

Exploring the Relationship between Parental Work Schedules and Their Children's School Attendance

Kess Ballentine, Wayne State University

Sarah Winchell Lenhoff, Wayne State University

Jeremy Singer, Michigan State University

AeYanna Yett, Wayne State University

This paper has been published in a peer-reviewed journal. Please use the following citation when referencing this paper:

Ballentine, K., Lenhoff, S. W., Singer, J., & Yett, A. (2025). Exploring the relationship between parental work schedules and their children's school attendance. *Urban Review*. <https://doi.org/10.1007/s11256-025-00721-3>

Author Notes

Kess Ballentine <https://orcid.org/0000-0003-1456-7174>

Sarah Winchell Lenhoff <https://orcid.org/0000-0003-1025-8219>

Jeremy Singer <https://orcid.org/0000-0002-2666-2972>

AeYanna Yett <https://orcid.org/0000-0002-5600-2684>

This study uses data on loan from the Detroit Public Schools Community District. We thank the district for their partnership. The research reported here was supported by the Spencer Foundation through Grant 202000154 and Skillman Foundation through Grant 2107-2018003180 to Wayne State University. Results, information, and opinions solely represent the analysis, information, and

opinions of the authors and are not endorsed by, or reflect the views or positions of, grantors, MDE, and CEPI, or any employee thereof.

Correspondence concerning this article should be addressed to Kess Ballentine at kess.ballentine@wayne.edu.

Statements and Declarations

The authors have no financial or non-financial conflicts of interest to report.

Abstract

Regular school attendance is associated with student academic achievement, while chronic absenteeism is a growing problem negatively associated with academic and socioemotional outcomes. While research has documented the significant influence of family socioeconomic conditions on student attendance, there is little empirical evidence documenting the potential mechanisms driving this relationship. This study illuminates one such mechanism by examining associations between parental work schedules and children's school attendance. Using survey data on Detroit parents' work schedules ($N=1,390$) linked to district-provided data on their children's attendance, we find that, for two-parent households, children whose parents both worked nonstandard schedules were more likely to be chronically absent. Meanwhile, children with one unemployed parent and the other working a nonstandard schedule were less likely to be chronically absent. These findings add to our understanding of the distal impact of job inflexibility in the interconnected lives of working parents and their children.

Keywords: attendance, parental work schedules, education, chronic absenteeism

Exploring the Relationship between Parental Work Schedules and Their Children's School Attendance

Chronic absenteeism, typically defined as missing 10% or more days of school, is now among the most salient educational issues in the United States. Researchers have demonstrated the consequences of absenteeism for academic and non-academic outcomes (e.g., Gottfried, 2010, 2014); policymakers have incorporated measures of absenteeism into school accountability systems (Jordan & Miller, 2017); and, especially in the wake of increased absenteeism during the COVID-19 pandemic, state and national leadership have called on districts and schools to increase efforts to improve attendance (e.g., Council of Economic Advisors, 2023). Researchers have identified a number of school- and district-based policies and practices that can modestly improve student attendance (Edwards, 2023; Gottfried et al., 2023; Kirksey & Gottfried, 2021; Liu & Lee, 2022; Robinson et al., 2018; Singer, 2023). Yet, absenteeism is an “ecological” issue, shaped by a combination of individual, school, family, and contextual factors (Gottfried & Gee, 2017; Opara et al., 2022; Sugrue et al., 2016). In high-poverty and racially segregated urban districts in particular, high rates of chronic absenteeism are associated with greater structural and environmental inequalities (Singer et al., 2021).

One potentially important out-of-school factor that has received limited attention in research on chronic absenteeism is parent work schedules. From an “ecological” perspective, a parent’s work schedule is a prime example of an “exosystemic” factor—one that is beyond students’ immediate context that nonetheless impacts their experience and outcomes (Singer et al., 2021). Existing research on parental involvement has illustrated the constraints imposed on parents with inflexible work schedules, with nonstandard schedules appearing to be particularly harmful for child outcomes (Posey-Maddox & Haley-Lock, 2020; Walther & Pilarz, 2023). Understanding

how parental work schedules relate to student attendance can complement and nuance our understanding of the established relationship between chronic absenteeism and student economic disadvantage more broadly (Gee, 2018). Further, studying the role of parent work schedules in student attendance helps draw attention to the ways in which schools can accommodate parents with work-related constraints (Posey-Maddox & Haley-Lock, 2020) and the potential for just work and employment policies to improve students' educational outcomes (Acton et al., 2023).

By linking data from parent surveys to their children's administrative data sourced through Detroit Public Schools Community District and Detroit charter schools, we expand the literature by examining the previously unstudied relationship between parental labor schedule as an exosystemic factor on their children's school attendance. Specifically, we address the following research questions: (1) what is the relationship between parents' self-reported work schedule (e.g., standard, nonstandard) and their children's chronic absenteeism; (2) what is the relationship between parents' self-reported work schedule and their children's average daily attendance; and (3) how do these relationships differ by family structure and, in two-parent households, the various combinations of both parents' work schedules? We find significant associations between parental labor schedule and chronic absenteeism in two-parent families and average daily attendance in one-parent families. Moreover, our findings suggest that maximizing parental time flexibility may be more important to absence-related outcomes than having a standard shift. These findings help bridge the work of education and labor advocates, offering common ground on which to support fair scheduling policies.

Background

Impact of Parental Work Schedules on Children

Nonstandard Shifts

Some qualities of parental work schedules appear to be harmful to children, including working nonstandard shifts, having an unpredictable or variable schedule, and having an inflexible schedule. Nonstandard (NS) schedules are conceptualized as any work shift where most hours fall outside of daytime hours and include evening, night, or rotating shifts. Night shifts and other nonstandard days have been associated with worse child behavior and child health outcomes, a relationship that may be mediated by parent stress (Champion et al., 2012; Dunifon et al., 2013; Gassman-Pines, 2011; Han & Fox, 2011; Joshi & Bogen, 2007; Li et al., 2014).

