

Dimensions of Marginality During COVID-19: Precarious workers, mental health, and race & ethnicity *

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Introduction

The coronavirus pandemic of 2019 (COVID-19) is responsible for an estimated 6.6 million deaths worldwide and over 1 million domestically (World Health Organization, 2022). Over 75% of COVID-related deaths were among persons over the age of 65. At its core, it is a public health crisis that with the help of vaccines, government intervention, and diligent public health measures, the United States has been able to curtail. However, as with many major adverse events, the aftershocks have a ripple effect that can be felt within various segments of society and for years to come (Galea, 2020). The social and economic devastation of COVID-19 has been evident in unemployment, poverty and other economic well-being measures, physical and mental health, access to food, education, and housing, to name a few (Grooms et al., 2021; Davis et al., 2020; Hsu and Henke, 2021). The pandemic has unearthed the cracks in many social structures and, in some instances, exacerbated them. It exposed the fragility of the most marginalized groups; racially, ethnically, economically, and health-wise. The contagious nature of the virus forced social distancing and restricted non-essential employment to prevent the spread of the deadly virus (Gupta et al., 2020, 2021). Consequently, given the necessary restrictions on work, COVID-19 has forced the United States to take a more critical view of what employment means and which employment categories are essential to our everyday existence.

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A substantial body of literature exists on the symbiotic relationship between employment and health. COVID-19 illuminated new dimensions of this dynamic and offered greater insights into the severity that worker instability and insecurity can have on one's health. At the peak of the pandemic, some labor force participants had to weigh the risks of COVID-19 exposure and its impact on their household health with the economic decision of whether to work through the pandemic. This was particularly problematic for Black and Hispanic workers, who on average reside in a multi-generational household a quarter of the time (Cohn et al., 2022). The ability to work from home during the pandemic was a privilege not afforded to some, especially those most economically disadvantaged and precarious workers (Blau et al., 2021; Grooms et al., 2021). Given the catastrophic effect of the pandemic on everyday life, this paper will explore the dimensions of marginality illuminated by COVID-19. The intent is to provide a comprehensive overview of how the coronavirus pandemic has impacted the mental health of vulnerable populations, particularly Black and Hispanic populations employed in precarious worker arrangements.¹

Precarious Employment

COVID-19 disrupted business activity domestically as well and globally. The risk of infection and possible death forced elected officials to make difficult decisions regarding business activity. However, it was not merely the pandemic that claimed responsibility for the ensuing economic slowdown. Economic globalization, technological advancements, and integrated labor markets have led to increased productivity globally. Simultaneously the landscape of the labor force in industrialized countries has evolved. Kalleberg (2011) asserts, in the 1970s, employee-employer relations began to erode, giving way to job insecurity. Breen (1997) underscores, "the shifting of risk from employer to employee represents an involuntary loss of welfare from the latter and a transfer of that welfare to the former." Many factors influenced a shift in risks, including but not limited to inflation, high unemployment, and a decline in union membership. The union decline is often thought to have occurred via illegal or unethical business practices, which forced employees to refrain from union membership to ensure employment. During this time frame, labor unions in other industrialized countries also declined, but to a lesser extent than what occurred in the U.S. (Gunn et al., 2021).

The shift in risks, was accompanied by unpredictable hours, reductions in employer-provided health insurance, a move from 'employer-paid defined benefit pension plans to defined employee contributions

¹Some of the ideas presented in this paper have been previously shared in solo and co-authored papers, a book chapter, blog posts, newsletters, and testimony. When relevant, all previously published work has been cited.

