



## Still Unstable: The Persistence of Scheduling

## Uncertainty During the Pandemic

### Introduction

The COVID-19 pandemic brought public awareness to the vital role that front-line service sector workers play in our economy and daily lives. These workers did the essential and in-person work of staffing grocery stores and pharmacies, keeping restaurants and retail running, and delivering supplies while millions of other Americans sheltered in place and worked from home. The service sector makes up a large sector of the U.S. labor force, accounting for over 23 million jobs.<sup>1</sup> Despite their importance during the pandemic, jobs in this sector are profoundly precarious, undermining both the economic security and the health and wellbeing of workers and their families. Jobs in retail, food service, and hospitality are known for their low wages and high turnover, but less attention has been paid to the schedule instability and unpredictability that many service sector workers contend with every day.

Schedules in the service sector have not improved, despite the current low unemployment rate and the stated commitment of some firms to improve conditions for workers during the pandemic. The Shift Project has been tracking service sector workers' schedules since 2017, using an innovative data collection method to survey thousands of workers twice annually. Drawing on data from about 110,000 workers who completed surveys between Spring 2017 and Fall 2021, we compare work-scheduling conditions before the COVID-19 pandemic to work-scheduling conditions during the COVID-19 pandemic. We find little evidence of change. Unstable and unpredictable work schedules continue to be the norm for service sector workers - especially for workers of color, and for women of color in particular.

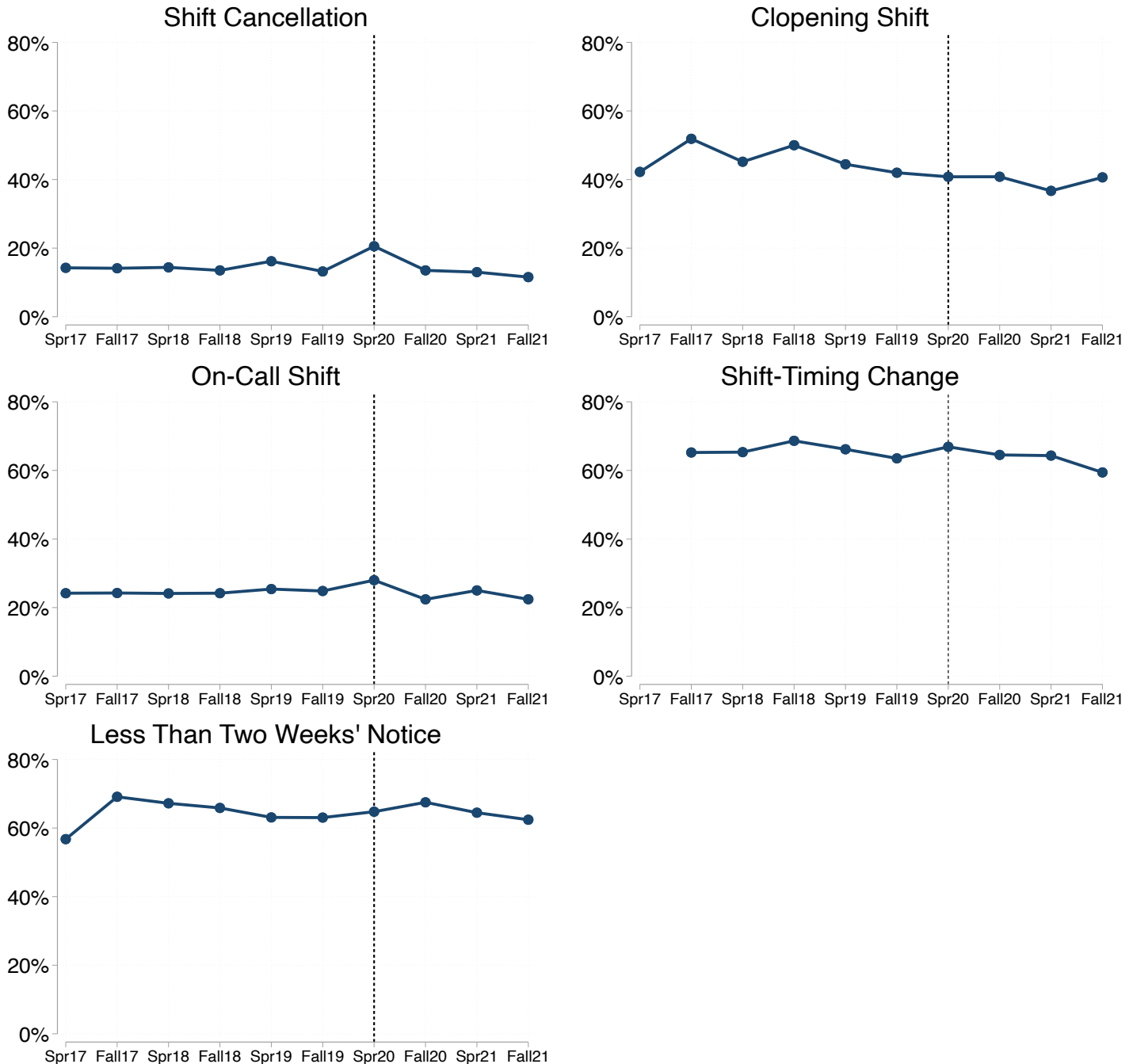
Far from a regular 9-5 schedule, or even a stable night shift, many workers in the service sector face schedules that are unstable and unpredictable, with little advance notice and frequent last-minute changes to timing. Workers are also often assigned to work "on-call," required to be available if needed, but otherwise generally not paid for their time. Last-minute changes to scheduled shifts or a sudden shift cancellation are also common. Workers may also be scheduled to close the store and then open it the next day (referred to as a "clopening" shift), leaving them with little time to rest between shifts. The prevalence of these unstable and unpredictable work scheduling practices is an impediment to planning non-work time for family, school, appointments, another job, or leisure.