However, research on the impact of parental work schedules on school-related outcomes is rare. Longitudinal data from the New Hope Project showed working a nonstandard shift or having a variable shift impacted children's school outcomes, predicting worse school achievement and behavior (Hsueh & Yoshikawa, 2007). A qualitative study of working mothers' school involvement found that lack of access and barriers to using paid time off and schedule flexibility created extreme challenges for mothers to be engaged at the levels they strove for and perceived schools to expect (Haley-Lock & Posey-Maddox, 2016). A few studies focus on pre-school children, for example, showing that mothers working nonstandard schedules negatively affect children's expressive language at 36 months (Han, 2005; Odom et al., 2013).

A few other studies suggest associations between parents' nonstandard schedules and children's reading and math achievement on standardized evaluations, however, results are inconsistent. For example, Han and Fox (2011) found that the longer mothers worked night shifts when children were in early elementary school, the worse their reading and math scores were at

ages 13-14, while working evening shifts was associated only with worse math scores. A study on South Korean middle schoolers found that in dual-earner, heterosexual households, only fathers' schedules were associated with worse academic achievement though even this effect was nonsignificant when controlling for fixed effects (Cho & Coulton, 2016). Finally, using the ESCL-B to examine how African American fathers' work schedule at 24 months predicted pre-school reading and math achievement, Baker (2016) found that children whose fathers had nonstandard schedules actually had higher reading scores compared to those with standard shifts.

Schedule Flexibility & Control

One aspect of scheduling beyond shift that has been associated with child outcomes is parental schedule flexibility and control. Flexibility of work schedule has also been found to support parenting (Katras et al., 2015) while inflexible work schedules have been found to increase parent stress which can be associated with parent depression (Nomaguchi & Johnson, 2016). In fact, parents who experience chronic workplace inflexibility report more stress than unemployed parents, with unemployment found to be a significant stressor (Nomaguchi & Johnson, 2016). Drawing on a sample of 5-year-olds from the Fragile Families Study, Pilarz (2021) found that high schedule inflexibility was directly and indirectly associated with behavior problems among children, partially mediated by mothers' stress and depressive symptoms. The strongest associations in the model between schedule inflexibility and externalizing behaviors specifically were found among low-income and single mother families. Qualitative research suggests that the complexity of arranging child care, completing basic parenting tasks such as preparing and serving meals, and spending time with children contribute to worse outcomes when parents have limited schedule flexibility or high schedule volatility (Agrawal et al., 2018; Henly et al., 2006; Katras et al., 2015).

Context for Parent Work: The Role of Family Structure

Limited research has examined the role of family context in the relationship between parents' schedules and child outcomes. Throughout most of this small literature, family context variables, such as family structure, social network, and, in households with multiple adults, which adult has which type of schedule, are controlled for and these covariates are not explored. In one exception, with a relatively small sample of 206, Joshi & Bogen, (2007) found that family structure made a meaningful difference in the relationship between parental schedules and children's behavior, mediated by parent stress. Specifically, in single mother households or households where both birth parents lived, nonstandard schedules were associated with worse internalizing behaviors in two- to four-year-olds. In contrast, in households with the birth mother and another co-habiting adult who was not the birth father, the relationship between adults' nonstandard schedules and children's behaviors were weak. A few studies have explored such between-group differences and suggest that the relationship between nonstandard schedules and child outcomes may differ by the gender of the parent with the nonstandard schedule (Joshi & Bogen, 2007; Posey-Maddox, 2017; Zilanawala & Pilkauskas, 2012), family structure (Pilarz, 2021), and maternal education level (Tan et al., 2020). Han (2008) also found that nonstandard schedules may have a greater impact in single-parent households.

Gaps & Significance

A few conclusions can be drawn from this small body of literature. First, though research suggests a connection between parental work schedules, the literature is small and, in some cases, inconsistent. Secondly, though some aspects of children's academic success, including behavior and achievement, have been tenuously associated with parental schedules, attendance has not been explored. In addition to being a key factor in children's academic success and overall child

development (Gottfried, 2010, 2014), attendance may be more directly related to parental work schedules than the other school-related outcomes due to its rigid connection with time, including school start and end times that require parents to coordinate transportation and childcare. Additionally, in much of the research on the connection between parents' schedules and children's outcomes, child outcome data has been gathered from parents' self-report. Finally, research examining the role of work schedules on key wellbeing outcomes is particularly salient given that fair scheduling laws are a growing area of policy development that may have important effects not only for adults but also their children.

In addition to contributing to growing the research base to inform fair scheduling laws, the current study addresses some of these gaps in the literature by exploring a previously unstudied child outcome, attendance, using a standard measure from administrative data. Additionally, our work draws attention to the important distal effects of parent job quality on child outcomes, which has largely lacked recognition by education advocates.

Method

Research Design

We used a survey research approach to gather information about parent work schedules from a representative sample of Detroit parents and linked those data with school records on student attendance. Through a partnership with Detroit Public Schools Community District and about 40% of the charter schools in Detroit, we designed a survey to capture the socioeconomic conditions of students' households to better understand how those conditions shape their attendance patterns. The survey, which incorporated validated items from other surveys (e.g., the Detroit Metro Area Communities Survey at the University of Michigan) asked parents to share information about their income, employment, and schedule, among other items not included in this

study. Parents consented to complete the survey and to have their child's school records linked back to their survey responses. We employed a stratified sampling approach by randomly selecting students from grades K-12 who were enrolled in 2021-22 and who had provided contact information (email or phone) to their child's school. We randomly selected students within three school types: DPSCD zoned schools, DPSCD application or exam schools, and Detroit charter schools. We sent a survey link to each selected student's parent whose contact information was on file via text message and email. Parents completed the online survey in January 2022, and they received an electronic gift card for participating. In Summer and Fall 2022, the school districts in our population provided student-level administrative records from the 2021-22 school year for each of the students whose parent completed the survey. We linked these records to survey responses.

For our analysis, we created analytic survey weights to account for differences between our survey sample and the population. We used an approach called "raking," which allowed us to weight based on several different population characteristics: student gender, race/ethnicity, grade level, district enrollment, and school type. We used the "ipfraking" command in Stata and applied these weights to all our analyses.

Measures and Sample Characteristics

We developed our categories of measures: work schedule within family structure, household characteristics, student characteristics, and outcomes.

Work Schedule Within Family Structure

Using survey responses, we first categorized students into one of two family structures: one parent or two parent, based on responses to a question about parents' marital status. Students whose parent responded that they were married or living with their significant other were

considered to reside in two-parent households. Students whose parent responded that they were single/never married/living alone, divorced, separated, or widowed were categorized as residing in one-parent households.

