		
Married or Cohabition	1495	77.70		
Divorced, Separated, Widowed	117	6.08		
Remote Status			<0.0001	<0.0001
New to WFH	1159	59.99		
Not WFH	712	36.85		
Previously WFH	61	3.16		
Work Status			0.0019	0.0705
Full-time	1663	85.77		
Part-time	276	14.23		

Table 1. *Cont.*

Variable	Frequency (*n* = 1941)	Precent	*p*-Value for PTSD Mean	*p*-Value for K6 Distress Mean
Household Income			<0.0001	0.4072
$0–25,000	137	7.12		
$25,001–50,000	332	17.26		
$50,001–75,000	370	19.23		
$75,001–100,000	338	17.57		
$100,001–200,000	599	31.13		
$200,001 or higher	148	7.69		
Work Change			<0.0001	<0.0001
No Change in Work	595	30.65		
Became Employed	27	1.39		
Laid off/Lost Job	126	6.49		
Work Hours Reduced	802	41.32		
Work Hours Increased	198	10.20		
Other	87	4.48		
2+ Answers Selected	106	5.46		
COVID-19 Policies				
Using backup care programs, childcare subsidies, or other dependent care benefits	438	22.57	<0.0001	<0.0001
Granting PTO for symptomatic employees, employees who must care for family members who are diagnosed with COVID-19, and/or employees with diagnosed cases of COVID-19	474	24.42	0.0878	0.5408
Recommending available Employee Assistance Programs (EAPs)	243	12.52	0.0079	0.0238
Increasing sick leave or PTO for all or on a case-by-case basis	225	11.59	0.6321	0.3134
Refraining from penalizing time off of any kind	412	21.23	0.0095	0.0020
No new organizational practices have been put in place by my employer	469	24.16	<0.0001	<0.0001
Other	18	0.93	0.4733	0.7055
Paying for time spent under quarantine	458	23.60	0.0002	0.0791

Table 1. *Cont.*

Variable	Frequency (n = 1941)	Precent	p-Value for PTSD Mean	p-Value for K6 Distress Mean
Offering work-from-home options or adjusting schedules due to school closures	637	32.82	0.2001	<0.0001
Permitting unlimited unpaid time off without penalty	286	14.73	0.0010	0.0245
Typical Policies Prior to COVID-19				
Paid disability leave	580	29.88	0.0005	0.0011
Paid family leave (longer-term leave to care for ill family members, as well as when a parent has a new child.)	516	26.58	0.0023	0.0065
Paid maternity leave	655	33.75	<0.0001	0.0059
Paid medical leave	923	47.55	0.9876	0.0068
None of the policies listed above are available through my employer	361	18.60	0.0010	0.0391
Other	25	1.29	0.2042	0.6516
Paid paternity leave	403	20.76	0.0083	0.0133
Paid sick time	1225	63.11	0.0009	<0.0001
Variable	Minimum	Maximum	Mean	Std Dev
Manager Support	1	5	3.78	0.86
Coworker Support	1	5	3.65	0.68
PTSD Score	0	4	1.69	1.01
K6 Distress Score	0	24	8.21	5.45
Variable	Frequency	Percent		
PTSD Diagnosis	891	46.31		
K6 Distress Level				
Low	649	34.61		
Moderate	877	46.77		
High	349	18.61		

Source. "National COVID-19 Survey Work, Policies and Parenting" conducted by Northeastern University, May–June 2020. Note. PTSD = post-traumatic stress disorder; WFH = work from home; PTO = paid time off.

When compared with the U.S. Census Current Population Survey (CPS) parents' sample, which is the closest census sample to our survey, our sample was over-representative of the 18–25 age group, while under-representative of the 46–55 age group. It was also over-representative of African Americans. It was under-representative of those married and divorced while over-representative of single individuals. Finally, it was also under-representative of those with some high school education and a high school degree and over-representative of those with some college education and those with a master's degree.

2.2. Measures

In addition to demographic data, organizational work policies were assessed through survey questions on both typical policies available prior to COVID-19 (e.g., sick leave, paid family leave) and new workplace policies in response to COVID-19 (e.g., PTO for symptomatic employees, WFH). Lastly, manager and coworker support were measured separately using a six-item and five-item scale adapted from Anderson, Byerly, and Coffey [46]. For example, the manager support scale included items such as "My supervisor is understanding when I talk about personal or family issues that affect my work", and the coworker support scale included items such as "My coworkers are understanding when I have personal business to take care of—for example, medical appointments, meeting with child's teacher, etc.". See Appendix B for the full set of questions. The answers were on a 5-point scale from strongly disagree to strongly agree and were averaged for the final score.

Data were collected on two primary outcome measures: the K6 Distress Scale and a modified version of the Impact of Events Scale-6 (IES-6) [47]. For the K6 Distress Scale, respondents were asked to report how often they had felt, using 6 common symptoms, over the past 30 days on a Likert scale of 1 (Never) to 5 (Always). Their scores were summed and evaluated using the recommended K6 cut points to determine meaningful levels of distress [48]. A score of less than or equal to 5 was categorized as having low distress, a score between 5 and 13 was categorized as having moderate distress, and a score of 13 or above was categorized as having high distress. The average K6 score among respondents was 8.21 (std 5.45) out of 24. Across respondents, 35% had low distress levels ($\leq$5), 47% had moderate distress levels (5–13), and 19% had high distress levels ($\geq$13) [48]. All values are reported in Table 1.

To measure PTSD symptoms, we used the IES-6 modified for COVID-19 and asked respondents to report how bothered they were by each symptom on a Likert scale of 0 (Not at all) to 4 (extremely) over the past seven days. These statements were modified to specifically assess their feelings toward the COVID-19 pandemic based on previous research [47]; therefore, we expect their reliability to be similar to that of the original version. We calculated their mean score across the six items (1.69 (std. 1.01) out of 4). We then used the IES-6 clinical cutoff score of 1.75 [49–51] to determine the severity of their symptoms, with 46% of respondents scoring above the cutoff point.

2.3. Analysis

First, univariate measures for the individual covariates were analyzed to separately examine predictors of PTSD and psychological distress. Age, gender, race, having children under age 5, education level, marital status, remote status, and changes in work were all significantly correlated with both PTSD and distress. Work status and household income were significantly associated with PTSD but not distress. The number of children under 18 in the household was not significant in the model for either PTSD or psychological distress. See Table 1 for more details.

We thoroughly examined the presence of multicollinearity in our analysis through various methods. Both a correlation matrix and assessments using the variance inflation factor and tolerance were conducted, all of which confirmed the absence of multicollinearity.

We then estimated separate linear regression models to determine the impact of organizational policies that were typically used prior to the pandemic and policies that were implemented because of the pandemic. Three models were run with two different dependent variables (PTSD and psychological distress); they each contained consistent covariates (age, gender, race, the number of children in the household, age of the children, education level, marital status, work status, WFH status, and income) but had a different set of independent variables. The first model's independent variables were coworker

and manager support (which were kept in the other models as well), the next model had organizational policies typically used prior to the pandemic, and the final model had policies implemented due to COVID (for a list of all policies, see Table 1). All analyses were conducted in SAS software version 9.4 [52].