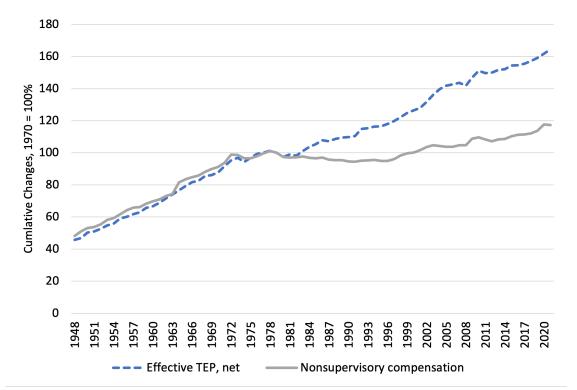


Figure 1: The productivity and workers' compensation gap 1948–2020

Source: Economic Policy Institute analysis of unpublished Total Economy Productivity data from Bureau of Labor Statistics (BLS) Labor Productivity and Costs program, wage data from the BLS Current Employment Statistics, BLS Employment Cost Trends, BLS Consumer Price Index, and Bureau of Economic Analysis National Income and Product Accounts.

plans,' and a reduction in other fringe benefits (Lambert, 2008; Kalleberg, 2009; Boushey and Ansel, 2016). This time frame also marked a notable shift in workers' compensation relative to productivity. According to the Bureau of Labor Statistics (BLS) Labor Productivity and Costs program, from 1948 to 1978, productivity and workers' compensation mapped rather closely; in 1979, the two measures were equivalent (Mishel et al., 2020). However, as illustrated in Figure 1, the gap widened substantially over the next four decades with no endin sight. From 1979 to 2021, productivity rose by nearly 63%, yet workers' compensation only rose by a quarter of the productivity. As a labor force, workers produced more but received a lower effective wage. "Unpredictable schedules, characterized by little to no control over one's work hours, and erratic, on-call, or rotating shifts are increasingly common for workers up and down the income ladder" (Boushey and Ansel, 2016). Precarious work and the gig economy did not happen overnight but are the consequence of decades of the erosion of the preceived power of employees in the labor force.

Broadly speaking, there are two employment arrangements; standard and alternative. Historically, stan-

dard employment arrangements have received the most protection from labor laws and include indefinite full-time employment in which the employee has a direct relationship with the employer and work is typically performed at the employer's business. Conversely, an alternative employment arrangement typically has limited temporal, physical and/or administrative attachment to the employer. Precarious workers fall into the latter category; by definition, precarious means dependent on chance or uncertainty. Researchers have coined precarious work as "uncertain, unpredictable, and risky from the point of view of the worker" (Kalleberg, 2009). This includes alternative work arrangements such as but not limited to part-time, contingent work, on-call, independent contractors, temporary, freelance, and gig workers. It is important to note that while traditionally precarious workers are thought to not fall in the full-time employment category (standard worker arrangement), the line between employment arrangements face greater job insecurity as employment risks have continued to shift to the employee and away from the employer (Breen, 1997; Lambert, 2008; Edgell et al., 2013; Boushey and Ansel, 2016). "The number of workers in high-quality, full-time employment, with adequate wages and benefits, has decreased over the last 40 years, while the number with low-quality, precarious employment has increased", (Oddo et al., 2021).

Given the rapidly changing nature of the labor market over the last five decades, the intricacies of precarious employment are ever evolving. While the broad definition of uncertainty and unpredictability in work is commonly accepted, the classification of industries and job categories which is encompassed by the term is less clear. Unfortunately, the U.S. Bureau of Labor Statistics does not systematically track unpredictable work hours or precarious employment. Thus grasping the full extent of the precarious labor force is difficult. Golden (2020) used 2010 data to conservatively estimate 10% of the U.S. labor force faces unpredictable work schedules. In 2015 employment of independent contractors and other alternative work by contract firms rose to 17.2% (Simpson, 2021). In a recent publication Oddo et al. (2021) use the National Longitudinal Survey of Youth (1988–2016) and the Occupational Information Network database to generate a precarious employment score using seven dimensions; material rewards, work time arrangements, stability, workers' rights, collective organization or empowerment, interpersonal relations, and training and employability opportunities.

Similarly, Bhattacharya and Ray (2022) at the Economic Research and Support Office of the National Institute for Occupational Safety and Health (NIOSH) used the 2002 - 2018 Quality of Work-Life module of the General Social Survey (GSS-QWL) to estimate a consistent ad replicable count for precarious workers. The authors found precarious workers accounted for roughly 30% of the labor fore. Precarious work was highest among Black (46%) and Hispanic (44.8%) workers and for workers in the age group 25-34 years (39.4%). Black and Latinx are also overrepresented in the gig economy. According to Padin (2020) Black and Latinx workers account for 42% of independent contracts working on apps, such as Lyft, Uber, Door Dash, Amazon Flex and Handy.