We then further categorized students by their parents' work schedule(s). Because our survey asked about both the respondent parent's work schedule and, if applicable, a spouse or live-in significant other's schedule, we were able to create different schedule types based on all-parents' work schedules. First, we determined whether any parent in the household was unemployed, categorizing parents as unemployed if they responded "I do not work at a job for pay" to a question about the number of hours per week they currently work. We excluded students who did not have an employed parent in their household. Then, using the question, "Do you work a regular day shift, where most hours are between 6am and 6pm," we categorized each parent in the household as working a standard shift if they marked "yes" and a nonstandard shift if they marked "no." We then categorized each student in the dataset as living in a household with one of seven parent work schedules. For two-parent households, the schedules were: both standard; both nonstandard; one standard, one nonstandard; one standard, one unemployed; one nonstandard, one unemployed. For one-parent households, the schedules were: one parent standard or one parent nonstandard.

Sample demographics are described in Table 1. About 40% of the sample is comprised of two-parent households, with the remaining in one-parent households. Among the two-parent households, only 7% both had nonstandard schedules, while 32% both had standard schedules. In nearly 23% of two-parent households, one parent worked a standard and one worked a nonstandard schedule, while another quarter of two-parent families had one parent working a standard schedule and the other unemployed. In the remaining two-parent households, one parent worked a

nonstandard schedule, while the other was unemployed. Among one-parent families, two thirds worked a standard shift.

Household Characteristics

In addition to parent work schedule, we created measures to account for other household characteristics that may be associated with student attendance. First, we included a measure of "occupational prestige" to account for other dimensions of social capital related to parental employment that are independent of work schedule. On the survey, we open-endedly asked respondents what their job is typically called or how they would describe their job (and, when applicable, their partner's job). We qualitatively coded these open-ended responses to correspond with the Census Bureau's (2021) industry and occupation codes. Two researchers reviewed and resolved any conflicting codes. From these qualitative codes, we matched respondents with industry and occupation codes and matched those codes with occupational prestige scores from the General Social Survey—scores that reflect the average perception of prestige for specific jobs from a nationally representative sample of respondents (Tom Smith & Son, 2014). With these data, we created a variable to indicate the highest parental occupational prestige score for each student (the higher of the respondent's score and, if applicable, their partner's score).

We included the number of adults and the number of children in the household on the parent survey. Based on household size, we determined what the federal poverty line would be for that family. Then, we divided the total household income by the federal poverty line for that family. That percentage represents the income-to-poverty ratio. For instance, the federal poverty line for a family of four was set at \$26,500 in 2021. Therefore, a family of four in our dataset with an annual income of \$15,000 would have an income-to-poverty ratio of 0.57. In contrast, a family of four with an annual income of \$60,000 would have an income-to-poverty ratio of 2.26. Within our

sample, families had an average of nearly 3 children and nearly 2 adults in the household. Families had an average annual income of slightly over \$29,000 and an average income-to-poverty ratio of 1.04.

Parent Race/Ethnicity

We asked parents on the survey to indicate their race and ethnicity. Parents could select one or more of the following racial categories: Black or African American; Native Hawaiian or Pacific Islander; American Indian or Alaska Native; Middle Eastern or North African; Asian; White; Spanish, Hispanic, or Latino; or Other with a text box to fill in. Parents were categorized as Black if they marked Black or African American and no other race. They were categorized as Hispanic if they marked Hispanic alone. They were categorized as other if they marked any of the other race categories alone or any two in combination. The sample was 77% Black, 16% Hispanic, and 7% Other Race, which is reflective of the school-aged population in Detroit public schools.

Student Characteristics

We used district administrative data to create measures of student characteristics. Students were categorized by their grades into elementary (K-5), middle (6-8) and high school (9-12). We also included an indicator for receipt of special education services. Eight percent of children were receiving special education services. About half of the children in the sample were in elementary school. Slightly over one fifth were in middle school while 28% were in high school. We included a student gender indicator of female. Due to limitations in administrative data, we were not able to construct measures of non-binary gender identities. About half of our sample was female.

Outcomes

From district administrative data, we created two outcome measures. First, we created a measure representing student chronic absenteeism by dividing the number of days a student was

enrolled by the number of days they were absent. If the percentage of days attended was 10% or greater, they were categorized as chronically absent. We also used an attendance rate measure representing the percentage of days the student attended school out of the number of days enrolled. Both outcomes are useful since attendance rate is a more precise measure of student daily attendance, but chronic absence status is policy-relevant and may result in consequences for the student or their parents. Seventy percent of children were chronically absent.

Data Analysis

We applied regression analysis to the survey-linked administrative data. The analytic sample included families who had completed a parent survey and for whom administrative data were available regarding their children's attendance outcomes. We included responses for all-parents who completed the items related to their work schedule, income, and job type. We excluded households that had no employed parent and whose families were extremely high income (greater than \$130,000). The resulting sample included 1,313 families in our full models. We used the following model to estimate the association between parent work schedule and student attendance:

$$Y_i = \beta_0 + \beta_1 Schedule_i + \beta_2 Z_i + \varepsilon_i$$

where, for student i , Y is one of the following outcomes: 1) categorized as chronically absent, 2) share of school days attended. Our predictor of interest is *Schedule*, a binary indicator of the household parent work schedule type. β_1 indicates whether students who live in households with that parent schedule experience different outcomes than students with other parent schedules. We estimated three sets of models: all parents, two parents, and single parents. For the all-parents and two-parents models, the reference group for schedule was two parents both standard schedules. For single parents, the reference group was standard schedule. We controlled for a vector of

covariates, Z , which includes the household characteristics, parent race/ethnicity, and student characteristics described above.