3. Results

Among the policies that were typically in place prior to the start of the COVID-19 pandemic, paid sick time, which 63% of the respondents stated was available through their employer, was the most common. Only 25% of respondents had access to paid family leave, and 19% said that their organizations had none of the policies listed. Among new policies put in place in response to the pandemic, the most common was offering WFH options (33%), and the least common was increasing sick leave or PTO for all or on a case-by-case basis (12%). Of the respondents, 24% reported that no new policies had been implemented. Please see Table 1 for all values.

3.1. PTSD

The mean PTSD score among participants was 1.69 (std. 1.01) out of 4. The clinical cutoff point for PTSD using the IES-6 scale is 1.75 [49–51]; among the participants, 46% were over the cutoff point (Table 1). Manager and coworker support was considered in all models for this study, and while manager support was never significantly associated with PTSD, coworker support always had a significant negative association with PTSD. Table 2 displays the results of all models predicting PTSD. Changes in work status were also always significantly associated with PTSD, but they were positively associated with PTSD. When considering the impact of typical policies available prior to the pandemic on PTSD scores, none of the policies were significantly associated with PTSD (Model 2). Among workplace policies put in place as a result of the COVID-19 pandemic, both "using backup care programs, childcare subsidies or other dependent care benefits" (β = 0.29; 95% CI 0.17: 0.40) and "granting PTO for symptomatic employees, employees who must care for family members who are diagnosed with COVID-19, and/or employees with diagnosed cases of COVID-19" (β = 0.12; 95% CI 0.01: 0.23) were associated with higher PTSD scores (Model 3).

Table 2. Regression analysis predicting COVID-19-related PTSD.

	Model 1			**Model 2**			**Model 3**		
Variable	**B**	**95% CI**		**B**	**95% CI**		**B**	**95% CI**	
Intercept	2.07 ***	1.61	2.53	2.08 ***	1.62	2.54	1.99 ***	1.53	2.44
Age									
18–25	0.00	.	.	0.00	.	.	0.00	.	.
26–35	−0.11	−0.28	0.06	−0.13	−0.30	0.05	−0.10	−0.27	0.07
36–45	−0.05	−0.23	0.13	−0.07	−0.25	0.11	−0.03	−0.21	0.15
46–55	−0.21 *	−0.41	0.00	−0.22 *	−0.42	−0.01	−0.16	−0.37	0.04
56–65	−0.21	−0.49	0.08	−0.22	−0.50	0.07	−0.16	−0.44	0.13
66+	−0.43	−1.06	0.21	−0.46	−1.09	0.18	−0.35	−0.98	0.28
Gender									
Female	−0.09	−0.19	0.01	−0.09	−0.19	0.01	−0.07	−0.17	0.02
Male	0.00	.	.	0.00	.	.	0.00	.	.
Other	−0.35	−1.18	0.49	−0.34	−1.18	0.50	−0.24	−1.08	0.59
Children									
Number of Children under 18 Living with Participant	−0.01	−0.06	0.03	−0.01	−0.06	0.03	−0.02	−0.07	0.03
Children under 5	0.04	−0.05	0.14	0.04	−0.05	0.14	0.03	−0.07	0.13

Table 2. *Cont.*

	Model 1			Model 2			Model 3		
Variable	**B**	**95% CI**		**B**	**95% CI**		**B**	**95% CI**	
Education									
Less than High School	−0.75 ***	−1.13	−0.37	−0.73 **	−1.12	−0.35	−0.70 ***	−1.08	−0.32
High School	−0.56 ***	−0.75	−0.37	−0.54 ***	−0.73	−0.36	−0.54 ***	−0.73	−0.35
Some College or 2-year Degree	−0.54 ***	−0.69	−0.38	−0.51 ***	−0.67	−0.35	−0.52 ***	−0.68	−0.37
4-year College Degree	−0.36 ***	−0.49	−0.22	−0.33 ***	−0.47	−0.20	−0.33 ***	−0.46	−0.20
Graduate Degree	0.00	.	.	0.00	.	.	0.00	.	.
Marital Status									
Divorced, Separated, Widowed	−0.20	−0.41	0.01	−0.20	−0.41	0.01	−0.18	−0.40	0.03
Married/Cohabitation	−0.01	−0.15	0.13	0.00	−0.14	0.14	−0.01	−0.15	0.13
Single	0.00	.	.	0.00	.	.	0.00	.	.
Race									
African American	0.06	−0.09	0.22	0.07	−0.08	0.22	0.07	−0.08	0.22
Asian	−0.08	−0.27	0.11	−0.09	−0.28	0.10	−0.04	−0.23	0.15
Hispanic	0.03	−0.11	0.17	0.03	−0.11	0.17	0.04	−0.09	0.18
Multiracial	0.29 **	0.06	0.53	0.31 *	0.07	0.54	0.32 *	0.09	0.55
Native American	0.39	−0.36	1.13	0.40	−0.34	1.15	0.40	−0.34	1.15
Other	−0.09	−0.41	0.23	−0.12	−0.44	0.20	−0.13	−0.45	0.19
White	0.00	.	.	0.00	.	.	0.00	.	.
Income									
$0–25,000	0.23	−0.04	0.50	0.20	−0.07	0.47	0.27	0.00	0.53
$25,001–50,000	0.08	−0.14	0.30	0.07	−0.16	0.29	0.12	−0.10	0.34
$50,001–75,000	0.01	−0.20	0.22	−0.01	−0.21	0.20	0.03	−0.18	0.24
$75,001–100,000	0.00	−0.20	0.20	−0.01	−0.21	0.19	0.03	−0.17	0.23
$100,001–200,000	0.00	−0.18	0.18	0.00	−0.19	0.18	0.02	−0.16	0.20
$200,001 or higher	0.00	.	.	0.00	.	.	0.00	.	.
Remote Status									
Not WFH	−0.04	−0.29	0.21	−0.03	−0.28	0.23	−0.03	−0.29	0.22
New to WFH	0.18	−0.07	0.43	0.20	−0.05	0.45	0.17	−0.08	0.42
WFH Prior to COVID-19	0.00	.	.	0.00	.	.	0.00	.	.
Work Change									
Became Employed	0.70 ***	0.31	1.08	0.68 **	0.29	1.06	0.59 **	0.21	0.98
Laid Off/Lost Job	0.56 ***	0.36	0.75	0.52 ***	0.33	0.72	0.46 ***	0.26	0.66
Hours Increased	0.42 ***	0.26	0.57	0.42 ***	0.26	0.58	0.37 ***	0.21	0.52
Hours Reduced	0.42 ***	0.31	0.52	0.41 ***	0.30	0.51	0.36 ***	0.25	0.47
Other	0.17	−0.05	0.39	0.17	−0.05	0.39	0.17	−0.04	0.39
Selected 2+ options	0.52 ***	0.31	0.73	0.51 ***	0.30	0.73	0.40 ***	0.19	0.61
No Change in Work	0.00	.	.	0.00	.	.	0.00	.	.
Workplace									
Work Status (Part/Full)	−0.15 *	−0.28	−0.01	−0.17 *	−0.31	−0.03	−0.11	−0.24	0.03
Manager Support	0.04	−0.02	0.10	0.04	−0.02	0.10	0.03	−0.03	0.09
Coworker Support	−0.11 **	−0.19	−0.04	−0.10 *	−0.18	−0.03	−0.11*	−0.18	−0.03
Typical Policies Available Prior to the Pandemic									
Paid disability leave				−0.02	−0.14	0.09			
Paid family leave				0.02	−0.09	0.13			
Paid maternity leave				−0.08	−0.20	0.03			
Paid medical leave				0.01	−0.09	0.12			
Paid paternity leave				−0.10	−0.23	0.03			
Paid sick time				−0.03	−0.13	0.07			
COVID-19 Organizational Practices									
Dependent care benefits							0.29 ***	0.17	0.40