While it is necessary to have a hand on the fraction of the labor market which faces precarious employment, whether one-tenth or one-third, neither are trivial and require careful attention to the possible ripple effects they may have outside of the labor market. The ramifications of greater precarity in the labor force extend beyond employee-employer relationships, it may impact an array of "non-work domains, including individual health and well-being (e.g., owing to mental stress, poor physical health, and uncertainty about educational choices), family formation (delayed entry into marriage and having children), and the nature of social life more generally (community disintegration and declining social cohesion), " (Kalleberg, 2011). This paper does not aim to clearly identify what a "precarious worker" is and instead, given that precarious employment is linked to an array of poor health outcomes, will focus on the impact of employment uncertainty on workers' mental health during the COVID-19 pandemic (Benach J, 2014; Boushey and Ansel, 2016).

Employment and Health

The literature examining the complex relationship between employment and health is growing and multifaceted. From occupational injuries to access to employer-sponsored health insurance, the relationship between the two is layered and, at times, difficult to disentangle. Jobs that pay higher wages are often associated with greater health by way of access and means. For example, higher income allows individuals to live in safer neighborhoods with fewer pollutants and greater access to healthier options. Additionally, higher-paying, more stable jobs are associated with greater fringe benefits such as employee-sponsored health insurance (Robert Wood Johnson Foundation, 2013). Conversely, low-wage jobs are associated with lower-quality health.

In recent years there has been a growing literature exploring work requirements and access to Medicaid, government-sponsored health insurance. Work requirements and social safety net programs are not new in theory. In prior iterations, work requirements were implemented for Supplemental Nutrition Assistance Program (SNAP), public housing, housing vouchers, and Temporary Assistance for Needy Families (TANF) (Hahn et al., 2017). The intent was to "strengthen self-esteem" and to facilitate economic progress for welfare recipients. In a systematic review of the literature Antonisse and Garfield (2018) concluded that, "while it is difficult to determine a causal relationship between employment and health status (largely due to challenges controlling for health selection bias and the inability to conduct randomized controlled trials on this topic), there is strong evidence of an association between employment and good health. However, research suggests that factors like job availability and quality, as well as the social context of workers, mediate the effect of work or work requirements on health." The stipulation of work requirements is a double edge sword, for many recipients the underlying assumption is they have the option to work consistent hours. (Henly and Lambert, 2014; Boushey and Ansel, 2016; Antonisse and Garfield, 2018).

Prior to the pandemic, other researchers have also reported the link between poor health and job insecurity (Olesen et al., 2013; Butterworth et al., 2012; van Rijn et al., 2014; Schuring et al., 2007, 2013; Schrage, 2013). Using multiple waves of annual household panel surveys in Australia from 2001 Olesen et al. (2013) found "mental health to be both a consequence of and risk factor for unemployment". Similarly, using a multi-year panel from the Netherlands Schuring et al. (2013) were able to establish that poor health is a determinant in a person's entrance and retention in the labor force. Studies have found a significant association between the role unemployment negatively impacts an individual's mental health, yet less is known of the mitigating role of precarious employment on mental health. The research on major adverse events (e.g., natural disasters, economic recessions, etc.) has established a consensus that such events are strongly linked to elevated mental health distress (Galea et al., 2005; Rhodes et al., 2010; Diette et al., 2018).

The Coronavirus Pandemic

Shifts in employee-employer risks, lingering consequences of the 2008 Great Recession, and other labor market forces introduced a consequential level of volatility and precarity prior to the onset of COVID-19 (Breen, 1997; Lambert, 2008). The pandemic proved especially difficult for workers faced with more significant uncertainty and by virtue of the market, typically work fewer hours, are paid lower wages, and receive fewer material rewards (Han and Hart, 2021). Spring 2020 marked the beginning of business closures, layoffs, and reductions in their working hours. In May 2020 (Bureau of Labor Statistics, U.S. Department of Labor, 2022) estimated 49 million workers in the U.S. "did not work at all or worked fewer hours at some point in the four weeks preceding the survey because their employer closed or lost business due to COVID-19." Of the nearly 50 million workers, 82% reported receiving no pay, partial or full, from