Results

All-parents

All models used linear regression to measure associations between parental work schedules and child outcomes, initially without covariates and secondarily including covariates. The first models included all families, both one-parent and two-parent households (see Table 2). With all configurations of schedule and family types included in the model, children in two-parent households where both parents worked a nonstandard shift were nearly 20% ($m=0.197$, $sd=0.070$, $p=0.005$) more likely to be chronically absent than two-parent households where parents both worked standard shifts. In contrast, children in households with two parents where one parent worked nonstandard and one parent was unemployed were 19% ($m=-0.191$, $sd=0.083$, $p=0.005$) less likely to be chronically absent. Though in the initial model children in one-parent households with both standard ($m=0.163$, $sd=0.046$, $p=0.000$) and nonstandard schedule ($m=0.253$, $sd=0.048$, $p=0.000$) were significantly and positively associated with chronic absenteeism, this relationship became weaker and nonsignificant once covariates were added.

The household income-to-poverty ratio was significantly and negatively associated with chronic absenteeism ($m=-0.141$, $sd=0.016$, $p=0.000$) while Black children were significantly more likely to be chronically absent ($m=0.245$, $sd=0.072$, $p=0.001$). No other covariates or schedule types were significantly associated with chronic absenteeism. The full model, including all family types and schedule configurations with covariates, explained approximately 16% of the variance in chronic absenteeism.

Comparing all family structures and schedule configurations, children in two-parent families where both parents worked a nonstandard schedule had slightly lower rates of average daily attendance compared to households where both parents worked standard schedules ($m=-0.047$, $sd=0.025$), but this relationship was only marginally significant ($p=0.063$). Similarly, children of single parents who worked standard schedules had slightly lower average daily attendance, but this relationship was not statistically significant upon adding covariates ($m=-0.022$, $sd=0.014$, $p=0.122$). However, children with one parent working a nonstandard schedule had significantly lower average daily attendance compared to two-parent families both working standard shifts, attending approximately 8 fewer days of school ($m=-0.045$, $sd=0.018$, $p=0.012$).

Similar to chronic absence, household income-to-poverty ratio was significantly and positively associated with average daily attendance ($m=0.048$, $sd=0.005$, $p=0.000$) while Black children had significantly lower average daily attendance ($m=-0.072$, $sd=0.018$, $p=0.039$). Being in high school was associated with significantly lower average daily attendance ($m=-0.058$, $sd=0.013$, $p=0.000$) while having a greater number of adults in the household was significantly associated with greater average attendance ($m=0.015$, $sd=0.006$, $p=0.011$). This model explained approximately 17% of the variance in average daily attendance.

One-Parent Families

Among one-parent families when one parent worked a nonstandard schedule, children were significantly more likely to be chronically absent compared to one-parent families where the parent worked a standard schedule (See Table 3; $m=0.090$, $sd=0.30$, $p=0.003$). However, this relationship was no longer significant upon adding covariates, wherein household income-to-poverty ratio was significantly and negatively associated with one-parent families where the parent worked a

nonstandard schedule compared to one-parent working a standard schedule ($m=-0.165$, $sd=0.018$, $p=0.000$). This model explained approximately 13% of the variance in chronic absence.

Similarly, among one-parent households where the parent worked a nonstandard schedule, children had a significantly lower average daily attendance compared to one-parent households where the parent worked a standard schedule, but this relationship was no longer statistically significant upon adding covariates ($m=-0.019$, $sd=0.01$, $p=0.188$). Additionally, the household income-to-poverty ratio ($m=0.052$, $sd=0.007$, $p=0.000$) was associated with better average daily attendance while having a high school student was associated with significantly worse average daily attendance for one-parent households with nonstandard schedules compared to those with standard schedules. This model explained approximately 14% of the variance in average daily attendance.

Two-Parent Families

Compared to two-parent households where both parents worked a standard schedule, children from two-parent households where both parents worked a nonstandard schedule were significantly more likely to be chronically absent (See Table 4; $m=0.270$, $sd=0.069$, $p=0.000$). Upon adding covariates, this relationship became slightly weaker but remained significant ($m=0.182$, $sd=0.078$, $p=0.019$) with children in households where both parents worked nonstandard schedules being 18% more likely to be chronically absent than in households where both parents worked standard shifts. In contrast, children in households where one parent worked a nonstandard schedule and the other parent was unemployed were 19% less likely ($m=-0.188$, $sd=0.087$, $p=0.031$) to be chronically absent compared to households with two parents working standard shifts. Two-parent households with one working standard and the other nonstandard shift and with one standard and the other being unemployed were tested but did not have significantly

different associations with chronic absenteeism than households with two parents working standard shifts. The household income-to-poverty ratio ($m=-0.104$, $sd=0.029$, $p=0.000$) was significantly and negatively related to chronic absenteeism, while being a Black child ($m=0.294$, $sd=0.083$, $p=0.000$) was positively related

Without covariates, average daily attendance had a negative yet significant association with children from two-parent families where both parents worked nonstandard schedules ($m=-0.067$, $sd=0.028$, $p=0.015$). In the full model, parental work schedules were no longer significantly associated with average daily attendance for any schedule configuration among two-parent households. The total number of adults in the household was associated with greater average daily attendance ($m=0.027$, $sd=0.010$, $p=0.008$). Being a Black student had a negative relationship with average daily attendance ($m=-0.073$, $sd=0.021$, $p=0.001$), while the home income-to-poverty rate was positively related ($m=0.040$, $sd=0.008$, $p=0.000$).

Discussion

Absenteeism is a critical problem, particularly in urban areas, and increasingly so post-pandemic (Council of Economic Advisors, 2023; Gottfried, 2010, 2014). Though an ecological perspective on the out-of-school drivers of absenteeism has gained attention (Gottfried & Gee, 2017; Opara et al., 2022; Singer et al., 2021; Sugrue et al., 2016), empirical research on these factors remains limited. Similarly, a small research base has connected parental work schedules to children's developmental outcomes (e.g., Haley-Lock & Posey-Maddox, 2016; Han, 2008; Hsueh & Yoshikawa, 2007; Odom et al., 2013; Posey-Maddox & Haley-Lock, 2020). The current study helps bridge these bodies of research and contributes to our developing understanding of parental labor as an ecological factor in children's school outcomes. Specifically, by identifying this association, we glean more insight into the nature of absenteeism. This pushes our understanding

that the resources that come from flexibility are in fact economic capital that families leverage to strengthen their children's attendance.