Prior research on scheduling has found that unpredictable and unstable schedules lead to higher employee turnover, household economic insecurity, and reductions in workers' health and wellbeing.<sup>ii</sup> Unstable and unpredictable work schedules may also have intergenerational impacts, as parental exposure to unstable scheduling disrupts childcare and household routines. In this update, we trace how schedules of parent workers impact child sleep, behavior, school

attendance, and health.

Our recent data on working conditions through the end of 2021 gives little credence to the idea that employers have voluntarily improved scheduling conditions during the pandemic. Instead, unstable and unpredictable schedules remained the norm. However, our data also demonstrate that policies can make a difference. We highlight findings from our evaluation of Seattle's

**Figure 1. Scheduling Characteristics by Wave**



*Notes: Figures show percent of workers who experienced each work-scheduling condition in the prior month. Vertical line marks the beginning of the pandemic.*

Secure Scheduling ordinance, which generated significant improvements in work schedule stability and predictability for covered workers.

## The Pandemic and Work Schedules

Despite rhetoric promising front-line workers more respect and better conditions, unpredictable schedules remained the status quo during the COVID-19 pandemic. Figure 1 shows that scheduling conditions during the pandemic closely resembled conditions in the three years leading up to the pandemic. In the most recent data from Fall of 2021, 64% of workers received less than two weeks' notice of their work schedule, unchanged from the period prior to the pandemic. In Fall of 2021, more than a third of workers received just one week of notice and one quarter have as little as 72 hours' notice. Many other scheduling hardships persisted in the Fall of 2021, such as on-call shifts (21%), cancelled shifts (11%), shift timing changes (57%) and clopening shifts (36%). In our most recent data, 42% of workers had no input into the timing of their work schedules, and 65% of workers expressed a desire for a more stable and predictable schedule.

The share of workers who are involuntary part-time—defined as working part-time but wanting more hours—modestly declined during the pandemic. Figure 2 shows that right before the pandemic, 32% of workers were involuntarily part-time, a share that declined to 24% by the Fall of 2021. Notably, this reduction was not driven by an increase in work hours, as median usual

work hours remained around 35/week before and during the pandemic. Instead, the modest reduction in involuntary part-time during the pandemic was driven by a decline in the share of part-time workers who reported wanting more hours at their main job. Before the pandemic, 60% of part-time workers wanted more hours, but this dropped to 53% during the pandemic. While we do not directly capture the reasons for this decline, it seems likely that pandemic-related school closures, increasing work-life conflict, and the risks posed by every hour of in-person work at least partially underly this reduction in desire for more work hours.