Table 2. *Cont.*

	Model 1		Model 2		Model 3		
Variable	**B**	**95% CI**	**B**	**95% CI**	**B**	**95% CI**	
Granting PTO for symptomatic employees, employees who must care for family members who are diagnosed with COVID-19, and/or employees with diagnosed cases of COVID-19					0.12 *	0.01	0.23
Recommending available Employee Assistance Programs (EAPs)					−0.14	−0.27	0.00
Increasing sick leave or PTO for all or on a case-by-case basis					−0.10	−0.24	0.04
Refraining from penalizing time off of any kind					0.02	−0.09	0.13
Paying for time spent under quarantine					0.05	−0.05	0.16
Offering WTF options or adjusting schedules due to school closures					−0.03	−0.13	0.08
Permitting unlimited unpaid time off without penalty					0.06	−0.07	0.18

Source. "National COVID-19 Survey Work, Policies and Parenting" conducted by Northeastern University, May–June 2020. Note. PTSD = post-traumatic stress disorder; WFH = work from home; PTO = paid time off. Note. * $p < 0.05$; ** $p < 0.05$; *** $p < 0.005$.

The covariates significantly associated with PTSD when no policies were in the model included age, education, identifying as multiracial, and working part-time (Model 1). These changed slightly when policies were added to the model: only education and identifying as multiracial were consistently significant throughout the models. The models found that education had a dose-response relationship with PTSD: the higher a person's education, the higher their PTSD score. Identifying as multiracial compared to identifying as White was positively associated with PTSD scores.

3.2. Psychological Distress

The average K6 score among participants was 8.21 (std 5.45) out of 24. K6 was broken into three levels: 35% of participants had low distress levels ($\leq$5), 47% had moderate stress levels (5–13), and 19% had high stress levels ($\geq$13) (Table 1) [48]. Table 3 displays the results of all models predicting psychological distress. None of the policies typically available prior to the pandemic that we asked about in the survey had an impact on psychological distress (Model 5). Among the organizational practices that were added due to COVID-19, "backup care programs, childcare subsidies, or other dependent care benefits" ($\beta = 1.94$; 95% CI 1.30: 2.57) and "refraining from penalizing time off of any kind" ($\beta = 0.67$; 95% CI 0.06: 1.28) were associated with higher levels of psychological distress. "Offering work-from-home options or adjusting schedules due to school closures" ($\beta = -0.58$; 95% CI −1.15: −0.00) was associated with lower levels of psychological distress (Model 6).

Table 3. Regression analysis predicting COVID-19-related distress.

	Model 4			**Model 4**			**Model 6**		
Variable	**B**	**95% CI**		**B**	**95% CI**		**B**	**95% CI**	
Intercept	15.19 ***	12.63	17.74	15.43 ***	12.86	17.99	14.73 ***	12.19	17.26
Age									
18–25	0.00	.	.	0.00	.	.	0.00	.	.
26–35	−0.97 *	−1.93	0.00	−1.01 *	−1.97	−0.04	−0.86	−1.82	0.09
36–45	−1.04 *	−2.05	−0.04	−1.08 *	−2.09	−0.07	−0.90	−1.90	0.09
46–55	−2.11 ***	−3.26	−0.96	−2.16 ***	−3.31	−1.01	−1.79 **	−2.93	−0.65
56–65	−2.50 **	−4.08	−0.91	−2.54 **	−4.12	−0.96	−2.17 *	−3.74	−0.60
66+	−3.79 *	−7.47	−0.11	−3.84 *	−7.52	−0.15	−3.21	−6.86	0.44
Gender									
Female	−0.33	−0.87	0.22	−0.39	−0.95	0.17	−0.18	−0.73	0.36
Male	0.00	.	.	0.00	.	.	0.00	.	.
Other	1.90	−3.26	7.06	2.02	−3.14	7.19	2.27	−2.85	7.39
Children									
Number of Children under 18 Living with Participant	0.04	−0.21	0.29	0.05	−0.21	0.30	0.02	−0.24	0.27
Children under 5	0.55 *	0.01	1.08	0.53	−0.01	1.07	0.50	−0.03	1.04
Education									
Less than High School	−1.81	−3.94	0.33	−1.79	−3.93	0.35	−1.36	−3.47	0.76
High School	−0.99	−2.03	0.05	−0.98	−2.02	0.07	−0.80	−1.83	0.23
Some College or 2-year Degree	−1.11 *	−1.97	−0.24	−1.05 *	−1.93	−0.17	−0.96 *	−1.82	−0.09
4-year College Degree	−1.20 **	−1.94	−0.46	−1.17 **	−1.92	−0.42	−1.02 *	−1.76	−0.28
Graduate Degree	0.00	.	.	0.00	.	.	0.00	.	.
Marital Status									
Divorced, Separated, Widowed	−1.55 *	−2.72	−0.37	−1.57 *	−2.75	−0.39	−1.47 *	−2.63	−0.30
Married/Cohabitation	−0.59	−1.37	0.19	−0.58	−1.36	0.20	−0.62	−1.39	0.15
Single	0.00	.	.	0.00	.	.	0.00	.	.
Race									
African American	−1.67 ***	−2.52	−0.82	−1.65 ***	−2.50	−0.80	−1.63 ***	−2.47	−0.79
Asian	−0.77	−1.80	0.26	−0.84	−1.87	0.20	−0.56	−1.59	0.47
Hispanic	−0.97 *	−1.73	−0.21	−0.98 *	−1.74	−0.22	−0.91 *	−1.67	−0.15
Multiracial	0.36	−0.93	1.65	0.34	−0.96	1.64	0.47	−0.81	1.74
Native American	1.12	−3.37	5.62	1.20	−3.31	5.70	0.89	−3.57	5.34
Other	0.00	−1.79	1.80	−0.12	−1.92	1.68	−0.34	−2.12	1.43
White	0.00	.	.	0.00	.	.	0.00	.	.
Income									
$0–25,000	1.04	−0.46	2.54	0.88	−0.63	2.38	1.19	−0.30	2.67
$25,001–50,000	1.05	−0.18	2.28	0.99	−0.25	2.22	1.24 *	0.01	2.46
$50,001–75,000	−0.33	−1.49	0.83	−0.38	−1.54	0.78	−0.16	−1.31	0.98
$75,001–100,000	0.20	−0.93	1.32	0.17	−0.95	1.30	0.34	−0.77	1.45
$100,001–200,000	−0.75	−1.76	0.26	−0.77	−1.78	0.25	−0.55	−1.55	0.45
$200,001 or higher	0.00	.	.	0.00	.	.	0.00	.	.
Remote Status									
Not WFH	−0.87	−2.28	0.54	−0.87	−2.28	0.55	−0.94	−2.35	0.46
New to WFH	0.17	−1.22	1.56	0.23	−1.17	1.62	0.08	−1.30	1.46
WFH Prior to COVID-19	0.00	.	.	0.00	.	.	0.00	.	.
Work Change									
Became Employed	3.12 **	0.94	5.29	2.91 *	0.74	5.09	2.44 *	0.28	4.60
Laid off/lost job	3.91 ***	2.82	4.99	3.87 ***	2.78	4.97	3.15 ***	2.05	4.25
Hours increased	1.89 ***	1.03	2.76	1.92 ***	1.05	2.79	1.51 **	0.65	2.38
Hours reduced	1.11 ***	0.52	1.70	1.09 ***	0.50	1.69	0.72 *	0.12	1.31
Other	0.90	−0.29	2.09	0.89	−0.30	2.09	0.95	−0.23	2.13
Selected 2+ options	3.18 ***	2.01	4.35	3.11 ***	1.93	4.28	2.34 ***	1.16	3.52
No change in work	0.00	.	.	0.00	.	.	0.00	.	.
Workplace									
Work Status (Part/Full)	−1.34 **	−2.10	−0.58	−1.45 ***	−2.23	−0.68	−1.10 **	−1.86	−0.34