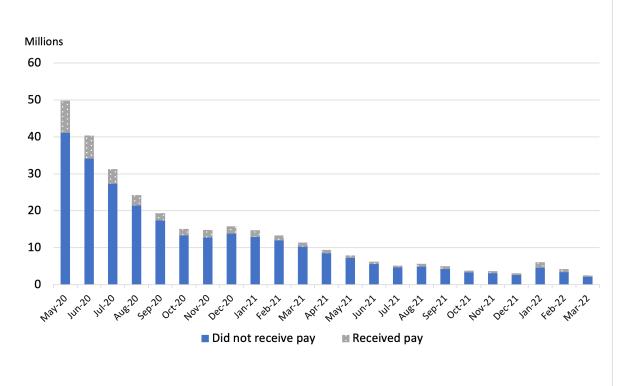
their employer for the hours they could not work (Figure 2). While the labor market has recovered in part, as of March 2022, 2.5 million workers still reported being out of work due to the pandemic.

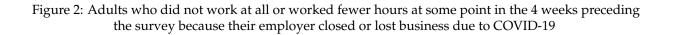
Additionally, the unequal distribution of the labor market effects from the onset of the pandemic has been well-established. Black and Hispanic workers account for more than half the labor force, which were hit especially hard by COVID-19 shutdowns, such as; food and agriculture, and industrial, commercial, and residential facilities and services (Gould and Wilson, 2020). In addition, to being overrepresented in frontline industries, Black and Hispanic workers routinely receive lower job quality for the same job as their white counterparts (Grooms et al., 2021). For example, in their 2015 report, Demos and the National Association for the Advancement of Colored People (NAACP) illustrated the extent to which employment in the retail industry continues to bolster racial inequality. Black and Hispanic retail workers are more likely than their white retail workers to live below the poverty line, less likely to be managers, work fewer hours, and at every position within retail industry are paid a fraction of what white employees in similar positions are paid (Ruetschlin and Asante-Muhammad, 2015).

Historically the Black to white unemployment ratio is 2:1. Extensive research has found the notion "first to be fired, last to be hired" to in fact, be factual Fairlie and Sundstrom (1997). Since the 1980's, the average Black unemployment rate has been 11.7%, and Latinx 8.6% compared to 5.4% for white workers (Couch et al., 2020). Drawing on the parallel between the recovery of Black employment following the 2008 Great Recession and COVID-19, (Williams, 2020) uses data to offer insight into how employment patterns could have a lasting impact on Black America's ability to accumulate wealth in years to come. Williams (2020) noted it took over 10 years post the Great Recession for the average income of Black workers' to return to pre-recession levels. Given that Black and Hispanic households hold less wealth and report lower incomes, they are less likely to be insulated from the financial shocks of the economic distress that accompanied the pandemic (Couch et al., 2020; Williams, 2020; Grooms et al., 2021).

While this paper will focus much of its attention on racial and ethnic differences, it is imperative to note that industries thought to have the greatest precarity, frontline industries, are disproportionately women of color. According to the Center for Economic and Policy Research, over 64% of frontline workers are women (Rho et al., 2020).² For example, in 2019, 80% of workers in California's Skilled Nursing Facilities were women and 72% identified as women of color. The median income was less than \$34,000 and roughly

²"Women are particularly overrepresented in the frontline industries in Health Care (76.8%) and Child Care and Social Services (85.2%). Women are also overrepresented in the following occupations within frontline industries: cashiers (71.8%); retail salespersons (63.5%); customer service representatives (63.7%); pharmacy technicians (81.6%); fast food and counter workers (67%); all of the top 10 occupations in the Health Care industry group (71.3-96.5%), except physicians; and, all of the top 10 occupations in the Child Care and Social Services industry group (73.1-97.7%) (?)