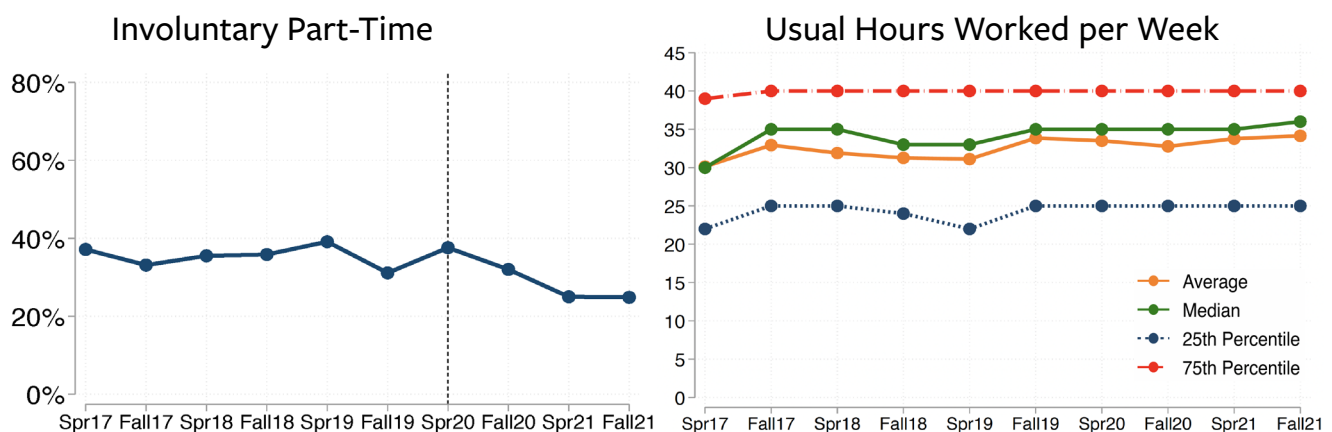
## Race & Gender Inequality

People of color are overrepresented in the service sector and, among service sector workers, are disproportionately exposed to unstable and unpredictable work schedules.<sup>iii</sup> Across several indicators, the pandemic exacerbated race and gender inequality.

Racial inequality in schedule notice widened during the pandemic. In the pandemic period, shown in the bottom panel of Table 1, men of color (67%) and women of color (68%) were more likely than white men (62%) and white women (62%) to report having less than 2 weeks' advance notice of their schedule.

Racial and gender inequality in other dimensions of schedule stability persisted or widened during

**Figure 2. Involuntary Part-Time Work and Usual Work Hours**



the pandemic. For instance, men of color (27%) and women of color (27%) were more likely than white women (23%) and white men (21%) to work on call during the pandemic. Overall, women of color were 15-30% more likely to experience canceled shifts, on-call shifts, and involuntary part-time work compared with white men.

Even while the overall share of workers who were involuntarily part-time declined during the pandemic, workers of color (57% men & 58% women) were much more likely than white workers (49% men & 50% women) to want more hours.

These racial and gender inequalities accord with prior Shift Project research, which has shown that even when comparing white and workers of color with similar characteristics within the same firms, a 5% to 10% gap in exposure to precarious scheduling remains.<sup>iv</sup> These disparities in scheduling conditions may come about because managers have a great deal

of discretion over schedules, allowing an opportunity for conscious or unconscious biases and unequal treatment.

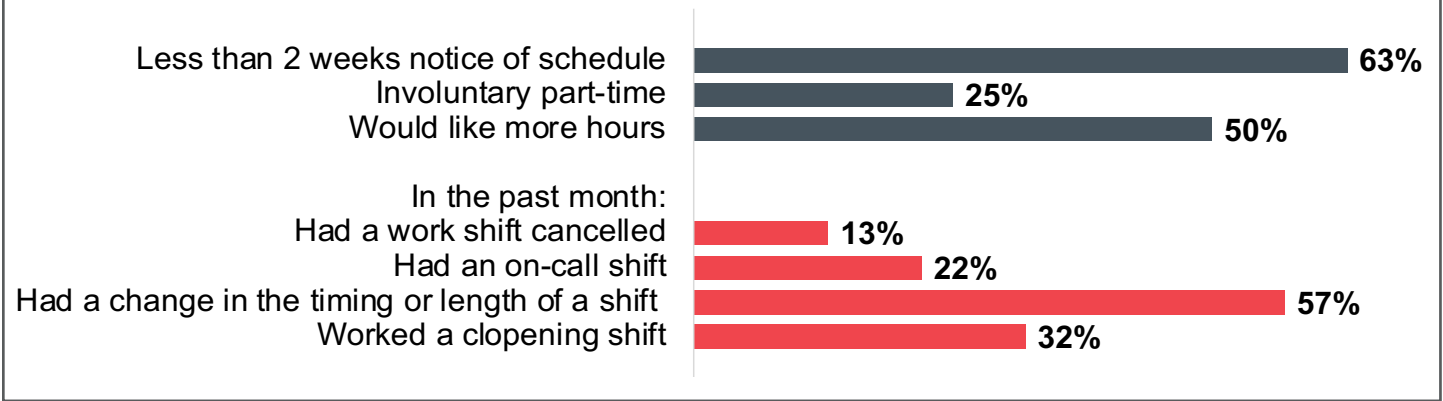
## Scheduling and Child Well-Being

Balancing work schedules and family life can be a struggle for the approximately one-third of service workers who are also parents. Comparable to other service sector workers during the pandemic, 63% percent of parents received less than two weeks' notice of their schedule. Figure 3 shows that parents also experienced changes at the last minute, with 13% reporting at least one cancelled shift and 57% reporting at least one change to the timing of one of their shifts in the past month. Twenty-two percent of parents experienced on-call shifts and 32% had clopening shifts. One fourth of parents continue to be involuntary part-time during the pandemic compared to 28% pre-COVID. The very slight decline

