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HOW TO SITUATE HIGH SCHOOL STUDENT PART-TIME WORK TRENDS: AN [INCOMPLETE] EMPIRICAL GLANCE

Michael Heise*

INTRODUCTION

Recent federal warnings about increases in child labor law violations¹ coincide with various state efforts to dilute child labor protections.² Problems incident to child labor abuses vary considerably in nature and magnitude and range from child labor trafficking and related exploitations to broader policy questions concerning legal guardrails demarking appropriate boundaries for lawful work performed by minors.³ Judicial recognition of the array of potential ills attributable to "premature and excessive child labor" for minors, their families, and society more generally includes Justice Oliver Wendell Holmes' dissent in Hammer v. Dagenhart.⁴ As federal regulators increasingly sound alarms, many state-level efforts, by contrast, consider ways to make it easier for fourteen- and fifteen-year-olds to work, dilute restrictions on hazardous work, and roll back work hour limitations.⁵ Given the magnitude of the stakes involved, getting this balance right is of obvious importance.

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^{1.} See Increases in Child Labor Violations, Young Workers' Injuries Prompts Enhanced Outreach, Strong Enforcement by US Department of Labor, U.S. DEP'T. LAB. (July 29, 2022), [https://perma.cc/R3K4-QJRW] (last visited Mar. 4, 2024).

^{2.} See, e.g., Jennifer Sherer & Nina Mast, Child Labor Laws Are Under Attack in States Across the Country, ECON. POL'Y INST. (Dec. 21, 2023), [https://perma.cc/JNV8-VAJ8].

^{3.} See, e.g., Annie B. Smith, Understanding Human Trafficking Laws and Liability, ARK. LAW., Summer 2021, at 30, 31.

^{4.} Hammer v. Dagenhart, 247 U.S. 251, 280 (1918) (Holmes, J., dissenting).

^{5.} See, e.g., Sherer & Mast, supra note 2, at 6-7 (summarizing various recent state-level efforts).

How these two key broad concurrent trends—a growing number of federal warnings about child labor law violations and increasing state-level efforts to reduce child labor law protections—interact warrants attention, and, frankly, attention that spans beyond the pages of this (and any other) law review symposium. Public and scholarly attention is warranted as the intersection of these two trends raises the possibility that "[w]e have failed in our collective responsibility to these working youth, resulting in death, injury, disease, and blighted futures."⁶ Assessing this possibility (and others) with necessary precision, however, requires, among other things, quality data that speak to the various outcomes attributable to legal minors' (many of whom are full-time high school students) lawful part-time workforce participation.

While other scholars and articles in this symposium issue engage with an array of larger, broader, and more complex topics, this Article's scope, by contrast, is self-consciously narrow and focuses on one particular context. Specifically, this Article confines itself to the array of outcomes attributable to lawful parttime work performed by non-trafficked, full-time, U.S. high school students. Where data permit, student part-time work conducted incident to formal "school-to-work" or "co-op" programs is excluded.

This Article's admittedly narrow focus on high school students' part-time work does not, however, render the policy stakes any less consequential. Indeed, the magnitude of this issue's scale alone underscores its policy and legal importance. While precise estimates are notoriously elusive, in 2007, approximately six million sixteen- and seventeen-year-olds were employed in the United States.⁷ Similarly, as Table 1 (*below*) illustrates, between 1990 and 2021, the percentage of sixteen- to nineteen- year-olds who worked part-time while attending high

^{6.} Seymour Moskowitz, Save the Children: The Legal Abandonment of American Youth in the Workplace, 43 AKRON L. REV. 107, 112 (2010).

^{7.} Id. at 113.

school full-time ranged from a high of 31% (1998) to a low of 17% (2013 and 2014).⁸

While the policy stakes—as well as the potential scope and magnitude of potential concerns—may be clear, answers to many basic questions about part-time work's implications for full-time high school students lack similar levels of clarity or precision. The pervasive opacity owes to, in substantial part, conceptual and methodological factors along with an overall paucity of helpful data. These important limitations notwithstanding, this Article sets out to develop two modest and separate—though related claims.

