EVIDENCE REVIEW



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Fair Work Scheduling

Evidence Review Findings: Needs Further Study

Fair work scheduling policies need further study before conclusions can be made about the impact of such policies on outcomes during the prenatal-to-3 period. Unpredictable, unstable work schedules have been shown to have negative consequences for workers and their families, and evaluations of fair work scheduling interventions at the company and local levels are ongoing. Statewide fair work scheduling policies aiming to improve the adequacy and predictability of work hours have recently been passed, but studies examining the impact of these policies are not yet available.

Unpredictable, unstable work schedules are associated with financial instability, reduced physical and mental wellbeing, less time spent with children, and difficulty securing consistent, high-quality child care among working parents. To reduce difficulties associated with inadequate, unpredictable, and unstable work schedules for low-income hourly employees, policies at the company, local, and state levels aim to promote fair work schedules. States can determine who is eligible for fair work scheduling protections, and policies typically cover at least one of the following aspects of work scheduling: predictability, employee input, and adequacy of hours and compensation. Ongoing evaluations of local fair work ordinances and future research on recent statewide fair scheduling policies will provide more evidence of the impact of these policies on outcomes for children and their families.

What Is Fair Work Scheduling?

The rise in involuntary part-time employment and "just-in-time" scheduling has contributed to inadequate, unpredictable, and unstable work schedules for low-income hourly employees, particularly in the retail and service industries. To reduce difficulties associated with unstable work schedules, recent policies at the local and state levels have aimed to promote fair work schedules among hourly employees. Although coverage details and eligibility vary, fair work scheduling policies broadly focus on at least one of the following aspects of work schedules: predictability, employee input, and adequacy of hours and compensation. Schedule predictability interventions typically require at least 14 days advance notice of work schedules or partial pay for shifts canceled with less than 24 hours of notice. Employee input includes the right of an employee to request schedule flexibility without repercussions. Policies related to the adequacy of hours and compensation require an employer to offer additional hours to qualified existing part-time employees before hiring new employees. The first fair work scheduling policies (the Retail Workers Bill of Rights in San Francisco, the Secure Scheduling ordinance in Seattle, and the Fair Workweek ordinance in Emeryville, California) were enacted between 2014 and 2016.

Who Is Affected by Fair Work Scheduling?

In 2015, approximately 17 percent of the workforce was employed in jobs with unstable work schedules.² As of 2016, more than 6 million low-wage workers were parents of children under age 18, and many parents work in industries overrepresented by people of color, and women of color in particular: child care, food service, hospitality, and retail.¹ Research estimates that as of 2012, approximately 90 percent of hourly retail employees experienced schedule instability to some degree.⁴ Because the coverage of local- and state-level fair work scheduling policies varies widely by jurisdiction and company size, not all employees in a given state or locality are eligible for fair scheduling protections.

Why Should Fair Work Scheduling Be Expected to Impact the Prenatal-to-3 Period?

Scheduling numerous workers for part-time, variable shifts has become common practice,⁵ providing managers with flexibility to cover unexpected gaps or reduce excess help on a shift while minimizing labor costs.⁶ Unpredictable, inadequate work hours can leave employees financially and logistically strained. Variable hours can make it difficult to consistently meet work requirements for safety net programs, which can lead to enrollment churn or loss of benefits for those who need them.⁷ Unpredictable hours can also prevent workers from being able to hold a second part-time job, leaving some employees with only part-time income and likely no benefits.⁸ For noncustodial parents, reduced income or benefits can mean a lower likelihood of paying child support or a smaller amount of support reaching a child. The stress of variable work shifts may lead to psychological distress, which can impact the relational health between parents, their partners, and their children.⁹ Further, access to formal child care during nontraditional hours is limited,¹⁰ leaving parents to rely on inconsistent or informal care arrangements that may impact child health and development.¹¹ The difficulties of employer-driven schedule unpredictability (in contrast to employee-driven flexibility) primarily impact workers of low socioeconomic status (SES) and women of color.¹² Fair work scheduling policies may benefit these groups in particular.

Decades of research in the field of child development have made clear the conditions necessary for young children and their families to thrive.²⁰ These conditions are represented by our eight policy goals, shown in Table 1. The goals with which fair work scheduling are theoretically aligned are indicated below.

¹ An algorithm-informed scheduling practice that seeks to minimize labor costs and maximize profits by adjusting employee schedules to match retail traffic patterns.