**Table 1. Race and Gender Inequality in Work Schedules Before and During COVID-19**

Before COVID (2017-2019)	White, non-Hispanic Men	Men of Color	White, non-Hispanic Women	Women of Color
Less than 2 weeks notice	62%	65%	64%	65%
On-call shift	23%	27%	25%	28%
Cancelled shift	13%	16%	14%	19%
Clopening shift	48%	49%	46%	48%
Shift timing change	66%	65%	68%	68%
Involuntary part-time	30%	34%	39%	43%
Wants more hours	55%	63%	58%	63%
Weekly hours (average)	34	34	31	31
Weekly hours (median)	38	36	33	32
During COVID (2020-2021)	White, non-Hispanic Men	Men of Color	White, non-Hispanic Women	Women of Color
Less than 2 weeks notice	62%	67%	62%	68%
On-call shift	21%	27%	23%	27%
Cancelled shift	13%	16%	14%	18%
Clopening shift	34%	39%	37%	38%
Shift timing change	60%	63%	64%	63%
Involuntary part-time	25%	28%	31%	36%
Wants more hours	49%	57%	50%	58%
Weekly hours (average)	36	36	33	33
Weekly hours (median)	40	38	35	35

**Figure 3. Parent Scheduling Disruptions**



in involuntary part-time, as we observed in workers overall, was not driven by an increase in hours, which remained around 35 hours per week on average, but rather by some decline in the desire for more hours (56% before vs 50% during the pandemic).

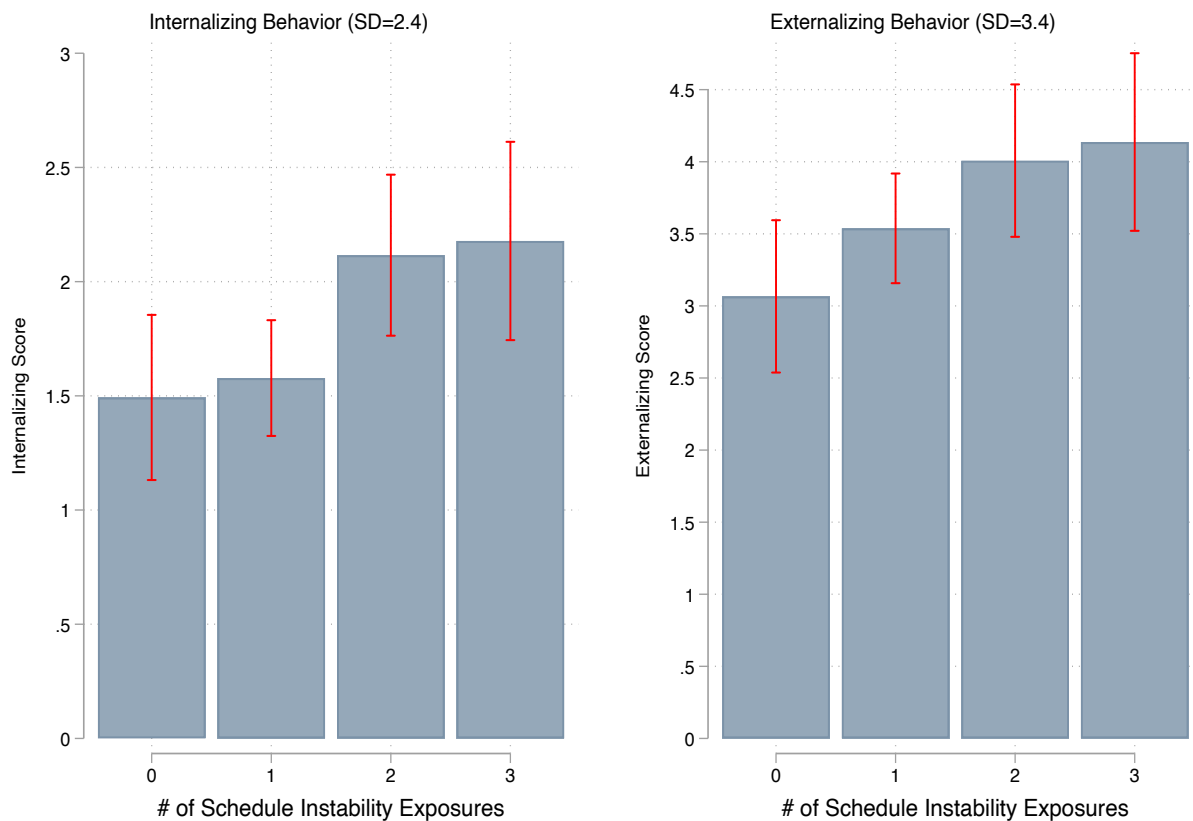
Substantial evidence shows that children suffer when parents cannot control the timing of their work.<sup>v</sup> Children lose consistent daily routines and parent-child time all while parents become more stressed. In the context of a pandemic that brought parents to their breaking point,<sup>vi</sup> and produced substantial stress and disruption for many children,<sup>vii</sup> the Shift