Source: U.S. Bureau of Labor Statistics

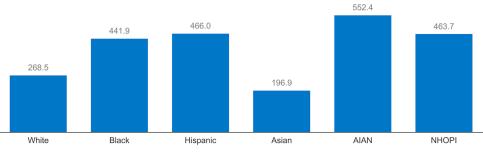
20% that of the state median income for all workers (Lopezlira et al., 2022). Analyzing results from a survey fielded in Saint Louis County, Missouri, in the fall of 2020, Coats JV (2022) found Black women to experience the greatest risk of employment loss. It is also true that minority women, especially Black women, are more likely to be single mothers and the head of the household relative to white women, thus compounding the effects of job precarity (Couch et al., 2020; Grooms et al., 2021).

From the onset, Black and Hispanic populations consistently reported higher rates of COVID-19 cases and deaths relative to white populations (Hill and Artiga, 2022; Alsan et al., 2021; Grooms et al., 2021). As illustrated in Figure 3, provided by Hill and Artiga (2022), Black, Hispanic, American Indian or Alaska Native (AIAN), and Native Hawaiian or Other Pacific Islander (NHOPI) all reported higher age-adjusted COVID-19 mortality rates from the onset of the pandemic through mid-2022. Figure 4 illustrates the disparity in COVID-19 cases. As with age-adjusted COVID-19 mortality rates, age-adjusted COVID-19 infection rates are higher for Black, Hispanic, AIAN, and NHOPI people. Infection rates are likely underreported, they do not include home test which were not reported to a public health agency (Antonisse and Garfield, 2018).

Increased transmission of the virus was also accompanied by increased exposure for Black and Hispanic/Latinx workers as they are more concentrated in essential non-healthcare occupations, which are also highly associated with precarious employment. The next sections will focus on the mental health of precarious employment in general and for Black, Hispanic/Latinx, and white workers. This is not to diminish the importance of understanding the intersection of employment and mental health of other racial/ethnic groups but is an artifact of the limited data to draw meaningful and conclusive results from. Moving forward, it is critical that efforts are also invested in understanding the mitigating effects of COVID-19 on smaller yet other vulnerable segments of the U.S. population.

The Pandemic, Precarious Employment and Mental Health

In 2020, 52.9 million adults in the U.S. reported having any mental illness (SAMHSA, 2020) On average Black and Hispanic adults report mental illness at lower rates than white and receive treatment less often as well. Black and Hispanic adults are underdiagnosed due to being less likely to have health insurance and cultural incompetence within the healthcare system (Grooms, 2022; Buchmueller and Levy, 2020; Kirby and Kaneda, 2010). During the past two years, there has been a nationwide rise in overdose deaths and suicide.

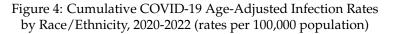


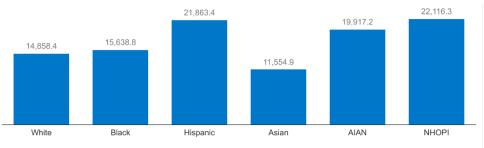
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Figure 3: Cumulative COVID-19 Age-Adjusted Mortality Rates by Race/Ethnicity, 2020-2022 (rates per 100,000 population)

NOTE: Persons of Hispanic origin may be of any race but are categorized as Hispanic for this analysis; other groups are non-Hispanic. AIAN refers to American Indian or Alaska Native. NHOPI refers to Native Hawaiian or Other Pacific Islander. Death data as of August 3, 2022. Ageadjusted rates standardized to 2019 U.S. Census Bureau population estimates. SOURCE: KFF Analysis of National Center for Health Statistics. Provisional COVID-19 Deaths by HHS Region, Race, and Age. Date accessed August 4, 2022. Available from https://data.cdc.gov/d/tpcp-uiv5.





NOTE: Persons of Hispanic origin may be of any race but are categorized as Hispanic for this analysis; other groups are non-Hispanic. AIAN refers to American Indian or Alaska Native. NHOPI refers to Native Hawaiian or Other Pacific Islander. Case data as of August 1, 2022. Ageadjusted rates standardized to 2019 U.S. Census Bureau population estimates.