Table 1: Policy Goals Theoretically Aligned With Fair Work Scheduling

Aligned	Policy Goal
	Access to Needed Services
	Parents' Ability to Work
	Sufficient Household Resources
	Healthy and Equitable Births
	Parental Health and Emotional Wellbeing
	Nurturing and Responsive Child-Parent Relationships
	Nurturing and Responsive Child Care in Safe Settings
	Optimal Child Health and Development

What Impact Does Fair Work Scheduling Have, and for Whom?

Case studies of fair scheduling pilot programs at the company level¹³ and ongoing evaluations of local fair scheduling ordinances⁶ have demonstrated implementation challenges and perceived improvements in scheduling among employees and managers, but no studies to date have causally linked recent state-level fair work scheduling policies with outcomes for parents and children in the prenatal-to-3 period. A growing body of observational research is working to define empirically the consequences of unpredictable, unstable work scheduling practices for worker health, work-life conflict, and child outcomes. In lieu of strong causal research on the impact of state-level policies, this problem-defining body of observational research is the subject of the review below.

Access to Needed Services

A 2019 research brief from the Urban Institute showed that public safety net beneficiary families are more likely to have variable and precarious work schedules than nonbeneficiary families, and many families are at risk of being noncompliant with safety net work requirements as a result of scheduling practices outside of their control.⁷

Parents' Ability to Work

Observational evidence suggests that unstable work schedules may reduce parents' ability to work. Though the sample was not limited to parents, a recent working paper with a national sample of service sector workers found that higher levels of work schedule instability, measured on a scale that included on-call or canceled shifts and a categorical indicator of advance schedule notice, were associated with significant increases in employee turnover.¹⁸

Sufficient Household Resources

Work schedule instability has also been shown to be negatively associated with financial and material wellbeing. A study of parents working in nonmanagerial retail jobs found that variable work shifts and having less than two weeks advance notice of work schedules were both associated with reduced financial security. Similarly, a recent study of service sector workers showed that higher levels on a scale of schedule unpredictability were associated with higher levels of hunger and housing hardship. Panel survey data of service sector workers has also shown that weekly earnings were significantly lower among those employees who had quit their previous job due to scheduling issues.

Parental Health and Emotional Wellbeing

Observational research supports the connection between schedule unpredictability and reduced mental and physical health among workers overall, though evidence focused on parents is more limited. One study with a large sample of hourly retail and food service workers found that routine schedule variability was associated with higher levels of psychological distress, lower sleep quality, and lower happiness levels; however, this sample was not limited to parents, who may experience even greater strain. A recent working paper similarly found that parents' variable work shifts were associated with lower wellbeing, higher parenting stress, and less time spent with their children. An observational study with a small sample of female hourly employees at one retail chain found that having less than one week advance notice of work schedules was associated with higher levels of work-life conflict. Counter to these findings, one study of low-income parents with children ages 1 to 11 found that variable work schedules had no significant effect on parent stress.

Nurturing and Responsive Child Care in Safe Settings

A growing body of observational research examines the effects of nontraditional work hours on child care arrangements among working parents, but research focusing specifically on child care among those experiencing unpredictable work schedules is largely still emerging. Using a large sample of working parents in the retail and food service industries with children ages 0 to 9, one working paper found that on-call scheduling and last-minute schedule changes were significantly associated with 0.21 more types of child care and a 100 percent increase in the probability of a child being left home alone. Additionally, a small qualitative study of 25 parents working hourly jobs in the retail or fast food industries found that unpredictable work schedules were associated with a "scramble" for child care, placing strain on both parents and their support networks.

Optimal Child Health and Development

A recent working paper found that parents with greater schedule unpredictability scored their children higher (worse) on internalizing and externalizing behavior scales; parental wellbeing was a significant mediator of this relationship, as were economic insecurity and time spent with children.¹⁶ An older study similarly found that variable, nonstandard work schedules were associated with child behavioral problems, but the effect did not remain significant for child behavior in the long term.¹⁷

Is There Evidence That Fair Work Scheduling Reduces Disparities?

Because fair work scheduling policies may especially benefit workers of low socioeconomic status and women of color working in retail, food service, and hospitality industries, such policies may have the potential to reduce racial and socioeconomic disparities. In the research included in this review, study samples were typically limited to the low-SES workers who are most affected by unpredictable scheduling practices; however, results were not broken down to show differential effects by race, ethnicity, or SES, so further research is needed.

Has the Return on Investment for Fair Work Scheduling Been Studied?