Project finds that parents' unstable work schedules are associated with increases in children's behavioral problems, school absences, sleep problems, and even with worsening child health.

### Child Behavior

When parents have work schedule instability and unpredictability, this causes emotional distress for children. Some children internalize this distress, by feeling worthless, anxious, guilty, self-conscious, unhappy, and worried, while other children may externalize this distress by acting out. Overall,

**Figure 4. Maternal Schedule Unpredictability and Child Behavior**





we find that parental exposure to on-call shifts, last-minute timing changes, as well as inadequate advanced notice of schedules, manifests in more internalizing and externalizing in their children. Internalizing, increased in children with each type of schedule hardship. As shown in Figure 4, children whose mothers experienced 2 or 3 different kinds of schedule instability showed significantly more internalizing behavior. Children whose mothers had advanced notice of their schedule exhibited significantly fewer negative behaviors. Two or more weeks advance notice was associated with .85 points less on the externalizing, or lashing out, behavior scale and .52 points less on the internalizing behavior scale compared to children with parents with only 0-2 days notice.

### School Absences

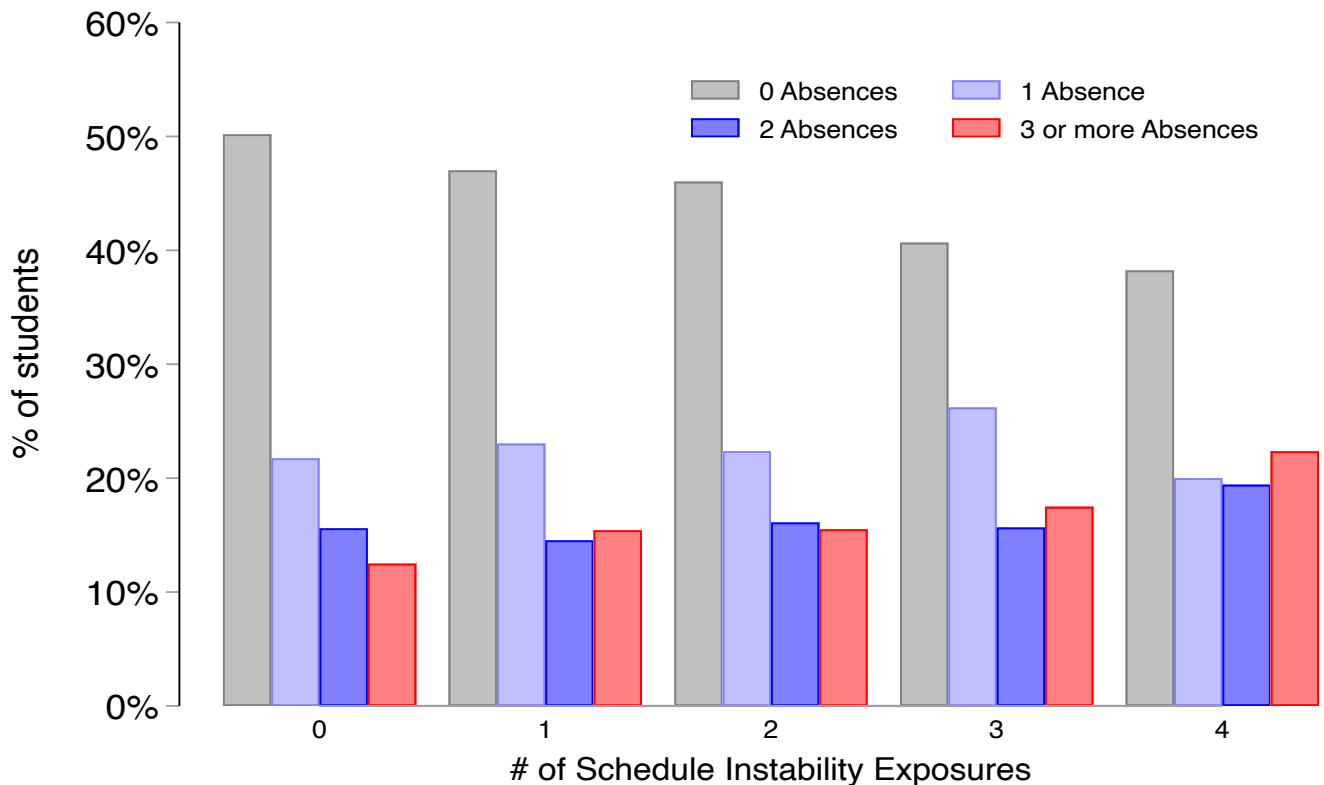
When parents are able to actively engage in their children’s lives, children have higher attendance rates in school. As we might expect, when parents struggle with unpredictable schedules, their children’s attendance suffers. Last minute changes to shift timing and clopening shifts make it hard for