Current education policy treats absenteeism as an outcome that can be addressed at the school level. This study joins with a growing literature base that helps point out other factors beyond school that contribute to absenteeism (Gottfried & Gee, 2017; Opara et al., 2022; Singer et al., 2021; Sugrue et al., 2016, 2016). As such, this research suggests that a broader set of solutions in and out of school may be necessary to support improved student attendance, particularly in high poverty districts. Within schools, districts might consider how bell schedules align with parent work schedules or advocate at chambers of commerce for businesses to allow more flexibility for employees to ensure their children can get to school. In addition, this research emphasizes the importance of before- and after-school care, to fill the gap between school schedules and work schedules. In addition, it points to ways that employers and state and municipal governments can support student attendance, such as by adopting worker-friendly policies, particularly when it comes to employee schedules.

When discussing SES, educators tend to focus on family income, parental education, or occupation (Long & Renbarger, 2023). This study adds further nuance to this construct, suggesting that parental work schedules—a dimension of parental employment—may have a distinct role to play when considering SES. Although the current study relies on relatively limited measures of scheduling (e.g., we were unable to account for within-group predictability or flexibility), our findings suggest that parental work schedule in a high poverty sample may be a salient contributor to how SES influences student attendance. Thus, this paper helps identify how parental work schedule may have meaningful effects on a key outcome contributing to the racial and economic education gap. Such findings suggest that adopting more holistic definitions of SES may be

beneficial for understanding educational issues ecologically and advocating for appropriate policy solutions (Harwell, 2019).

Prior research has largely attributed negative effects of scheduling onto nonstandard schedules (Han & Fox, 2011; Li et al., 2014). However, some research suggests that lacking predictability and/or flexibility is either a root or exacerbating factor in this association (Nomaguchi & Johnson, 2016; Pilarz, 2021). Our study adds complexity to this literature, showing that nonstandard schedules may be associated with better outcomes for children in some contexts while for others it is indeed worse. In this study, the best familial schedule for child attendance was the schedule that provided the greatest parental support and flexibility: two-parent households with one unemployed parent and one parent working a nonstandard schedule. It is possible that these families were least likely to have a schedule that completely conflicted with their children's school schedules, as do standard schedules. Though many adults may strive for consistent, standard schedules, we find that two parents having standard schedules was not the best arrangement for facilitating school attendance. This is likely due to the fact that standard schedules often fully eclipse the child's school day, forcing parents to require both before and after care, which has significant access issues in Detroit, where these data were collected. Further, this finding adds to the growing acceptance that working standard shifts does not offer ample flexibility for parenting people to balance their many responsibilities, including getting their children to school (Elliott et al., 2022; Lockhart, 2023). Still, the worst schedule for facilitating school attendance was two parents having nonstandard schedules, potentially being the most chaotic for families to manage.

For our sample of primarily Black and low-income students and parents, demographic covariates appeared to explain a significant amount of variance in the relationship between

schedules and school outcomes. This is consistent with ample research showing that Black and poor families experience the greatest structural discrimination in the workplace that significantly increases their exposure to worse schedules and lower-paying jobs (Enchautegui, 2015; Jones & Shorter-Gooden, 2009; Moss & Tilly, 2001; Tung et al., 2015). Among one-parent families specifically, the significant relationship between nonstandard schedules and outcomes became nonsignificant upon adding covariates, suggesting the relationship is better explained by racially and socioeconomically unequal exposure to structural inequalities than schedule alone. This is consistent with research showing that single mothers, particularly Black and poor single mothers like those in this sample, are crowded into nonstandard schedules due to institutional and interpersonal discrimination (Bahn & Cumming, 2020; Enchautegui, 2015). Notably, however, working a nonstandard schedule and being a one-parent family was only significantly worse for attendance when compared to 2-parent standard shift families.

Fair scheduling policies, such as “right to request” policies, are gaining support among worker advocates around the world (Lambert & Haley, 2021). This paper suggests that such policies will not only benefit employers and employees as prior research has suggested (Golden & Dickson, 2020) but also their children, and ultimately our whole communities through their education. The potential implications of such findings should stimulate additional research on the distal effects of labor policy on child outcomes and motivate education leaders to become invested in policy efforts beyond direct education policy. For example, in Michigan where this research was conducted, local governments’ right to pass fair scheduling policies is hamstrung by state preemption laws (Michigan Public Acts 98 and 105) which is seen as only affecting labor. This research should be replicated to determine the full scale of the impact of labor on child outcomes to strengthen the argument to empower local or even state governments to make the necessary

changes to move toward both labor and educational justice. Additionally, this research suggests a new avenue through which school leaders, who serve a unique role in the politics of local communities, could influence employers to support workplace policies that would improve child outcomes.

Limitations

There are a few limitations to this research. First, these data are drawn from a population that may not be generalizable to many other contexts since this sample has a high poverty rate both for the one- and two-parent families. Second, the schedule data were collected using questions commonly used in nationally representative surveys, however, this measure of standard shift is not sensitive to variation within the day shift. Future research should address this measurement issue. Given that variability in day shift is not accounted for in this analysis, results likely underestimate the effect of schedule on child outcomes. Third, support from family and friends is important for student attendance, particularly in areas with high levels of school choice and, relatedly, limited school transportation, like Detroit (Lenhoff et al., 2022). However, we did not have a measure of social capital or specific questions about the availability and reliability of family and friends to help children get to or from school. Future research should examine the rule of social capital in supporting children getting to school. Finally, these data were collected during the official COVID-19 pandemic, and its generalizability to post-pandemic situations is unclear.

Conclusion

This study builds evidence for bridging labor and education research to acknowledge the ecological realities of families' lives. Though limited prior research has begun to connect some aspects of parental work on children's development, this study's use of administrative data helps to draw a direct connection between parental job quality, family context, and a key variable in

children's academic and social development: school attendance. Thus, this research suggests a new avenue for policy advocacy to improve child outcomes via labor policy.