No studies included in this review conducted an analysis of the return on investment for fair work scheduling policies; however, reduced employee turnover¹⁸ and increased productivity¹³ may provide cost savings for employers. A more comprehensive review of the return on investment is forthcoming.

What Do We Know, and What Do We Not Know?

The current and emerging observational literature has demonstrated the consequences of unpredictable work schedules, especially among low-income parents: reduced financial security, worsened parental mental health, unstable child care arrangements, increased work-life conflict, and increased child behavioral problems. However, strong causal evidence is

Work-life conflict is defined in this study as a conflict that challenges one's "ability to effectively plan activities and meet responsibilities outside of work, such as participating in children's school and extra-curricular programs, assisting with caregiving needs of aging parents, scheduling medical appointments, and socializing with friends" (p. 988).

iii Disparities are defined here as differential outcomes by race, ethnicity, or socioeconomic status (SES).

not yet available to determine whether fair work scheduling policies can significantly improve these problems. Additionally, research has not yet examined the differential impacts of scheduling policies by race and ethnicity, despite the overrepresentation of women of color in industries most affected by unpredictable schedules. Further research is needed to understand what aspects of fair work scheduling (e.g., advance notice of schedules, employee input into schedules, guaranteed pay for hours on-call) are most effective for improving outcomes for workers and their families.

Is Fair Work Scheduling an Effective Policy for Improving Prenatal-to-3 Outcomes?

Fair work scheduling policies need further study before conclusions can be made about the impact of such policies on outcomes during the prenatal-to-3 period. Although states and major cities have recently passed legislation related to scheduling practices, more time is needed before the impacts of recent statewide fair work scheduling policies can be known. Corporate case studies¹³ and ongoing local evaluations⁶ suggest that fair work scheduling policies may be effective at stabilizing schedules despite implementation challenges, but research on the impacts of these policies on parent and child outcomes is not yet available.

How Does Fair Work Scheduling Vary Across the States?

Ten states^{iv} have passed a state-level policy related to schedule predictability or input (see Table 2 below), but policies related to adequacy of hours and compensation have only been implemented at the local level in six major cities^v in California, New York, and Washington. The details of these policies, including who is eligible for coverage and what types of protections are guaranteed, vary widely at both the state and local levels.²

Table 2: State	Variation	in Fair	Work	Scheduling

State	State Has Implemented a Policy Regarding Fair Work Scheduling		
Alabama	No		
Alaska	No		
Arizona	No		
Arkansas	No		
California	Yes		
Colorado	No		
Connecticut	Yes		
Delaware	No		
District of Columbia	Yes		
Florida	No		
Georgia	No		
Hawaii	No		
Idaho	No		
Illinois	No		
Indiana	No		
lowa	No		
Kansas	No		
Kentucky	No		
Louisiana	No		
Maine	No		
Maryland	No		

Table 2: State Variation for Fair Work Scheduling (continued)

iv State counts include the District of Columbia.