The first claim is that clear and reliable answers do not emerge for such basic policy questions as, for example, whether student part-time work during high school constitutes a penalty or, instead, confers rewards to students. One key factor fueling this uncertainty includes conceptual ambiguity regarding the appropriate frame of reference from which to assess basic questions in this policy space. Specifically, good-faith contestations persist about *which* of the various student outcomes (short-, medium-, or long-term) is the most salient. Moreover, even if it was clear whether part-time work constitutes a net positive or negative for students as a whole, from whatever frame of reference it remains unclear how these outcomes distribute across various sub-streams of students and over time.

This Article's second claim is methodological. Specifically, much of the existing research on the implications of part-time work on full-time students lacks a sufficiently developed and secure empirical footing. Data limitations as well as research design threats imposed by selection effects persistently emerge as meaningful challenges for much of the research in this area. The particular challenges posed by selection effects for this scholarly field flow from the product of nonexperimental observational studies' domination in this research space and the reality that the distribution of high school students into sub-pools of those who engage in part-time work and those who do not is not random.

^{8.} See infra Table 1; Veera Korhonen, Percentage of Teenagers (16-19) Who Are Enrolled in School and Working in the United States from 1985 to 2021, STATISTA (June 2, 2023), [https://perma.cc/J684-H6MA].

Indeed, recent scholarship describes the selection effects challenge as "[o]ne of the greatest limitations prohibiting researchers from drawing firm causal conclusions" about the various impacts of part-time student work.⁹

To the extent that legal scholars and policymakers seek to inform or influence child labor law or policy, to do so without the benefit of some consensus on part-time work's implications for high school students, some level of agreement on the most salient student outcomes, and a more secure, stable, and reliable empirical foundation invites peril. This Article's organization proceeds as follows: Part I quickly and descriptively summarizes key longitudinal full-time high school student part-time employment trends. Part II engages with existing research on the effects of part-time work on various high school student outcomes and, in so doing, illustrates how a lack of a scholarly consensus on the most salient student outcome complicates-and obscures-potential policy implications from this research literature. Part III reviews the leading data sets in this policy space and illustrates how they fall short of supplying an adequate empirical footing necessary for helpful, reliable analyses of how part-time work intersects with an array of student outcomes. The conclusion emphasizes that what we do not yet know about the consequences of part-time work for full-time high school students, at least empirically, risks overwhelming what we do know.

I. FULL-TIME HIGH SCHOOL STUDENTS' PART-TIME WORK TRENDS

While this Article emphasizes how research design and data limitations impede scholarly efforts to better understand the effects of part-time labor participation on full-time high school students, a few broad macro-level trends do emerge with some level of helpful clarity. For example, aggregate data presented in Table 1 illustrate how annual full-time high school students' parttime labor participation rates have evolved over time. Notably,

^{9.} See, e.g., Kathryn C. Monahan et al., Revisiting the Impact of Part-Time Work on Adolescent Adjustment: Distinguishing Between Selection and Socialization Using Propensity Score Matching, 82 CHILD DEV. 96, 96 (2011).

Table 1 indicates, despite a recent discernable post-COVID uptick, a net overall decline in the rate of full-time high school students working part-time during the school year (as a percentage of the universe of sixteen- to nineteen-year-old high school students) during the past two decades (of the three-decade panel).

Equally notable is that while a decline in part-time student work rates over time is clear in Table 1, comparatively less clear, however, is how to best interpret this decline. On the one hand, for those who view part-time work by full-time high school students as a problem due to the costs that part-time work imposes on various student outcomes,¹⁰ Table 1 implies that the magnitude of the problem has abated marginally over the past two decades. On the other hand, those more partial toward part-time student work and view it as increasing students' human capital may view this same decline in Table 1 with concern.¹¹

While opponents of student part-time work typically emphasize its potentially deleterious consequences for various student outcomes, including high school academic achievement and post-secondary education prospects, proponents, in contrast, emphasize the various putative benefits to students flowing from work experience, including enhancing employability, earnings, and occupational standing partly through on-the-job training and skill development.¹² At a more general level, proponents note that workforce experience may also help students develop a sense of responsibility, trustworthiness, positive work habits, and dependability.¹³

Contestations over how to best interpret the general decline in student part-time work rates implied by Table 1 parallel other interpretative contestations in this area. As a result, despite—or because of—persisting interpretative challenges, interest in the

^{10.} See, e.g., Kusum Singh, Mido Chang & Sandra Dika, *Effects of Part-Time Work on School Achievement During High School*, 101 J. EDUC. RSCH. 12, 20-21 (2007) (finding negative effects).