parents to ensure that their children get to school on time and persistent unpredictability and instability make it difficult to establish regular family routines. Figure 5 shows that parents whose schedules included all four measured indicators of unstable and unpredictable work schedules (on-call shifts, last minute shift cancellation, last minute change to shift timing, and clopening shifts) have children who miss about .26 school days per month, which amounts to approximately two more absences per school year, compared with children whose parents work stable and predictable schedules.

### Child Sleep

Unpredictable work schedules and can result in poor sleep for workers by undermining the economic stability and causing psychological stress and distress. New evidence shows that this relationship extends beyond workers to their children, as parental schedule instability disrupts family routines, increases economic insecurity, and diminishes parents’ bandwidth. A larger share of children whose parents had the greatest schedule instability (41%) did not get adequate sleep each night compared to parents of

**Figure 5. School Absences and Schedule Instability**



children with stable and predictable schedules (27%).<sup>ix</sup> Additionally, 47% of children whose parents had the most unstable schedules did not consistently sleep the same amount each night, compared with 34% of children whose parents had stable and predictable schedules. Parents' unstable and unpredictable work schedules lead to work-life conflict and stress, diminished parental well-being, and material hardship, all of which can create distress for children that undermine child sleep quality. Sleep disruptions in children and adolescents puts them at greater risk of poorer health and may lower academic performance and learning capacity.<sup>x</sup>

## Child Asthma Control

Unstable schedules also interfere with parents' ability to care for children with health conditions like asthma. Parents play a significant role in managing their children's asthma because they monitor symptoms, administer inhalers, and make doctor's appointments. In order to play this role effectively, parents need to know their work schedules so that they can plan out when they will be able to support their child and when they need to arrange for other care. We find that children whose parents are exposed to routine schedule unpredictability and instability are more likely to have attacks of wheezing or to make visits to the ER for asthma than children whose parents worked more stable and predictable schedules. Similar to the cases of child behavior and child sleep, unstable and unpredictable work schedules lead to more wheezing because they increase household economic insecurity and stress.

## Policies Can Increase Schedule Predictability: Seattle Case Study

Over the past few years, several cities and Oregon state have passed fair workweek laws, which aim to improve schedule predictability and stability.<sup>xi</sup> Seattle's fair workweek law, the Secure Scheduling Ordinance, went into effect in 2017 and resulted in improved schedule predictability for workers in our evaluation study.<sup>xii</sup>

Similar to most fair workweek laws, Seattle's Secure

Schedule Ordinance stipulates that covered workers receive two weeks' advance notice of their work schedule or be compensated with extra pay when their work schedule is assigned or changed with less notice. Seattle's law discourages employers from scheduling clopening shifts by requiring that workers receive extra compensation for shifts scheduled without at least 10 hours of rest time in between. Among other provisions, this law also requires that part-time workers have access to additional hours before new workers are hired into similar positions.<sup>xiii</sup>

The Shift Project evaluation of Seattle's ordinance found that it was effective in increasing schedule predictability and in reducing schedule instability. The law also had significant downstream benefits, improving workers' sleep, economic security, and overall happiness. To evaluate Seattle's law, the Shift Project compared changes in the working conditions of Seattle workers to workers employed at the very same companies in a set of comparison cities. Two years after Seattle's Secure Scheduling Ordinance went into effect, Seattle workers enjoyed more predictable schedules. In particular, Seattle's Secure Scheduling Ordinance:

- Increased the share who received two weeks' advance notice of their work schedule (by 11 percentage points)
- Decreased the share of workers reporting last minute shift timing changes without pay (by 13 percentage points)
- Reduced on-call shifts (by 7 percentage points)
- Reduced clopening shifts (by 6 percentage points)

These improvements to the predictability and stability of schedules had positive benefits for workers' quality of life. Specifically, Seattle's Secure Ordinance:

- Increased workers' reports of happiness (by 7 percentage points)
- Increased the share of workers reporting good or very good sleep quality (by 11 percentage points)
- Reduced the share of workers reporting one or more material hardships, such as food or housing insecurity (by 10 percentage points)

The evidence from Seattle shows that legislation aimed at improving schedule predictability and stability can improve schedule conditions for workers

and can lead to more general improvements in worker well-being.