[∨] San Francisco, Emeryville, San Jose, New York City, Seattle, SeaTac

MassachusettsYesMichiganNoMinnesotaNoMississispipiNoMissouriNoMontanaNoNebraskaNoNewadaNoNew HampshireYesNew JerseyYesNew MexicoNoNew YorkYesNorth CarolinaNoNorth DakotaNoOhioNoOklahomaNoOregonYesPennsylvaniaNoRhode IslandYesSouth CarolinaNoSouth DakotaNoTexasNoUtahNoVermontYesVirginiaNoWest VirginiaNoWyoshingtonNoState Count10	State	State Has Implemented a Policy Regarding Fair Work Scheduling
Minnesota No Mississippi No Missouri No Montana No Nebraska No Nevada No New Hampshire Yes New Jersey Yes New Mexico No New York Yes North Carolina No Ohio No Oklahoma No Oregon Yes Pennsylvania No Rhode Island Yes South Carolina No Tennessee No Texas No Utah No Vermont Yes Virginia No Washington No Wisconsin No Wisconsin No Mino Missouri No Mo Montana No Mo Montana No Mo	Massachusetts	Yes
Mississippi No Missouri No Montana No Nebraska No Nevada No New Hampshire Yes New Jersey Yes New Mexico No New York Yes North Carolina No Ohio No Oklahoma No Oregon Yes Pennsylvania No Rhode Island Yes South Carolina No South Dakota No Tennessee No Texas No Utah No Vermont Yes Virginia No Washington No Wisconsin No Wisconsin No Mono Mono Mono Mono Mono Mono Mono Mo	Michigan	No
Missouri No Montana No Nebraska No Nevada No New Hampshire Yes New Jersey Yes New Mexico No New York Yes North Carolina No Ohio No Oklahoma No Oregon Yes Pennsylvania No Rhode Island Yes South Carolina No South Dakota No Texas No Utah No Vermont Yes Virginia No Washington No Wisconsin No West Virginia No Wisconsin No N	Minnesota	No
MontanaNoNebraskaNoNevadaNoNew HampshireYesNew JerseyYesNew MexicoNoNew YorkYesNorth CarolinaNoNorth DakotaNoOhioNoOklahomaNoOregonYesPennsylvaniaNoRhode IslandYesSouth CarolinaNoSouth DakotaNoTennesseeNoTexasNoUtahNoVermontYesVirginiaNoWashingtonNoWisconsinNoWyomingNo	Mississippi	No
Nebraska No Nevada No New Hampshire Yes New Jersey New Mexico No New York North Carolina No North Dakota Ohio Oklahoma Oregon Pennsylvania Rhode Island South Carolina No South Dakota No Texas No Utah No Vermont Virginia No Washington No Wisconsin No	Missouri	No
New Hampshire New Jersey New Jersey New Mexico No New York North Carolina No North Dakota Ohio Oklahoma Oregon Pennsylvania Rhode Island South Carolina No South Dakota No Tennessee No Texas No Utah No Vermont Vermont Ves Virginia No Washington No Wyoming No	Montana	No
New Hampshire New Jersey New Mexico No New York North Carolina No North Dakota Ohio Oklahoma Oregon Pennsylvania Rhode Island South Carolina No South Dakota No Tennessee No Texas No Utah No Vermont Virginia No Washington No Wisconsin No	Nebraska	No
New Jersey New Mexico New York New York North Carolina No North Dakota No Ohio Oklahoma No Oregon Yes Pennsylvania Rhode Island South Carolina No South Dakota No Tennessee No Texas No Utah No Vermont Virginia No Washington No Wisconsin No	Nevada	No
New Mexico New York Yes North Carolina No North Dakota Ohio Oklahoma Oregon Yes Pennsylvania No Rhode Island South Carolina No South Dakota Tennessee No Texas No Utah No Vermont Yes Virginia No Washington No Wyoming No	New Hampshire	Yes
New York North Carolina No North Dakota No Ohio Oklahoma No Oregon Yes Pennsylvania No Rhode Island South Carolina South Dakota Tennessee No Texas No Utah No Vermont Yes Virginia No Washington No Wisconsin No	New Jersey	Yes
North Carolina North Dakota No Ohio Ohio Oklahoma No Oregon Yes Pennsylvania No Rhode Island Yes South Carolina South Dakota Tennessee No Texas No Utah No Vermont Yes Virginia No Washington No Wyoming No	New Mexico	No
North Dakota Ohio No Oklahoma No Oregon Yes Pennsylvania No Rhode Island Yes South Carolina No South Dakota Tennessee No Texas No Utah No Vermont Yes Virginia No Washington No Wyoming No	New York	Yes
Ohio No Oklahoma No Oregon Yes Pennsylvania No Rhode Island Yes South Carolina No South Dakota No Tennessee No Texas No Utah No Vermont Yes Virginia No Washington No Wisconsin No Wyoming No	North Carolina	No
Oklahoma Oregon Yes Pennsylvania Rhode Island Yes South Carolina South Dakota Tennessee No Texas No Utah No Vermont Yes Virginia No Washington Wisconsin No Wood Wyoming No	North Dakota	No
Oregon Yes Pennsylvania No Rhode Island Yes South Carolina No South Dakota No Tennessee No Texas No Utah No Vermont Yes Virginia No Washington No West Virginia No Wisconsin No Wyoming No	Ohio	No
Pennsylvania No Rhode Island Yes South Carolina No South Dakota No Tennessee No Texas No Utah No Vermont Yes Virginia No Washington No West Virginia No Wisconsin No Wyoming No	Oklahoma	No
Rhode Island South Carolina No South Dakota No Tennessee No Utah No Vermont Virginia No Washington No Wisconsin No Wyoming No	Oregon	Yes
South Carolina South Dakota No Tennessee No Texas No Utah No Vermont Yes Virginia No Washington No West Virginia No Wisconsin No Wyoming No	Pennsylvania	No
South Dakota Tennessee No Texas No Utah No Vermont Yes Virginia No Washington No West Virginia No Wisconsin No Wyoming No	Rhode Island	Yes
Tennessee No Texas No Utah No Vermont Yes Virginia No Washington No West Virginia No Wisconsin No Wyoming No	South Carolina	No
Texas No Utah No Vermont Yes Virginia No Washington No West Virginia No Wisconsin No Wyoming No	South Dakota	No
UtahNoVermontYesVirginiaNoWashingtonNoWest VirginiaNoWisconsinNoWyomingNo	Tennessee	No
VermontYesVirginiaNoWashingtonNoWest VirginiaNoWisconsinNoWyomingNo	Texas	No
VirginiaNoWashingtonNoWest VirginiaNoWisconsinNoWyomingNo	Utah	No
Washington No West Virginia No Wisconsin No Wyoming No	Vermont	Yes
West VirginiaNoWisconsinNoWyomingNo	Virginia	No
Wisconsin No Wyoming No	Washington	No
Wyoming No	West Virginia	No
	Wisconsin	No
	Wyoming	No
		10