References

- Acton, R., Khafaji-King, J., & Smith, A. (2023). Suspended from work and school? Impacts of layoff events and unemployment insurance on student disciplinary incidence. *SSRN Electronic Journal*. <https://doi.org/10.2139/ssrn.4561621>
- Agrawal, T., Farrell, T. J., Wethington, E., & Devine, C. M. (2018). “Doing our best to keep a routine:” How low-income mothers manage child feeding with unpredictable work and family schedules. *Appetite*, *120*, 57–66. <https://doi.org/10.1016/j.appet.2017.08.010>
- Bahn, K., & Cumming, C. S. (2020). Factsheet: U.S. occupational segregation by race, ethnicity, and gender. *Equitable Growth*. <http://www.equitablegrowth.org/factsheet-u-s-occupational-segregation-by-race-ethnicity-and-gender/>
- Baker, C. E. (2016). African American and Hispanic Fathers’ Work Characteristics and Preschool Children’s Cognitive Development. *Journal of Family Issues*, *37*(11), 1514–1534. <https://doi.org/10.1177/0192513X15576198>
- Champion, S. L., Rumbold, A. R., Steele, E. J., Giles, L. C., Davies, M. J., & Moore, V. M. (2012). Parental work schedules and child overweight and obesity. *International Journal of Obesity*, *36*(4), 573–580. <https://doi.org/10.1038/ijo.2011.252>
- Cho, Y., & Coulton, C. J. (2016). The effects of parental nonstandard work schedules on adolescents’ academic achievement in dual-earner households in South Korea. *Child Indicators Research*, *9*(1), 193–212. <https://doi.org/10.1007/s12187-015-9308-4>
- Council of Economic Advisors. (2023, September 13). Chronic Absenteeism and Disrupted Learning Require an All-Hands-on-Deck Approach. *The White House*. <https://www.whitehouse.gov/cea/written-materials/2023/09/13/chronic-absenteeism-and-disrupted-learning-require-an-all-hands-on-deck-approach/>

- Dunifon, R., Kalil, A., Crosby, D., & Su, J. H. (2013). Mothers' night work and children's behavior problems. *Developmental Psychology*, *49*(10), 1874–1885. <https://doi.org/10.1037/a0031241>
- Edwards, D. S. (2023). Another one rides the bus: The impact of school transportation on student outcomes in Michigan. *Education Finance and Policy*, 1–31. https://doi.org/10.1162/edfp_a_00382
- Elliott, B., Subramanian, S., & Kupp, H. (2022). *How the Future Works: Leading Flexible Teams To Do The Best Work of Their Lives*. Wiley. <https://www.wiley.com/en-us/How+the+Future+Works%3A+Leading+Flexible+Teams+To+Do+The+Best+Work+of+Their+Lives-p-9781119870951>
- Enchautegui, M. E. (2015). *Who Minds the Kids When Mom Works a Nonstandard Schedule?* (p. 38). Urban Institute.
- Gassman-Pines, A. (2011). Low-income mothers' nighttime and weekend work: Daily associations with child behavior, mother-child interactions, and mood. *Family Relations*, *60*(1), 15–29. <https://doi.org/10.1111/j.1741-3729.2010.00630.x>
- Gee, K. A. (2018). Minding the gaps in absenteeism: Disparities in absenteeism by race/ethnicity, poverty and disability. *Journal of Education for Students Placed at Risk (JESPAR)*, *23*(1–2), 204–208. <https://doi.org/10.1080/10824669.2018.1428610>
- Golden, L., & Dickson, A. (2020). *Precarious Times at Work: Detrimental Hours and Scheduling in Illinois and How Fair Workweek Policies Will Improve Workers' Well-Being* (SSRN Scholarly Paper 3795584). <https://doi.org/10.2139/ssrn.3795584>
- Gottfried, M. A. (2010). Evaluating the relationship between student attendance and achievement in urban elementary and middle schools: An instrumental variables approach. *American*

- Educational Research Journal*, 47(2), 434–465.
<https://doi.org/10.3102/0002831209350494>
- Gottfried, M. A. (2014). Chronic Absenteeism and Its Effects on Students' Academic and Socioemotional Outcomes. *Journal of Education for Students Placed at Risk (JESPAR)*, 19(2), 53–75. <https://doi.org/10.1080/10824669.2014.962696>
- Gottfried, M. A., & Gee, K. A. (2017). Identifying the determinants of chronic absenteeism: A bioecological systems approach. *Teachers College Record: The Voice of Scholarship in Education*, 119(7), 1–34. <https://doi.org/10.1177/016146811711900704>
- Gottfried, M. A., Little, M., & Ansari, A. (2023). Student-teacher ethnoracial matching in the earliest grades: Benefits for executive function skills. *Early Education and Development*, 1–17. <https://doi.org/10.1080/10409289.2023.2172674>
- Haley-Lock, A., & Posey-Maddox, L. (2016). Fitting it all in: How mothers' employment shapes their school engagement. *Community, Work & Family*, 19(3), 302–321. <https://doi.org/10.1080/13668803.2015.1023699>
- Han, W.-J. (2005). Maternal nonstandard work schedules and child cognitive outcomes. *Child Development*, 76(1), 137–154. <https://doi.org/10.1111/j.1467-8624.2005.00835.x>
- Han, W.-J. (2008). Shift work and child behavioral outcomes. *Work, Employment and Society*, 22(1), 67–87. <https://doi.org/10.1177/0950017007087417>
- Han, W.-J., & Fox, L. E. (2011). Parental work schedules and children's cognitive trajectories. *Journal of Marriage and Family*, 73(5), 962–980. <https://doi.org/10.1111/j.1741-3737.2011.00862.x>

- Harwell, M. (2019). Don't expect too much: The limited usefulness of common SES measures. *The Journal of Experimental Education*, 87(3), 353–366.
<https://doi.org/10.1080/00220973.2018.1465382>
- Henly, J. R., Shaefer, H. L., & Waxman, E. (2006). Nonstandard work schedules: Employer- and employee-driven flexibility in retail jobs. *Social Service Review*, 80(4), 609–634.
<https://doi.org/10.1086/508478>
- 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>
- Jones, M. C., & Shorter-Gooden, K. (2009). *Shifting: The Double Lives of Black Women in America*. Harper Collins.
- Jordan, P. W., & Miller, R. (2017). *Who's in: Chronic Absenteeism Under the Every Student Succeeds Act*. Future Ed.
- Joshi, P., & Bogen, K. (2007). Nonstandard schedules and young children's behavioral outcomes among working low-income families. *Journal of Marriage and Family*, 69(1), 139–156.
<https://doi.org/10.1111/j.1741-3737.2006.00350.x>
- Katras, M. J., Sharp, E. H., Dolan, E. M., & Baron, L. A. (2015). Non-standard work and rural low-income mothers: Making it work. *Journal of Family and Economic Issues*, 36(1), 84–96. <https://doi.org/10.1007/s10834-014-9410-7>
- Kirksey, J. J., & Gottfried, M. A. (2021). The effect of serving “breakfast after-the-bell” meals on school absenteeism: Comparing results from regression discontinuity designs. *Educational*