Table 3. *Cont.*

	Model 4			Model 4			Model 6		
Variable	**B**	**95% CI**		**B**	**95% CI**		**B**	**95% CI**	
Manager Support	−0.53 **	−0.87	−0.20	−0.52 **	−0.86	−0.19	−0.67 ***	−1.01	−0.34
Coworker Support	−0.81 ***	−1.22	−0.40	−0.77 ***	−1.19	−0.36	−0.67 **	−1.08	−0.26
Typical Policies Available Prior to the Pandemic									
Paid disability leave				0.04	−0.62	0.70			
Paid family leave				0.23	−0.38	0.85			
Paid maternity leave				0.14	−0.50	0.79			
Paid medical leave				−0.55	−1.14	0.04			
Paid paternity leave				−0.31	−1.03	0.42			
Paid sick time				−0.19	−0.76	0.38			
COVID-19 Organizational Practices									
Dependent care benefits							1.94 ***	1.30	2.57
Granting PTO for symptomatic employees, employees who must care for family members who are diagnosed with COVID-19, and/or employees with diagnosed cases of COVID-19							0.17	−0.44	0.77
Recommending available Employee Assistance Programs (EAPs)							−0.12	−0.89	0.64
Increasing sick leave or PTO for all or on a case-by-case basis							−0.28	−1.07	0.51
Refraining from penalizing time off of any kind							0.67 *	0.06	1.28
Paying for time spent under quarantine							0.11	−0.47	0.70
Offering WFH options or adjusting schedules due to school closures							−0.58 *	−1.15	0.00
Permitting unlimited unpaid time off without penalty							0.04	−0.66	0.74

Source. "National COVID-19 Survey Work, Policies and Parenting" conducted by Northeastern University, May–June 2020. Note. PTSD = post-traumatic stress disorder; WFH = work from home; PTO = paid time off. Note. * $p < 0.05$; ** $p < 0.05$; *** $p < 0.005$.

Manager support and coworker support were considered in all models for this study, and both had a significant negative association with distress. Changes in work status were also always significantly associated with distress, but they were positively associated with distress.

Among the covariates, age, having children under age 5, education, marital status, race, and work status were associated with psychological distress when considered in the model without policies (Model 4). Only age, education level, marital status, race, and work status were significant in all three models. Age was negatively associated with distress, having a dose-response relationship, i.e., as age increased, distress levels were lower. Education level was positively associated with distress and generally had a dose-response relationship as

well. Identifying as African American or Hispanic, being divorced, separated, or widowed, and working part-time were all associated with lower levels of distress models.

4. Discussion

The impacts of COVID-19 on mental health and well-being have been dramatic and will continue to emerge long after new cases of COVID-19 have ended. As Dr Tedros Adhanom Ghebreyesus, the World Health Organization (WHO) Director-General, noted, "The information we have now about the impact of COVID-19 on the world's mental health is just the tip of the iceberg" (WHO, 2022). Our study offers a glimpse of these effects as we identified the level of distress and PTSD among working parents early in the COVID-19 pandemic and how workplace support impacted their mental health. These data suggest that while many different types of support are important, signaling informal support (compared to formal support) may provide more help to working parents, particularly coworker support, as it may provide workers with a sense of reassurance that they are not alone and are cared for in times of high stress. Indeed, having people to turn to for emotional support in times of crisis, extending beyond family and into the workplace, can provide a buffer in the face of adverse circumstances.

To our knowledge, this is the first study of its kind to consider the impact of the workplace on parents' mental health during the COVID-19 pandemic. Our study demonstrated that working parents reported high levels of PTSD related to COVID-19 and psychological distress. Interestingly, workplace policies played a limited role in impacting both PTSD and distress. The lack of association between PTSD, distress, and typical workplace policies may be due to the low percentage of respondents with access to the policies. Less than one-third of respondents had access to paid disability leave, paid family leave, and paid paternity leave, similar to the national average. However, we suspect, as noted above, that informal support carried greater weight in making employees feel cared for.

Our study revealed unexpected nuances in the effects of COVID-19 policies: organizational practices that used backup care programs, childcare subsidies, or other dependent care benefits were associated with higher PTSD and distress. While it was expected that having increased childcare benefits would reduce the mental health impacts of COVID-19, it is possible that though they were given the additional resources, due to COVID-19 employees were unable to use them as there was no childcare or summer camps available to parents. New policies granting PTO for symptomatic employees, employees who must care for family members who are diagnosed with COVID-19, and/or employees with diagnosed cases of COVID-19 were also associated with higher levels of PTSD, and refraining from penalizing time off of any kind was associated with higher levels of distress. It is possible that this unexpected association may be related to those employees most likely to be aware of the policies related to time off were those who needed them due to being sick with COVID-19 or having a family member who was sick. Indeed, more recent studies have shown that having had COVID-19 increases the risk of mental health issues [53,54]. The employees may have also faced more disruptions in their workplace because of workers taking additional time off due to being sick or having sick family members, thus those employees who were still at the office took on additional responsibilities in response to these absences. When considering the impact of COVID-19 policies, it is important to point out that this survey was done in the first few months of the COVID-19 shutdown, May and June 2020. Many organizations may not have had time to put in policies or to fully flush out what types of policies would make the most sense for their employees. Further longitudinal work on policies is necessary to understand this impact.