## Conclusion

The Shift Project has tracked work scheduling conditions in the service sector and their consequences for workers and their families over a five-year period from 2017 through 2021, spanning three years leading up to the pandemic and two years during the pandemic. The Shift Project survey data puts into sharp relief the unpredictable and unstable work schedules that service sector workers have contended with both before and during the COVID-19 pandemic. These data show that, alongside the health risks, uncertainty, and stress of working during a pandemic, many service-sector workers continue to contend with chronically unpredictable and unstable work schedules.

Although we observe widespread precarity and instability in the service sector as a whole, we also find inequality in conditions by gender and race. Across several dimensions of schedule instability, people of color—and particularly women of color—have more precarious schedules relative their white counterparts. The persistence of schedule instability in the service sector contributes to the perpetuation of widespread racial inequality. Inattention to the temporal dimension of precarious work risks continuing a longstanding pattern of neglecting the needs of women of color in labor policy initiatives.<sup>xiv</sup>

The pandemic period has naturally led to heightened attention to workplace safety and paid sick leave, while unstable work schedules have been largely overlooked in the national narrative. Yet, work schedules have a pervasive influence on workers' lives. Unstable schedules can undermine workers' quality of life by interfering with their ability to rest, to plan for important events and appointments, to provide caregiving for family members, and to protect time for school, family and friends, and other pursuits.

Unstable schedules also take a toll on the children of service workers. Parents' unstable work schedules are associated with increases in children's behavioral difficulties, school absences, sleep problems, and even with worsening child health.

Efforts by employers to improve worker's schedules have been inadequate which is why regulations that raise the floor on job quality are so critical to improving schedule instability and unpredictability. In Seattle, fair workweek legislation reduced the share of workers receiving their schedules on short notice and reduced disruptive last-minute schedule changes. The legislation also had benefits for worker well-being in terms of better sleep, more economic security, and improvements in overall happiness. Yet, at present, very few cities or states have fair workweek legislation in place and very few workers enjoy the benefits of more stable schedules.

At the Federal level, The Schedules That Work Act explicitly addresses the unstable and unpredictable scheduling practices that continue to plague service sector workers.<sup>xv</sup> In the industries where schedule instability is particularly prevalent, the bill requires two weeks' notice of work schedules and compensation for last-minute shift changes. And across industries, the bill ensures that employees have a right to make work schedule requests without fear of retaliation, as well as a right to adequate time to commute and rest between shifts. The Part-Time Workers Bill of Rights Act aims to reduce involuntary part-time work, by requiring employers to provide hours to existing employees who want them before hiring more workers.<sup>xvi</sup>

Service sector workers have staffed the front lines throughout the COVID-19 pandemic, and yet they remain subject to unstable and unpredictable work scheduling practices. Limited advance notice of schedules, on-call shifts, last minute cancellations and timing changes increase stress and instability in the lives of workers and their families.. Precarious work schedules undermine economic security, workers' health, and prospects for intergenerational mobility. Despite trumpeting the heroism of front-line workers, firms have largely failed to voluntarily improve work scheduling conditions. But, policy makers have a proven tool kit for making a difference in laws that require two weeks' advance notice, predictability pay for last minute changes, and that encourage greater work hour stability and sufficiency.



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## Methodological Appendix

The Shift Project has collected survey data from hourly service-sector workers employed at large retail and food establishments since the fall of 2016. The survey data collection was national in scope and the survey sample includes respondents from all 50 U.S. states and Washington, D.C. The Shift Project collected two cross-sections of survey data annually (one in the Spring (March - June) and once in the Fall (Sept - Nov)) each year. In total, this report used data from 110,000 workers employed at 149 of the largest firms in the service sector who took these surveys over the period.

The Shift Project recruits survey respondents using online Facebook/Instagram advertisements, targeted to workers employed at large retail and food-service employers.

Those who responded to the Shift survey invitation were automatically routed to a survey landing page where they were asked to consent to participate in the study, then began the online self-administered survey using the Qualtrics platform. As an incentive, those who completed the survey and provided contact information were entered into a lottery for a \$500 gift card. The survey included modules on job characteristics, work schedules, demographics, economic stability, health, parenting, and child outcomes.

The survey recruitment approach yields a non-probability sample of workers, which may differ from the broader population of service-sector workers. To mitigate this potential bias, we have applied weights that adjust our sample to reflect the universe of service-sector workers in the United States. We construct survey weights to adjust the demographic characteristics of the Shift survey sample to match the demographic characteristics of service-sector workers in the American Community Survey (ACS) for the years 2008-2019. We align the ACS sample with the Shift sample by selecting workers in the ACS who are employed in the same occupations and industries as the Shift sample.