- Evaluation and Policy Analysis*, 43(2), 305–328.
<https://doi.org/10.3102/0162373721991572>
- Lambert, S. J., & Haley, A. (2021). Implementing work scheduling regulation: Compliance and enforcement challenges at the local level. *ILR Review*, 74(5), 1231–1257.
<https://doi.org/10.1177/00197939211031227>
- Lenhoff, S. W., Singer, J., Stokes, K., Mahowald, J. B., & Khawaja, S. (2022). Beyond the bus: Reconceptualizing school transportation for mobility justice. *Harvard Educational Review*, 92(3), 336–360. <https://doi.org/10.17763/1943-5045-92.3.336>
- Li, J., Johnson, S. E., Han, W.-J., Andrews, S., Kendall, G., Strazdins, L., & Dockery, A. (2014). Parents' nonstandard work schedules and child well-being: A critical review of the literature. *The Journal of Primary Prevention*, 35(1), 53–73.
<https://doi.org/10.1007/s10935-013-0318-z>
- Liu, J., & Lee, M. (2022). Beyond chronic absenteeism: The dynamics and disparities of class absences in secondary school. *SSRN Electronic Journal*.
<https://doi.org/10.2139/ssrn.4268772>
- Lockhart, J. (2023). *Working hours continue to fall for companies a year into their 4 day week*. 4 Day Week Global. <https://www.4dayweek.com/press-releases/working-hours-continue-to-fall>
- Long, K., & Renbarger, R. (2023). Persistence of poverty: How measures of socioeconomic status have changed over time. *Educational Researcher*, 52(3), 144–154.
<https://doi.org/doi.org/10.3102/0013189X221141409>
- Moss, P., & Tilly, C. (2001). *Stories employers tell: Race, skill, and hiring in America*.

- Nomaguchi, K., & Johnson, W. (2016). Parenting stress among low-income and working-class fathers: The role of employment. *Journal of Family Issues*, 37(11), 1535–1557. <https://doi.org/10.1177/0192513X14560642>
- Odom, E. C., Vernon-Feagans, L., & Crouter, A. C. (2013). Nonstandard maternal work schedules: Implications for African American children's early language outcomes. *Early Childhood Research Quarterly*, 28(2), 379–387. <https://doi.org/10.1016/j.ecresq.2012.10.001>
- Opara, I., Thorpe, D., & Lardier, D. T. (2022). School absenteeism and neighborhood deprivation and threat: Utilizing the child opportunity index to assess for neighborhood-level disparities in Passaic County, NJ. *Urban Education*, 0(0), 1–29. <https://doi.org/10.1177/00420859221125704>
- Pilarz, A. R. (2021). Mothers' work schedule inflexibility and children's behavior problems. *Journal of Family Issues*, 42(6), 1258–1284. <https://doi.org/10.1177/0192513X20940761>
- Posey-Maddox, L. (2017). Race in place: Black parents, family-school relations, and multispatial microaggressions in a white suburb. *Teachers College Record*, 119(11), 1–42. <https://doi.org/10.1177/016146811711901107>
- Posey-Maddox, L., & Haley-Lock, A. (2020). One size does not fit all: Understanding parent engagement in the contexts of work, family, and public schooling. *Urban Education*, 55(5), 671–698. <https://doi.org/10.1177/0042085916660348>
- Robinson, C. D., Lee, M. G., Dearing, E., & Rogers, T. (2018). Reducing student absenteeism in the early grades by targeting parental beliefs. *American Educational Research Journal*, 55(6), 1163–1192. <https://doi.org/10.3102/0002831218772274>
- Singer, J. (2023). The effect of suspensions on student attendance in a high-absenteeism urban district. *Urban Education*, 0(0), 1–32. <https://doi.org/10.1177/00420859231192084>

- Singer, J., Pogodzinski, B., Lenhoff, S. W., & Cook, W. (2021). Advancing an ecological approach to chronic absenteeism: Evidence from Detroit. *Teachers College Record: The Voice of Scholarship in Education*, 123(4), 1–36. <https://doi.org/10.1177/016146812112300406>
- Sugrue, E. P., Zuel, T., & LaLiberte, T. (2016). The ecological context of chronic absenteeism in the elementary grades. *Children & Schools*, 38(3), 137–145. <https://doi.org/10.1093/cs/cdw020>
- Tan, C. Y., Lyu, M., & Peng, B. (2020). Academic benefits from parental involvement are stratified by parental socioeconomic status: A meta-analysis. *Parenting*, 20(4), 241–287. <https://doi.org/10.1080/15295192.2019.1694836>
- Tom Smith & Son. (2014). *Measuring Occupational Prestige on the 2012 General Social Survey* (122; GSS Methodological Report). NORC. <https://gss.norc.org/Documents/reports/methodological-reports/MR122%20Occupational%20Prestige.pdf>
- Tung, I., Lathrop, Y., & Sonn, P. (2015). *The Growing Movement for \$15*. National Employment Law Project. <http://www.nelp.org/publication/growing-movement-15/>
- U.S. Census Bureau. (2021). *Industry and Occupation Code Lists & Crosswalks*. Census.Gov. <https://www.census.gov/topics/employment/industry-occupation/guidance/code-lists.html>
- Walther, A. K., & Pilarz, A. R. (2023). Associations between parental precarious work schedules and child behavior problems among low-income families. *Journal of Marriage and Family*, n/a(n/a). <https://doi.org/10.1111/jomf.12933>
- Zilanawala, A., & Pilkauskas, N. V. (2012). Material hardship and child socioemotional behaviors: Differences by types of hardship, timing, and duration. *Children and Youth Services Review*, 34(4), 814–825. <https://doi.org/10.1016/j.childyouth.2012.01.008>