Consistent with prior work [55], we found that coworker support was associated with lower PTSD and distress levels, and while the COVID-19 data are limited, previous

studies have suggested that coworker support is associated with positive mental health outcomes [56–58]. Building on this prior research, our study demonstrates the importance of promoting coworker support, particularly in times of crisis, as it can reduce the risk of distress and PTSD. These findings also align with a recent study that found that informal and interpersonal behaviors and exchanges between coworkers were positively associated with improved health and well-being [59]. We also found that changes in work can have a negative impact on both PTSD and distress, which was unsurprising as prior research has found that changes in the workplace can cause significant stress among employees [60–62]. Particularly, a 2019 study found that organizational changes, such as reorganization, downsizing, or partial closure, were associated with increased levels of mental distress among employees [63]. During the early days of the pandemic, many people experienced job changes. To mitigate the impact of the changes during crisis situations, employers should explore creating a supportive organizational culture, signaling that there is trust and commitment between employees and managers [61].

Finally, we found that education levels and race were strongly associated with PTSD. Yet, contrary to other studies [64,65], more educated participants had higher PTSD scores, which may suggest that PTSD symptoms related to the COVID-19 pandemic have different risk factors than those previously identified for PTSD. One possible explanation is that individuals with higher education levels were more likely to be in professions that faced increased pandemic-related stress, such as healthcare, education, and knowledge-based industries. Additionally, greater media exposure and heightened awareness of the pandemic's risks may have contributed to increased psychological distress among highly educated individuals. Future research should explore whether occupational stress, job insecurity, or heightened expectations for control and stability play a role in this association.

Identifying as multiracial (compared to identifying as White) was associated with higher PTSD levels, which is consistent with previous PTSD research [66]. According to previous research, these differences may exist due to demographics, trauma experience, life-related stress, and differences in social support [66]. The pandemic exacerbated existing racial and ethnic disparities in healthcare access, economic stability, and exposure to COVID-19, all of which could contribute to heightened PTSD risk. Future studies should examine how structural inequalities, social support systems, and coping mechanisms influence PTSD risk among multiracial individuals.

Limitations

It is important to acknowledge the limitations of the study that could be addressed in future research. First, the study was a cross-sectional design, which does not allow for causality between the variables to be determined; therefore, it cannot be concluded that the pandemic alone was responsible for the high levels of distress and PTSD among working parents. As such, future research could look at how PTSD and psychological distress changed over time as the pandemic evolved. Second, the survey relied on self-reported symptoms of distress and PTSD, which may be lower in reliability than a clinical measure [67]. Third, we were unable to capture COVID-19 infection status, which would have been useful in our analysis. Finally, the survey did not measure prior trauma or mental health history, which may be an effect modifier of the relationship between workplace policies and levels of distress and PTSD among individuals [68–71].

5. Conclusions

In the wake of the COVID-19 pandemic, the profound and lasting impact on mental health and well-being is evident. Our study sheds light on the distress and PTSD levels among working parents during the early stages of the pandemic, emphasizing the role of

workplace support in shaping mental health outcomes, which may be useful in studying other outcomes of the pandemic such as the "Great Resignation". The findings of our study carry several critical implications for organizations, employers, and researchers, as well as for the broader understanding of the impacts of global health crises on mental health and well-being. First, organizations should revisit and adapt workplace policies to address the evolving needs of employees during health and other crises. The unexpected consequences of certain policies, such as backup care programs and dependent care benefits, emphasize the importance of carefully considering the implementation of such measures to ensure they are effective. Organizations should acknowledge the potential disruptions that come with changes in the workplace, especially during crises. Adapting to these disruptions and creating a supportive organizational culture that emphasizes trust and commitment between employees and managers can help mitigate the mental health impact of work-related changes. This can be done, in part, by recognizing the significance of informal support, particularly coworker support, in mitigating the mental health impacts of crises. This implies fostering a workplace culture that encourages and facilitates interpersonal support, as it can serve as a valuable buffer during times of stress.

Given that this study was conducted in the early months of the pandemic, it is essential to conduct more extensive longitudinal research to understand how workplace policies and informal support evolve over time and impact mental health outcomes. Such research can inform better policy development and adaptation as the situation unfolds. It is also essential that studies consider the impact of racial disparities in access to mental health support and treatment, especially during crises. More research is necessary to understand and address the unique challenges faced by different racial and ethnic groups in times of crisis.

Finally, this study highlights the importance of preparedness for future global health crises. Employers and policymakers should proactively develop and implement comprehensive strategies for protecting employee mental health, understanding that these crises have far-reaching effects that go beyond physical health. The implications of this research go beyond the immediate findings and offer valuable insights for addressing the mental health consequences of global health crises. They emphasize the need for adaptability, support networks, and a nuanced understanding of the diverse challenges faced by individuals and communities during such challenging times.

Author Contributions: Conceptualization, S.A.M., A.M., J.L. and A.K.L.; methodology, S.A.M., A.M., J.L. and A.K.L.; software, S.A.M., A.M., J.L. and A.K.L.; validation, S.A.M., A.M., J.L. and A.K.L.; formal analysis, S.A.M., A.M., J.L. and A.K.L.; investigation, S.A.M., A.M., J.L. and A.K.L.; resources, S.A.M., A.M., J.L. and A.K.L.; data curation, A.M., J.L. and A.K.L.; writing—original draft preparation, S.A.M., A.M., J.L. and A.K.L.; writing—review and editing, S.A.M., A.M., J.L., B.E.M. and A.K.L.; funding acquisition, A.M., J.L. and A.K.L. All authors have read and agreed to the published version of the manuscript.

Funding: This research received no external funding.

Institutional Review Board Statement: The study was conducted in accordance with the Declaration of Helsinki, and approved by the Institutional Review Board of Northeastern University (protocol code 20-04-11 and date of approval 4 October 2020).

Informed Consent Statement: Informed consent was obtained from all subjects involved in the study.

Data Availability Statement: The datasets presented in this article are not readily available because the data are part of an ongoing study. Requests to access the datasets should be directed to A.modestino@northeastern.edu.

Conflicts of Interest: The authors declare no conflict of interest.

Abbreviations

The following abbreviations are used in this manuscript:

EAP	employee assistant program
IES	Impact of Event Scale
PTO	paid time off
PTSD	post-traumatic stress disorder
WFC	work–family conflict
WFH	work from home
WHO	World Health Organization

Appendix A

Table A1. Demographic differences between the used sample and the dropped sample.