For a detailed discussion of The Shift Project data collection, methodology, and data validation, see:

Schneider, D. and K. Harknett. 2019. "What's to Like?" Facebook as a Tool for Survey Data Collection." *Sociological Methods & Research*. <http://doi.org/10.1177/0049124119882477>.

## Endnotes

<sup>i</sup> On size of workforce, see Bureau of Labor Statistics, “Labor Force Statistics from the Current Population Survey, Household Data, Annual Averages, 18b. Employed Persons by Detailed Industry and Age.” <https://www.bls.gov/cps/cpsaat18b.htm>, On unemployment projections, <https://www.nytimes.com/2022/01/07/business/economy/jobs-report-december-2021.html>

<sup>ii</sup> On schedules and turnover, see Choper et al., 2019. On schedules and economic insecurity, see Federal Reserve, 2016; Golden, 2015, Haley-Lock, 2011; Zeytinoglu et al., 2004; Edin and Schaefer, 2015. On schedules affecting time-based conflicts, see Lambert and Henly, 2014; Han and Waldfogel, 2007; Hsueh and Yoskikawa, 2007; and on time-based conflicts affecting child wellbeing, see Conger and Donnellan, 2007; Bodovski and Farkas, 2010; Greeman and Bodovski, 2011; Del Boca et al., 2012.

<sup>iii</sup> Adam Storer, Daniel Schneider and Kristen Harknett, “What Explains Race/Ethnic Inequality in Job Quality in the Service Sector?” (Washington, D.C.: Washington Center for Equitable Growth, 2019).

<sup>iv</sup> Ibid

<sup>v</sup> On schedules affecting parental wellbeing, see Zeytinoglu et al., 2004; Schneider and Harknett, 2019; Williams et al., 2019; and on parental wellbeing affecting child wellbeing, see Conger and Elder, 1994

<sup>vi</sup> <https://www.nytimes.com/2021/02/04/parenting/working-moms-mental-health-coronavirus.html>

<sup>vii</sup> <https://www.kff.org/coronavirus-covid-19/issue-brief/back-to-school-amidst-the-new-normal-ongoing-effects-of-the-coronavirus-pandemic-on-childrens-health-and-well-being/>

<sup>viii</sup> Schneider, D., & Harknett, K. (2019). Consequences of Routine Work-Schedule Instability for Worker Health and Well-Being. *American Sociological Review*, 84(1), 82–114. <https://doi.org/10.1177/0003122418823184>

<sup>ix</sup> Forthcoming: Allison Logan & Daniel Schneider. (2022) Parental Exposure to Work Schedule Instability and Child Sleep Quality.

<sup>x</sup> On poor sleep and poor child outcomes, see Chaput et al. 2016; Spruyt 2019

<sup>xi</sup> J. Wolfe, J. Jones, D. Cooper, ‘Fair workweek’ laws help more than 1.8 million workers. (Economy Policy Institute, 2018). & Sophia Mitchell, Deanna Baumle, and Lindsay Cloud. (2021, October). “Exploring The Legal Response To Unpredictable Scheduling Burdens for Women in the Workplace” (Philadelphia, PA.: Temple University Center for Public Health Law Research).

<sup>xii</sup> Harknett, K., Schneider, D., & Irwin, V. (2021). Improving health and economic security by reducing work schedule uncertainty. *Proceedings of the National Academy of Sciences*, 118(42). <https://doi.org/10.1073/pnas.2107828118>

<sup>xiii</sup> S. M. Code, Chapter 14.22: Secure scheduling. Municipal code (Municode Library, Seattle, WA, 2017).

<sup>xiv</sup> Ellen Mutari, Marilyn Power, and Deborah M. Figart, “Neither Mothers nor Breadwinners: African-American Women’s Exclusion from US Minimum Wage Policies, 1912–1938,” *Feminist Economics* 8, no. 2 (2002): 37–61.

<sup>xv</sup> National Women’s Law Center. (2019b). The Schedules That Work Act: Giving workers the tools they need to succeed. Retrieved August 13, 2021, from <https://nwlc.org/wp-content/uploads/2019/10/Schedules-that-Work-Act-Giving-Workersthe-Tools-2019-v3.pdf>

<sup>xvi</sup> Sophia Mitchell, Deanna Baumle, and Lindsay Cloud. (2021, October). “Exploring The Legal Response To Unpredictable Scheduling Burdens for Women in the Workplace” (Philadelphia, PA.: Temple University Center for Public Health Law Research).