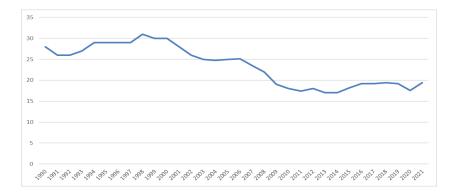
^{11.} See, e.g., Christopher J. Ruhm, Is High School Employment Consumption or Investment?, 15 J. OF LAB. ECON. 735, 738 (1997); see also JEYLAN T. MORTIMER, WORKING AND GROWING UP IN AMERICA (2003).

^{12.} See Moskowitz, supra note 6, at 116.

^{13.} Id.; see also Ruhm, supra note 11, at 738.

effects of part-time work on key outcomes for high school students endures for scholars and policymakers.

Table 1: Percentage of Sixteen- to Nineteen- Year-Olds Enrolled in High School and Working Part-Time, 1990-2021¹⁴



NOTES: Data relate to the labor force and enrollment status of persons ages sixteen through nineteen in the civilian noninstitutionalized population during an "average" week of the school year. The percentage represents an average based on responses to survey questions for the months that youth are usually in school (January through May and September through December). Results are based on nine months of data.

Setting aside nettlesome and contested interpretative issues raised by the trend illustrated in Table 1, understanding how macroeconomic changes facilitate sixteen- to nineteen- yearolds' participation in today's part-time workforce warrants brief discussion. While high school students' participation in part-time labor markets has varied over the decades, most scholars point to the "widespread shift from a manufacturing to a service economy" as an important factor contributing to high school students' part-time labor market participation.¹⁵ Specifically, increases in retail trade and personal services jobs have helped fuel corresponding increases in minimum-wage, entry-level

^{14.} Korhonen, *supra* note 8.

^{15.} Rhoda V. Carr et al., *Effects of High School Work Experience a Decade Later:* Evidence from the National Longitudinal Survey, 69 SOCIO. EDUC. 66, 66 (1996).

positions that are especially amenable to high school students seeking part-time work.

Although an increase in comparatively low-wage service economy employment opportunities facilitates high school students' access to part-time work, the descriptive trend data in Table 1 provide, at best, an incomplete picture. For example, information in Table 1 does not speak to factors that may account for the current downward trend in full-time high school student participation in part-time labor markets despite concurrent structural economic shifts that facilitate student participation. Even if such explanations were clear, Table 1 also does not meaningfully contribute to normative assessments about what to infer from the recent overall net decline in part-time work by fulltime students.

Indeed, empirical scholarship exploring part-time work's implications for full-time high school students remains contested. Results from some studies imply that student part-time employment during high school enhances a student's future employment prospects and earnings potential through the development of work-related skills and forging contacts with employers.¹⁶ Moreover, the impact of early work experience on earnings may have increased given the concurrent rise in the "return to skill" employment in recent years.¹⁷ Results from other studies, however, suggest that part-time high school employment, certainly intensive part-time work, may harm a student's later economic success.¹⁸ Potential harms to students' economic future emerge if, for example, part-time work degrades a student's academic performance (including high school graduation and college attendance rates), which, in turn, risks limiting rather than enhancing students' future employment prospects.¹⁹

^{16.} See, e.g., MORTIMER, supra note 11, at 120-21.

^{17.} See, e.g., Gerald S. Oettinger, Does High School Employment Affect High School Academic Performance?, 53 INDUS. & LAB. RELS. REV. 136, 137 (1999).