Variable	Frequency (Used Sample *n* = 1941)	Precent	Frequency (Dropped Sample *n* = 511)	Precent	*p*-Value
Age					0.0715
18–25	174	9.00	79	15.67	
26–35	548	28.35	137	27.18	
36–45	828	42.83	185	36.71	
46–55	308	15.93	73	14.48	
56–65	65	3.36	25	4.96	
66+	10	0.52	5	0.99	
Gender					<0.0001
Male	939	48.58	177	34.64	
Female	988	51.11	328	64.19	
Other	6	0.31	6	1.18	
Race					<0.0001
African American	231	12.00	93	18	
Asian	113	5.87	29	5.68	
Hispanic	278	14.44	90	17.61	
Native American	7	0.36	3	0.59	
Multiracial	75	3.90	34	6.65	
Other	39	2.03	9	1.76	
White	1182	61.40	253	49.51	
Education Level					<0.0001
Less than High School	33	1.75	20	4.06	
High School	273	14.50	102	20.69	
Some College or 2-year Degree	622	33.03	205	41.58	
4-year College Degree	543	28.84	104	21.10	
Graduate Degree	412	21.88	62	12.58	
Marital Status					0.0004
Single	312	36.55	114	30.92	
Married or Cohabition	1495	77.70	351	14.09	
Divorced, Separated, Widowed	117	6.08	42	8.28	
Work Status					<0.0001
Full-time	1663	85.77	359	70.25	
Part-time	276	14.23	152	29.75	
Household Income					<0.0001
$0–25,000	137	7.12	52	10.32	
$25,001–50,000	332	17.26	112	22.22	
$50,001–75,000	370	19.23	103	20.44	
$75,001–100,000	338	17.57	91	18.06	
$100,001–200,000	599	31.13	117	23.21	

Table A1. *Cont.*

Variable	Frequency (Used Sample n = 1941)	Precent	Frequency (Dropped Sample n = 511)	Precent	p-Value
Variable	Minimum	Maximum	Mean	Std Dev	p-value
PTSD Score—Used Sample	0	4	1.69	1.01	0.1353
PTSD Score—Dropped Sample	0	4	1.76	0.98	
K6 Distress Score—Used Sample	0	24	8.21	5.45	<0.0001
K6 Distress Score—Dropped Sample	0	24	9.33	5.85	

Source. "National COVID-19 Survey Work, Policies and Parenting" conducted by Northeastern University, May–June 2020. Note. PTSD = post-traumatic stress disorder.

Appendix B

Manager Support Scale

- My supervisor is supportive when I have a problem.
- My supervisor is fair and doesn't show favoritism in responding.
- My supervisor accommodates me when I have family or personal business to take care of—for example, medical appointments, meeting with child's teacher, etc.
- My supervisor is understanding when I talk about personal or family issues that affect my work.
- I feel comfortable bringing up personal or family issues with my supervisor.
- My supervisor really cares about the effects that work demands have on my personal and family life.

Coworker Support Scale

- I talk regularly to my coworkers about my child(ren).
- My coworkers are understanding when I have personal business to take care of—for example, medical appointments, meeting with child's teacher, etc.
- I feel comfortable bringing up personal or family issues with my coworkers.
- My colleagues have made insulting jokes or comments regarding my status as a working parent (reverse coded).
- My colleagues don't respect the fact that I have children (reverse coded).

References

1. Dong, E.; Du, H.; Gardner, L. An interactive web-based dashboard to track COVID-19 in real time. *Lancet Infect. Dis.* **2020**, *20*, 533–534. [CrossRef] [PubMed]
2. Calvano, C.; Engelke, L.; Di Bella, J.; Kindermann, J.; Renneberg, B.; Winter, S.M. Families in the COVID-19 pandemic: Parental stress, parent mental health and the occurrence of adverse childhood experiences-results of a representative survey in Germany. *Eur. Child Adolesc. Psychiatry* **2021**, *31*, 1–13. [CrossRef] [PubMed]
3. Nieuwenhuis, R.; Yerkes, M.A. Workers' well-being in the context of the first year of the COVID-19 pandemic. *Community Work Fam.* **2021**, *24*, 226–235. [CrossRef]
4. Boyraz, G.; Legros, D.N. Coronavirus disease (COVID-19) and traumatic stress: Probable risk factors and correlates of posttraumatic stress disorder. *J. Loss Trauma* **2020**, *25*, 503–522. [CrossRef]
5. Liu, N.; Zhang, F.; Wei, C.; Jia, Y.; Shang, Z.; Sun, L.; Wu, L.; Sun, Z.; Zhou, Y.; Wang, Y.; et al. Prevalence and predictors of PTSS during COVID-19 outbreak in China hardest-hit areas: Gender differences matter. *Psychiatry Res.* **2020**, *287*, 112921. [CrossRef]
6. Holmes, M.R.; Rentrope, C.R.; King, J.A.; Korsch-Williams, A. COVID-19 Pandemic and Emotional Well-Being Study: April 2020 United States Data Snapshot. 2020. Available online: https://case.edu/socialwork/traumacenter/resources/covid-19-research/april-2020-data-snapshot (accessed on 11 October 2021).
7. Kerr, M.L.; Fanning, K.A.; Huynh, T.; Botto, I.; Kim, C.N. Parents' self-reported psychological impacts of COVID-19: Associations with parental burnout, child behavior, and income. *J. Pediatr. Psychol.* **2021**, *46*, 1162–1171. [CrossRef]
8. Modestino, A.S.; Ladge, J.J.; Swartz, A.; Lincoln, A. Childcare is a business issue. In *Harvard Business Review*; Harvard Business Publishing: Harvard University, MA, USA, 2021.