SOURCE: KFF analysis of Centers for Disease Control and Prevention, COVID-19 Response. COVID-19 Case Surveillance Restricted Data Access, Summary, and Limitations, released on August 4, 2022. The CDC does not take responsibility for the scientific validity or accuracy of methodology, results, statistical analyses, or conclusions presented. Overdose deaths have steadily risen since the onset of the opioid epidemic (roughly 2011). From 1999 to 2017, there was 253% increase in overdose deaths per capita (Rudd et al., 2016). For most of the past two decades, overdose deaths for Blacks and Hispanics rose at a slower rate than for white deaths. For Black Americans, this changed in 2020, when the age-adjusted drug overdose deaths per 100,000 persons was 35.4 for Black and 32.8 for white, marking the first time Black overdose deaths exceeded white in recent history. Hispanic overdose deaths rose to 17.6 in 2020 compared to 11.0 in 2018. In 2020 the overdose death rate for American Indian and Alaska Native people was the highest at 41.9 and the lowest for Asian people and Pacific Islanders at 5.5 age-adjusted drug overdose deaths per 100,000 persons (Panchal et al., 2022).

Racial and Ethnic Disparities: Essential Workers, Mental Health, and the Coronavirus Pandemic

Beginning in March 2020, co-authors and I fielded a multi-wave, nationally representative household survey to monitor American households' well-being throughout the pandemic. The National Panel Study of COVID-19 (NPSC-19) explored various dimensions of vulnerability across worker typology (unemployed, non-essential, essential non-healthcare, and essential healthcare) and race and ethnicity (Grooms et al., 2021). The following section will present the study's primary results, followed by complimentary studies that reinforced the fragility of Black and Hispanic workers throughout the pandemic.

Data was collected as part of the second wave of the NPSC-19 across 3,338 households. Surveys were fielded from April 10th to April 24th, 2020, providing a snapshot of mental health distress by worker typology from the initial months of the pandemic. Various individual and household-level characteristics were collected. Variables of particular interest are race, ethnicity, employment typology, and mental health distress inventories. The aim was to better understand the interaction race and employment status played in levels of mental health distress and explore dimensions of vulnerability exposed by the the public health crises. The individual employment categorizes utilized were; employed but non-essential worker; employed, essential non-healthcare worker; and employed essential health Questionnaire (PHQ-9) and the General Anxiety Disorder questionnaire (GAD-7) are employed to generate a measure for the severity of mental health distress.

On average Black and Hispanic respondents who worked through the pandemic as essential nonhealthcare workers lacked health insurance 9% of the time relative to 2% for white respondents (Grooms

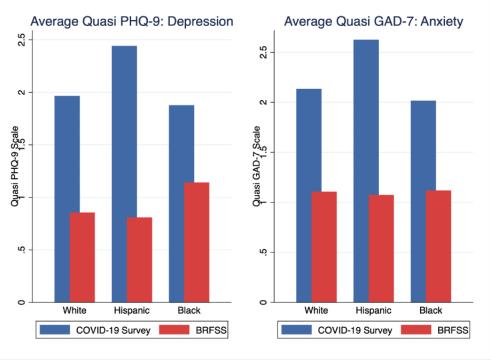


Figure 5: Mental Health Disparity, Cross Survey Comparison

et al., 2021). Similarly, respondents of color are more likely to be single parents (38% Black, 28% Hispanic, 20% white). Consistent with other quantitative studies analyzing the effects of COVID-19 on mental health. On average, all respondents reported elevated levels of mental health distress relative to pre-COVID estimates reported in 2018. Average mental health distress scores for the NSPC-19 are compared against the CDC 2018 Behavioral Risk Factor Surveillance System by race and ethnicity as illustrated in Figure 5. Given the absence of pre-COVID survey results, inventories from 2018 BRFSS across similar questions are used for comparison. While there is some variation on average, all races reported substantially elevated levels of depression and anxiety.