Table I*Sample Demographics (N=1,313)*

Variable	% (n)
Parent Work Schedules x Family Structure	
Both Nonstandard	3% (39.39)
Both Standard	13% (170.69)
One Standard, One Nonstandard	9% (118.17)
One Standard, One Unemployed	10% (131.30)
One Nonstandard, One Unemployed	5% (65.65)
One Parent Standard	40% (525.20)
One Parent Nonstandard	20% (262.60)
Parent Race/Ethnicity	
Black	77% (1011.01)
Hispanic	16% (210.08)
Other Race	7% (91.91)
Student Characteristics	
Elementary School Student	50% (656.50)
Middle School Student	21% (262.60)
High School Student	28% (367.64)
Special Education Student	8% (105.04)
Female Students	50% (656.50)
Chronically Absent	70% (919.1)
	Mean (Range)
Highest Employed Parent Prestige Score	37.95 (29.51-43.69)
Income	\$29,357.85 (\$20,154.65-41,794.86)
Income-to-Poverty Ratio	1.04 (0.87-1.40)
Number of Children in Household	2.91 (2.65-3.64)
Number of Adults in Household	1.71 (1.39-2.17)

Note: Not all percentages add up to 100 due to rounding.

Table II*Regression Models for All Families*

Variable	(1) Chronically Absent	(2) Chronically Absent	(3) Attendance Rate	(4) Attendance Rate
Schedule x Family Structure				
Both Standard (reference group)				
Both Nonstandard	0.281***(0.065)	0.197**(0.070)	-0.071**(0.025)	-0.047+(0.025)
One Standard, One Nonstandard	0.030(0.063)	-0.057(0.061)	-0.006(0.016)	0.011(0.016)
One Standard, One Unemployed	-0.041(0.066)	-0.079(0.064)	0.008(0.017)	0.019(0.017)
One Nonstandard, One Unemployed	-0.125(0.094)	-0.191*(0.083)	-0.002(0.025)	0.028(0.024)
One Parent Standard	0.163***(0.046)	0.016(0.047)	-0.067***(0.014)	-0.022(0.014)
One Parent Nonstandard	0.253***(0.048)	0.064(0.050)	-0.115***(0.017)	-0.045*(0.018)
Household Characteristics				
Highest Employed Parent Prestige Score	-	-0.000(0.001)	-	0.000(0.000)
Income-to-Poverty Ratio	-	-0.141***(0.016)	-	0.048***(0.005)
Total Number of Children	-	0.006(0.008)	-	-0.002(0.003)
Total Number of Adults	-	-0.024(0.017)	-	0.015*(0.006)
Parent Race/Ethnicity				
Black	-	0.245***(0.072)	-	-0.072***(0.018)
Hispanic	-	0.044(0.079)	-	-0.024(0.019)
Student Characteristics				
Middle School	-	-0.007(0.033)	-	-0.007(0.011)
High School	-	0.041(0.031)	-	-0.058***(0.013)
Special Education	-	-0.002(0.050)	-	0.002(0.018)
Female	-	-0.034(0.026)	-	0.005(0.009)
Constant	0.578***	0.676***	0.850***	0.800***
<i>Adjusted R</i> ²	0.059	0.157	0.069	0.174
<i>N</i>	1,400	1,313	1,400	1,313

* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$, + $p < 0.10$.

Table III*Regression Models for One-Parent Families*

Variable	(5) Chronically Absent	(6) Chronically Absent	(7) Attendance Rate	(8) Attendance Rate
Schedule				
One Parent Standard (reference group)				
One Parent Nonstandard	0.090**(0.030)	0.052(0.032)	-0.048***(0.015)	-0.019(0.014)
Household Characteristics				
Highest Employed Parent Prestige Score	-	0.002(0.001)	-	0.000(-0.001)
Income-to-Poverty Ratio	-	-0.165***(0.018)	-	0.052***(0.007)
Total Number of Children	-	0.010(0.009)	-	-0.008+(0.005)
Total Number of Adults	-	-0.016(0.018)	-	0.014+(0.007)
Parent Race/Ethnicity				
Black	-	0.236+(0.138)	-	-0.075+(0.038)
Hispanic	-	0.225(0.150)	-	-0.057(0.043)
Student Characteristics				
Middle School	-	-0.013(0.039)	-	-0.009(0.014)
High School	-	0.049(0.034)	-	-0.081***(0.019)
Special Education	-	-0.027(0.059)	-	0.018(0.020)
Female	-	-0.027(0.030)	-	0.001(0.013)
Constant	0.741***	0.614***	0.783***	0.810***
<i>Adjusted R</i> ²	0.009	0.132	0.016	0.144
<i>N</i>	867	800	867	800

* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$, + $p < 0.10$.

Table IV*Regression Models for Two-Parent Families*

Variable	(9) Chronically Absent	(10) Chronically Absent	(11) Attendance Rate	(12) Attendance Rate
Schedule				
Both Standard (reference group)				
Both Nonstandard	0.270***(0.069)	0.182*(0.078)	-0.067*(0.028)	-0.045(0.028)
One Standard One Nonstandard	0.009(0.065)	-0.083(0.062)	0.002(0.016)	0.018(0.016)
One Standard One Unemployed	-0.041(0.066)	-0.069(0.064)	0.008(0.017)	0.017(0.017)
One Nonstandard One Unemployed	-0.145(0.099)	-0.188*(0.087)	-0.002(0.027)	0.017(0.025)
Household Characteristics				
Highest Employed Parent Prestige Score	-	-0.003(0.002)	-	0.001+(0.001)
Income-to-Poverty Ratio	-	-0.104***(0.029)	-	0.040***(0.008)
Total Number of Children	-	-0.004(0.015)	-	0.008+(0.004)
Total Number of Adults	-	-0.074+(0.038)	-	0.027**(0.010)
Parent Race/Ethnicity				
Black	-	0.294***(0.083)	-	-0.073***(0.021)
Hispanic	-	-0.023(0.093)	-	0.000(0.022)
Student Characteristics				
Middle School	-	-0.006(0.061)	-	-0.009(0.017)
High School	-	0.024(0.056)	-	-0.025(0.016)
Special Education	-	0.121(0.085)	-	-0.055(0.036)
Female	-	-0.057(0.047)	-	0.018(0.013)
Constant	0.578***	0.889**	0.850***	0.721***
Adjusted R ²	0.029	0.143	0.015	0.161
N	514	496	514	496

* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$, + $p < 0.10$.