9. Moreland-Russell, S.; Jabbari, J.; Ferris, D.; Roll, S. At Home and on the Brink: U.S. Parents' Mental Health during COVID-19. *Int. J. Environ. Res. Public Health* **2022**, *19*, 5586. [CrossRef]
10. Uehara, M.; Ishimaru, T.; Ando, H.; Tateishi, S.; Eguchi, H.; Tsuji, M.; Mori, K.; Matsuda, S.; Fujino, Y. Worries about COVID-19 infection and psychological distress at work and while commuting. *J. Occup. Environ. Med.* **2021**, *63*, e631–e635. [CrossRef]
11. Shao, Y.; Fang, Y.; Wang, M.; Chang, C.H.D.; Wang, L. Making daily decisions to work from home or to work in the office: The impacts of daily work-and COVID-related stressors on next-day work location. *J. Appl. Psychol.* **2021**, *106*, 825. [CrossRef]
12. Straus, E.; Uhlig, L.; Kühnel, J.; Korunka, C. Remote workers' well-being, perceived productivity, and engagement: Which resources should HRM improve during COVID-19? A longitudinal diary study. *Int. J. Hum. Resour. Manag.* **2023**, *34*, 2960–2990. [CrossRef]
13. Butts, M.M.; Casper, W.J.; Yang, T.S. How important are work–family support policies? A meta-analytic investigation of their effects on employee outcomes. *J. Appl. Psychol.* **2013**, *98*, 1. [CrossRef] [PubMed]
14. Hammer, L.B.; Neal, M.B.; Newsom, J.T.; Brockwood, K.J.; Colton, C.L. A longitudinal study of the effects of dual-earner couples' utilization of family-friendly workplace supports on work and family outcomes. *J. Appl. Psychol.* **2005**, *90*, 799. [CrossRef] [PubMed]
15. Kelly, E.L.; Kossek, E.E.; Hammer, L.B.; Durham, M.; Bray, J.; Chermack, K.; Murphy, L.A.; Kaskubar, D. 7 getting there from here: Research on the effects of work–family initiatives on work–family conflict and business outcomes. *Acad. Manag. Ann.* **2008**, *2*, 305–349. [CrossRef]
16. Masterson, C.; Sugiyama, K.; Ladge, J. The value of 21st century work–family supports: Review and cross-level path forward. *J. Organ. Behav.* **2021**, *42*, 118–138. [CrossRef]
17. Spence, M. Job market signaling. In *Uncertainty in Economics*; Elsevier: Amsterdam, The Netherlands, 1978; pp. 281–306.
18. Connelly, B.L.; Certo, S.T.; Ireland, R.D.; Reutzel, C.R. Signaling theory: A review and assessment. *J. Manag.* **2011**, *37*, 39–67. [CrossRef]
19. Thompson, C.A.; Beauvais, L.L.; Lyness, K.S. When work–family benefits are not enough: The influence of work–family culture on benefit utilization, organizational attachment, and work–family conflict. *J. Vocat. Behav.* **1999**, *54*, 392–415. [CrossRef]
20. Allen, T.D. Family-supportive work environments: The role of organizational perceptions. *J. Vocat. Behav.* **2001**, *58*, 414–435. [CrossRef]
21. Williams, J. *Unbending Gender: Why Family and Work Conflict and What to Do About It*; Oxford University Press: Oxford, UK, 2001.
22. Ladge, J.J.; Humberd, B.K.; Eddleston, K.A. Retaining professionally employed new mothers: The importance of maternal confidence and workplace support to their intent to stay. *Hum. Resour. Manag.* **2018**, *57*, 883–900. [CrossRef]
23. Reid, E. Embracing, passing, revealing, and the ideal worker image: How people navigate expected and experienced professional identities. *Organ. Sci.* **2015**, *26*, 997–1017. [CrossRef]
24. Crain, T.L.; Stevens, S.C. Family-supportive supervisor behaviors: A review and recommendations for research and practice. *J. Organ. Behav.* **2018**, *39*, 869–888. [CrossRef]
25. Casper, W.J.; Harris, C.M. Work-life benefits and organizational attachment: Self-interest utility and signaling theory models. *J. Vocat. Behav.* **2008**, *72*, 95–109. [CrossRef]
26. French, K.A.; Shockley, K.M. Formal and informal supports for managing work and family. *Curr. Dir. Psychol. Sci.* **2020**, *29*, 207–216. [CrossRef]
27. Mutambudzi, M.; Javed, Z.; Kaul, S.; Prochaska, J.; Peek, M.K. Effects of work-family conflict and job insecurity on psychological distress. *Occup. Med.* **2017**, *67*, 637–640. [CrossRef] [PubMed]
28. Bowen, P.; Govender, R.; Edwards, P.; Cattell, K. Work-related contact, work-family conflict, psychological distress and sleep problems experienced by construction professionals: An integrated explanatory model. *Constr. Manag. Econ.* **2018**, *36*, 153–174. [CrossRef]
29. Yildiz, B.; Yildiz, H.; Ayaz Arda, O. Relationship between work–family conflict and turnover intention in nurses: A meta-analytic review. *J. Adv. Nurs.* **2021**, *77*, 3317–3330. [CrossRef]
30. Peltokorpi, V.; Michel, J. The moderating effect of core self-evaluations between the relationships of work–family conflict and voluntary turnover, job promotions and physical health. *Stress Health* **2021**, *37*, 162–174. [CrossRef]
31. Eby, L.T.; Casper, W.J.; Lockwood, A.; Bordeaux, C.; Brinley, A. Work and family research in IO/OB: Content analysis and review of the literature (1980–2002). *J. Vocat. Behav.* **2005**, *66*, 124–197. [CrossRef]
32. Rosin, H.M.; Korabik, K. *Do Family-Friendly Policies Fulfill Their Promise? An Investigation of Their Impact on Work-Family Conflict and Work and Personal Outcomes*; American Psychological Association: Washington, DC, USA, 2002.
33. Fiksenbaum, L.M. Supportive work–family environments: Implications for work–family conflict and well-being. *Int. J. Hum. Resour. Manag.* **2014**, *25*, 653–672. [CrossRef]
34. Kossek, E.E.; Pichler, S.; Bodner, T.; Hammer, L.B. Workplace social support and work–family conflict: A meta-analysis clarifying the influence of general and work–family-specific supervisor and organizational support. *Pers. Psychol.* **2011**, *64*, 289–313. [CrossRef]