Table 1 reports the main specifications employed in the paper's regression analysis. Black and Hispanic essential non-healthcare workers report elevated levels of depression (quasi PHQ-9) 0.7 and 1.1 standard deviations relative to white respondents. Similarly, they report elevated levels of anxiety (quasi GAD-7) 0.8 and 0.9 standard deviations relative to white respondents. For Black and Hispanic essential non-healthcare workers, the results are robust and significant for each inventory used to calculate the severity score (Grooms et al., 2021). "Given the survey's timing, it is not easy to disentangle what is precisely driving our results. However, the findings provide clear evidence that Black and Hispanic essential non-health

Source: Grooms et al. (2021)

(standard normal dependent variables)		
	Quasi PHQ-9	Quasi GAD-7
Race & Ethnicity: relative to non-	Hispanic Whites	
Black	-0.16	-0.09
	(0.14)	(0.14)
Hispanic	0.03	0.04
	(0.14)	(0.12)
Employment status: relative to "U	Inemployed"	
Non-essential	0.03	-0.11
	(0.12)	(0.11)
Essential non-health	-0.06	-0.17
	(0.12)	(0.10)
Essential health	0.42**	0.38**
	(0.17)	(0.16)
Employment status $ imes$ Race & Eth	nicity	
Black: non-essential	0.68**	0.78**
	(0.29)	(0.33)
Black: essential non-health	0.79***	0.74**
	(0.27)	(0.31)
Black: essential health	0.83**	0.63
	(0.41)	(0.40)
Hispanic: non-essential	0.44	0.22
	(0.45)	(0.29)
Hispanic: essential non-health	1.13***	0.88***
	(0.42)	(0.28)
Hispanic: essential health	0.41	0.17
	(0.53)	(0.43)
Dependent variable mean	2.20	3.18
Dependent variable Std.	[1.98]	[2.79]
Covariates	\checkmark	\checkmark
No. Observations	2,026	2,026

Table 1: MENTAL HEALTH DISTRESS

Note: The dependent variables include the transformed (z-score) quasi PHQ-9 and GAD-7 scores. Statistics were estimated using the sample survey weights. Standard errors are reported for each statistic in parenthesis. Statistical significance is indicated at the 10%, 5%, and the 1% levels, respectively, as *, **, and ***.

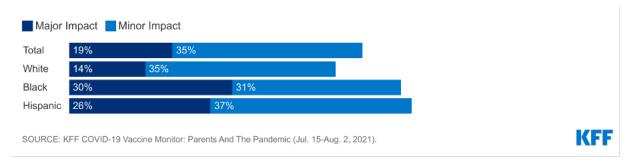


Figure 6: Impact of the Pandemic on Parents' Mental Health, by Race/Ethnicity

The Kaiser Family Foundation COVID-19 Vaccine Monitor: Parents And The Pandemic survey was fielded July 15 - August 2, 2021 found similar results. When asked if 'they feel that worry or stress related to coronavirus has had a major or minor negative impact on their mental health" 61% of Black respondents, 63% of Hispanic respondents, and 49% of white respondents replied that it did. As illustrated in Figure 6, the primary effect is more pronounced for Black and Hispanic respondents (Hill and Artiga, 2022). In addition, elevated levels of worry and stress were more likely to be reported by mothers (61%) relative to fathers (45%) and for households that had an employment disruption (65%) relative to those which did not (46%).

Conclusion

The growth of precarious work is not uniquely American. In Europe, precarious employment accounts for 25% to 60% of employment. Thus understanding the social and economic burdens of this evolving labor classification is a global concern (Simpson, 2021). "Precarious employment is a significant determinant of population health and health inequities and has complex public health consequences both for a given nation and internationally," Gunn et al. (2021). Compounded by the deleterious effects of COVID-19, Black and Hispanic households have endured additional economic and social disparities rooted in systemic racism which can have lasting impacts on their well-being and health (Grooms et al., 2021). The prolonged impact of COVID-19 not only exacerbated prior mental health stressors but has given way to elevated levels of mental health distress across the board, regardless of race and/or ethnicity. As we continue to navigate the new landscape forged by COVID-19, it is imperative that we continue to assess how mental health access and treatment will be incorporated into our recovery and interwoven into our social structure permanently.

Given the well-established link between mental health and substance use disorder, moving forward, it

is vital to grasp better the roles that mental health distress, worker precarity, and income inequality play in the current rise of overdose deaths (Grooms and Ortega, 2021). Additionally, a growing body of literature has begun exploring the complex effects of workers cycling in and out of the labor force. Understanding the impact of precarious employment over multiple points could provide context for the longer-term social and economic worker instability (Gunn et al., 2021).

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