Data as of 2019. National Women's Law Center.

For additional source and calculation information, please refer to the Methods and Sources section of pn3policy.org.

How Did We Reach Our Conclusions?

Method of Review

This evidence review began with a broad search of all literature related to the policy and its impacts on child and family wellbeing during the prenatal-to-3 period. First, we identified and collected relevant peer-reviewed academic studies as well as research briefs, government reports, and working papers, using predefined search parameters, keywords, and trusted search engines. From this large body of work, we then singled out for more careful review those studies that endeavored to identify causal links between the policy and our outcomes of interest, taking into consideration characteristics such as the research designs put in place, the analytic methods used, and the relevance of the populations and outcomes studied. We then subjected this literature to an in-depth critique and chose only the most methodologically rigorous research to inform our conclusions about policy effectiveness. All studies considered to date for this review were released on or before March 31, 2020.

Standards of Strong Causal Evidence

When conducting a policy review, we consider only the strongest studies to be part of the evidence base for accurately assessing policy effectiveness. A strong study has a sufficiently large, representative sample, has been subjected to methodologically rigorous analyses, and has a well-executed research design allowing for causal inference – in other words, it demonstrates that changes in the outcome of interest were likely caused by the policy being studied.

The study design considered most reliable for establishing causality is a randomized control trial (RCT), an approach in which an intervention is applied to a randomly assigned subset of people. This approach is rare in policy evaluation because policies typically affect entire populations; application of a policy only to a subset of people is ethically and logistically prohibitive under most circumstances. However, when available, randomized control trials are an integral part of a policy's evidence base and an invaluable resource for understanding policy effectiveness.

The strongest designs typically used for studying policy impacts are quasi-experimental designs (QEDs) and longitudinal studies with adequate controls for internal validity (for example, using statistical methods to ensure that the policy, rather than some other variable, is the most likely cause of any changes in the outcomes of interest). Our conclusions are informed largely by these types of studies, which employ sophisticated techniques to identify causal relationships between policies and outcomes. Rigorous meta-analyses with sufficient numbers of studies, when available, also inform our conclusions.

References

- 1. Vogtman, J., & Schulman, K. (2016). *Set up to fail: When low-wage work jeopardizes parents' and children's success*. National Women's Law Center. https://nwlc.org/wp-content/uploads/2016/01/FINAL-Set-Up-To-Fail-When-Low-Wage-Work-Jeopardizes-Parents%E2%80%99-and-Children%E2%80%99s-Success.pdf
- 2. National Women's Law Center. (2019). State and local laws advancing fair work schedules [Fact sheet]. https://nwlc-ciw49tixgw5lbab.stackpathdns.com/wp-content/uploads/2019/10/Fair-Schedules-Factsheet-v2.pdf
- 3. Golden, L. (2015). *Irregular work scheduling and its consequences* (No. 394). Economic Policy Institute. https://www.epi.org/files/pdf/82524.pdf
- Lambert, S. J., Fugiel, P. J., & Henly, J. R. (2014). Precarious work schedules among early-career employees in the US: A national snapshot. Employment Instability, Family Well-Being, and Social Policy Network. https://ssa.uchicago.edu/sites/default/files/uploads/lambert.fugiel.henly_.precarious_work_schedules.august2014_0.pdf
- 5. 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
- 6. Schneider, D., Harknett, K. Haley, A., Lambert, S., and Romich, J. (2018). *The Evaluation of Seattle's Secure Scheduling Ordinance:*Baseline Report and Considerations for the Year 1 Evaluation. West Coast Poverty Center: University of Washington.