35. Clark, S.C. Work cultures and work/family balance. *J. Vocat. Behav.* **2001**, *58*, 348–365. [CrossRef]
36. Sirin, M.S.; Yucel, I. The relationship between supervisor support and work-family conflict and the mediating role of work overload perception on this relationship. *Ekon. Vjesn.* **2021**, *34*, 145–159. [CrossRef]
37. Goff, S.J.; Mount, M.K.; Jamison, R.L. Employer supported child care, work/family conflict, and absenteeism: A field study. *Pers. Psychol.* **1990**, *43*, 793–809. [CrossRef]
38. Baeriswyl, S.; Krause, A.; Elfering, A.; Berset, M. How Workload and Coworker Support Relate to Emotional Exhaustion: The Mediating Role of Sickness Presenteeism. *Int. J. Stress Manag.* **2017**, *24*, 52–73. [CrossRef]
39. Han, Y.; Lee, S.H.; Hur, W.M.; Le, H.S. The mixed blessing of coworker support: Understanding family-work conflict, emotional exhaustion, and job satisfaction. *Balt. J. Manag.* **2023**, *18*, 141–156. [CrossRef]
40. Janssen, P.P.; De Jonge, J.; Bakker, A.B. Specific determinants of intrinsic work motivation, burnout and turnover intentions: A study among nurses. *J. Adv. Nurs.* **1999**, *29*, 1360–1369. [CrossRef]
41. Inoue, R.; Hikichi, H.; Inoue, A.; Kachi, Y.; Eguchi, H.; Watanabe, K.; Arai, Y.; Iwata, N.; Tsutsumi, A. Workplace social support and reduced psychological distress: A 1-year occupational cohort study. *J. Occup. Environ. Med.* **2022**, *64*, e700–e704. [CrossRef]
42. Sloan, M.M. Unfair treatment in the workplace and worker well-being: The role of coworker support in a service work environment. *Work Occup.* **2012**, *39*, 3–34. [CrossRef]
43. Blair-Loy, M.; Wharton, A.S. Employees' use of work-family policies and the workplace social context. *Soc. Forces* **2002**, *80*, 813–845. [CrossRef]
44. Shrider, E.A.; Kollar, M.; Chen, F.; Semega, J. *Income and Poverty in the United States: 2020-Current Population Reports*; United States Census Bureau: Suitland-Silver Hill, MD, USA, 2021.
45. United States Census Bureau. *CPS Historical Time Series Visualizations*; United States Census Bureau: Suitland-Silver Hill, MD, USA, 2021.
46. Anderson, S.E.; Coffey, B.S.; Byerly, R.T. Formal organizational initiatives and informal workplace practices: Links to work-family conflict and job-related outcomes. *J. Manag.* **2002**, *28*, 787–810.
47. Basu, A.; Kim, H.H.; Basaldua, R.; Choi, K.W.; Charron, L.; Kelsall, N.; Hernandez-Diaz, S.; Wyszynski, D.F.; Koenen, K.C. A cross-national study of factors associated with women's perinatal mental health and wellbeing during the COVID-19 pandemic. *PLoS ONE* **2021**, *16*, e0249780. [CrossRef]
48. Kessler, R.C.; Green, J.G.; Gruber, M.J.; Sampson, N.A.; Bromet, E.; Cuitan, M.; Furukawa, T.A.; Gureje, O.; Hinkov, H.; Hu, C.Y.; et al. Screening for serious mental illness in the general population with the K6 screening scale: Results from the WHO World Mental Health (WMH) survey initiative. *Int. J. Methods Psychiatr. Res.* **2010**, *19*, 4–22. [CrossRef] [PubMed]
49. Hosey, M.M.; Leoutsakos, J.M.S.; Li, X.; Dinglas, V.D.; Bienvenu, O.J.; Parker, A.M.; Hopkins, R.O.; Needham, D.M.; Neufeld, K.J. Screening for posttraumatic stress disorder in ARDS survivors: Validation of the Impact of Event Scale-6 (IES-6). *Crit. Care* **2019**, *23*, 276. [CrossRef] [PubMed]
50. Naghavi, S.; Shabestari, O.; Alcolado, J. Post-traumatic stress disorder in trainee doctors with previous needlestick injuries. *Occup. Med.* **2013**, *63*, 260–265. [CrossRef] [PubMed]
51. Thoresen, S.; Tambs, K.; Hussain, A.; Heir, T.; Johansen, V.A.; Bisson, J.I. Brief measure of posttraumatic stress reactions: Impact of Event Scale-6. *Soc. Psychiatry Psychiatr. Epidemiol.* **2010**, *45*, 405–412. [CrossRef]
52. SAS Institute Inc. *SAS® 9.4 Statements: Reference*; SAS Institute Inc.: Cary, NC, USA, 2013.
53. Saevarsdottir, K.S.; Hilmarsdóttir, H.Ý.; Magnúsdóttir, I.; Hauksdottir, A.; Thordardottir, E.B.; Gudjonsdottir, A.B.; Tomasson, G.; Runarsdottir, H.; Jonsdottir, H.L.; Gudmundsdottir, B.; et al. Illness severity and risk of mental morbidities among patients recovering from COVID-19: A cross-sectional study in the Icelandic population. *BMJ Open* **2021**, *11*, e049967. [CrossRef]
54. Zhang, Z.; Feng, Y.; Song, R.; Yang, D.; Duan, X. Prevalence of psychiatric diagnosis and related psychopathological symptoms among patients with COVID-19 during the second wave of the pandemic. *Glob. Health* **2021**, *17*, 44. [CrossRef]
55. Moore, K.A.; Lucas, J.J. COVID-19 distress and worries: The role of attitudes, social support, and positive coping during social isolation. *Psychol. Psychother.* **2021**, *94*, 365–370. [CrossRef]
56. Rousseau, V.; Salek, S.; Aubé, C.; Morin, E.M. Distributive justice, procedural justice, and psychological distress: The moderating effect of coworker support and work autonomy. *J. Occup. Health Psychol.* **2009**, *14*, 305–317. [CrossRef]
57. Winning, A.M.; Merandi, J.M.; Lewe, D.; Stepney, L.M.; Liao, N.N.; Fortney, C.A.; Gerhardt, C.A. The emotional impact of errors or adverse events on healthcare providers in the NICU: The protective role of coworker support. *J. Adv. Nurs.* **2018**, *74*, 172–180. [CrossRef]
58. Yucel, D.; Minnotte, K.L. Workplace support and life satisfaction: The mediating roles of work-to-family conflict and mental health. *Appl. Res. Qual. Life* **2016**, *12*, 549–575. [CrossRef]
59. Pal, I.; Galinsky, E.; Kim, S. Employee health and well-being after a crisis–re-imagining the role of workplace inclusion. *Community Work. Fam.* **2022**, *25*, 30–62. [CrossRef]
60. Johnson, M.E.; Brems, C.; Mills, M.E.; Neal, D.B.; Houlihan, J.L. Moderating effects of control on the relationship between stress and change. *Adm. Policy Ment. Health Ment. Health Serv. Res.* **2006**, *33*, 499–503. [CrossRef] [PubMed]

61. Oreg, S.; Vakola, M.; Armenakis, A. Change recipients' reactions to organizational change: A 60-year review of quantitative studies. *J. Appl. Behav. Sci.* **2011**, *47*, 461–524. [CrossRef]
62. Wisse, B.M.; Sleebos, E. When change causes stress: Effects of self-construal and change consequences. *J. Bus. Psychol.* **2016**, *31*, 249–264. [CrossRef]
63. Flovik, L.; Knardahl, S.; Christensen, J.O. Organizational change and employee mental health: A prospective multilevel study of the associations between organizational changes and clinically relevant mental distress. *Scand. J. Work Environ. Health* **2019**, *45*, 134–145. [CrossRef]
64. Dougall, A.L.; Ursano, R.J.; Posluszny, D.M.; Fullerton, C.S.; Baum, A. Predictors of posttraumatic stress among victims of motor vehicle accidents. *Psychosom. Med.* **2001**, *63*, 402–411. [CrossRef]
65. Tang, B.; Deng, Q.; Glik, D.; Dong, J.; Zhang, L. A meta-analysis of risk factors for post-traumatic stress disorder (PTSD) in adults and children after earthquakes. *Int. J. Environ. Res. Public Health* **2017**, *14*, 1537. [CrossRef]
66. McClendon, J.; Perkins, D.; Copeland, L.A.; Finley, E.P.; Vogt, D. Patterns and correlates of racial/ethnic disparities in posttraumatic stress disorder screening among recently separated veterans. *J. Anxiety Disord.* **2019**, *68*, 102145. [CrossRef]
67. Colombo, D.; Suso-Ribera, C.; Fernández-Álvarez, J.; Cipresso, P.; Garcia-Palacios, A.; Riva, G.; Botella, C. Affect recall bias: Being resilient by distorting reality. *Cogn. Ther. Res.* **2020**, *44*, 906–918. [CrossRef]
68. Hamam, A.A.; Milo, S.; Mor, I.; Shaked, E.; Eliav, A.S.; Lahav, Y. Peritraumatic reactions during the COVID-19 pandemic—The contribution of posttraumatic growth attributed to prior trauma. *J. Psychiatr. Res.* **2021**, *132*, 23–31. [CrossRef]
69. Liu, C.H.; Stevens, C.; Conrad, R.C.; Hahm, H.C. Evidence for elevated psychiatric distress, poor sleep, and quality of life concerns during the COVID-19 pandemic among U.S. young adults with suspected and reported psychiatric diagnoses. *Psychiatry Res.* **2020**, *292*, 113345. [CrossRef] [PubMed]
70. Solomon, Z.; Mikulincer, M.; Ohry, A.; Ginzburg, K. Prior trauma, PTSD long-term trajectories, and risk for PTSD during the COVID-19 pandemic: A 29-year longitudinal study. *J. Psychiatr. Res.* **2021**, *141*, 140–145. [CrossRef] [PubMed]
71. Young, J.; Schweber, A.; Sumner, J.A.; Chang, B.P.; Cornelius, T.; Kronish, I.M. Impact of prior trauma exposure on the development of PTSD symptoms after suspected acute coronary syndrome. *Gen. Hosp. Psychiatry* **2021**, *68*, 7–11. [CrossRef] [PubMed]