 https://www.seattle.gov/Documents/Departments/CityAuditor/auditreports/SecureSchedulingReport.pdf
- 7. Karpman, M., Hahn, H., & Gangopadhyaya, A. (2019). *Precarious work schedules could jeopardize access to safety net programs targeted by work requirements.* Urban Institute. https://www.urban.org/sites/default/files/publication/100352/precarious_work_schedules_could_jeopardize_access_to_safe ty_net_programs.pdf
- 8. Henly, J. R., & Lambert, S. J. (2014). Unpredictable work timing in retail jobs: Implications for employee work–life conflict. *ILR Review*, 67(3), 986–1016. https://doi.org/10.1177/0019793914537458
- 9. Rosenbaum, E., & Morett, C. R. (2009). The effect of parents' joint work schedules on infants' behavior over the first two years of life: Evidence from the ECLSB. *Maternal and Child Health Journal*, 13(6), 732. https://doi.org/10.1007/s10995-009-0488-8
- 10. Rachidi, A., Sykes, R., Desjardins, K., & Chaidez, J. C. (2019). The new economy and child care: Nonstandard-hour work, child care, and child health and well-being. Mathematica. https://www.mathematica.org/our-publications-and-findings/publications/the-new-economy-and-child-care-nonstandard-hour-work-child-care-and-child-health-and-well-being
- 11. Carrillo, D., Harknett, K., Logan, A., Luhr, S., & Schneider, D. (2017). Instability of work and care: How work schedules shape child-care arrangements for parents working in the service sector. *Social Service Review*, *91*(3), 422–455. https://doi.org/10.1086/693750
- 12. Gerstel, N., & Clawson, D. (2015). Inequality in work time: Gender and class stratify hours and schedules, flexibility, and unpredictability in jobs and families. *Sociology Compass*, 9(12), 1094–1105. https://doi.org/10.1111/soc4.12332

- 13. Williams, J.C., Lambert, S., Kesavan, S. Fugiel, P.J., Ospina, L.A., Rapoport, E.D., Jarpe, M., Bellisle, D., Pendem, P., McCorkell, L., & Adler-Milstein, S. (2018). Stable scheduling increases productivity and sales: The stable scheduling study. Worklife Law. http://worklifelaw.org/publications/Stable-Scheduling-Study-Report.pdf
- 14. Schneider, D. & Harknett, K. (2016). Schedule instability and unpredictability and worker and family health and wellbeing. Washington Center for Equitable Growth. http://sites.middlebury.edu/soan201/files/2019/04/Schneider_FWW.pdf
- 15. Harknett, K., Schneider, D., & Luhr, S. (2019). Who cares if parents have unpredictable work schedules?: The association between just-in-time work schedules and child care arrangements. Washington Center for Equitable Growth. https://equitablegrowth.org/working-papers/who-cares-if-parents-have-unpredictable-work-schedules-the-association-between-just-in-time-work-schedules-and-child-care-arrangements/
- 16. Schneider, D. & Harknett, K. (2019). Parental exposure to routine work schedule uncertainty and child behavior. Washington Center for Equitable Growth. https://equitablegrowth.org/working-papers/parental-exposure-to-routine-work-schedule-uncertainty-and-child-behavior/
- 17. Hsueh, J., & Yoshikawa, H. (2007). Working nonstandard schedules and variable shifts in low-income families: Associations with parental psychological well-being, family functioning, and child well-being. *Developmental Psychology*, 43(3), 620–632. https://doi.org/10.1037/0012-1649.43.3.620
- 18. Choper, J., Schneider, D., & Harknett, K. (2019). *Uncertain time: Precarious schedules and job turnover in the U.S. service sector.*Washington Center for Equitable Growth. https://equitablegrowth.org/working-papers/uncertain-time-precarious-schedules-and-job-turnover-in-the-u-s-service-sector/
- 19. Schneider, D. & Harknett, K. (2019). *Hard times: Routine schedule instability and material hardship among service sector workers.*Washington Center for Equitable Growth. https://equitablegrowth.org/working-papers/hard-times-routine-schedule-unpredictability-and-material-hardship-among-service-sector-workers/
- 20. Shonkoff, J., & Phillips, D. (2000). From neurons to neighborhoods: The science of early childhood development. Washington, DC: The National Academies Press. https://doi.org/10.17226/9824.



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