^{18.} Wendy Patton & Erica Smith, *Part-Time Work of High School Students: Impact on Employability, Employment Outcomes and Career Development*, 19 AUSTL. J. CAREER DEV. 54, 56-57 (2010).

^{19.} *Id.*; *see*, *e.g.*, Jeremy Staff et al., *Explaining the Relationship Between Employment and Juvenile Delinquency*, 48 CRIMINOLOGY 1101, 1102 (2010); *see also* Monahan et al., *supra* note 9, at 110.

This enduring scholarly contestation itself is unsurprising once one understands that part-time work during high school can plausibly confer both costs *and* benefits on students and that the composition of these costs and benefits likely varies over time horizons and across students. While a clear understanding of the effects of early work experience is certainly important in its own right, the stakes may now be higher due to the general decline in part-time high school employment during the first decade of the twenty-first century.²⁰

II. EFFECTS OF PART-TIME WORK ON STUDENTS

Although this Article's initial focus on the persistent scholarly contestations over consequences to high school students attributable to part-time work is not a novel one, the policy importance of such a focus has not abated.²¹ It is important to note that the absence of scholarly clarity is not a function of a paucity of research. Indeed, the effects of high school employment, broadly defined, have been studied in earnest since the "late 1970s."²² While much of the existing research tends to dwell on such student outcomes as grades, test scores, or school completion rates, research also assesses the implications of part-time work for other student outcomes including access to post-secondary education opportunities as well as initial full-time employment outcomes and wages.

Finally, it is also important to recognize that an absence of a scholarly consensus on key outcomes attaching to students who engage in part-time employment has not dampened the emergence of various—and shifting—conventional wisdoms. These include, for example, the notion that permitting any form of part-time work for full-time high school students necessarily degrades a student's academic performance or general engagement with high school in ways that limit a student's future prospects.²³ Indeed, if anything, an absence of quality data can

^{20.} See Korhonen, supra note 8.

^{21.} See, e.g., Ruhm, supra note 11, at 737.

^{22.} Id. at 738.

^{23.} See, e.g., Steven Greenhouse, Problems Seen for Teenagers Who Hold Jobs, N.Y. TIMES (Jan. 29, 2001), [https://perma.cc/ZFR4-MM3W].

help fuel the emergence of various popular "conventional wisdoms" that too often assume the mantle of "truth."

A. Short-Term Outcomes

Much of the empirical research on part-time work's effect on full-time high school students dwells on various potential short-term outcomes, including student academic achievement. Notably, even a focus on discrete short-term consequences does little to generate greater clarity as the empirical literature remains largely unsettled and persistently contested on part-time work's implication for student academic achievement.²⁴ Aside from an understandable focus on formal student academic achievement. some scholars point to ways in which part-time work can also implicate other related short-term student outcomes, including high school attendance, effort, and overall school engagement.²⁵ Although the research literature assessing part-time work's various consequences has grown substantially in the past few decades, findings about the array of effects of work on the school lives of students, including how work affects academic achievement, remain inconsistent and contested.²⁶

Amid general scholarly uncertainty about and an absence of any consensus on whether a student's part-time employment improves or worsens the student's performance in high school,²⁷ a non-inconsequential slice of research implies that, on average, student part-time work imposes a "small to moderate" negative effect on a student's high school grades and standardized test

^{24.} Compare Singh, Chang & Dika, supra note 10 (finding negative effects), with MORTIMER, supra note 11 (finding either no or positive effects); see also Frank J. Barone, The Effects of Part-Time Employment on Academic Performance, 76 NASSP BULL. 67, 68-69 (1993).

^{25.} See, e.g., Laurence Steinberg et al., Negative Impact of Part-Time Work on Adolescent Adjustment: Evidence from a Longitudinal Study, 29 DEV. PSYCH. 171, 178 (1993); Laurence Steinberg & Sanford M. Dornbusch, Negative Correlates of Part-Time Employment During Adolescence: Replication and Elaboration, 27 DEV. PSYCH., 304, 307 (1991).

^{26.} See, e.g., Singh, Chang & Dika, *supra* note 10; Oettinger, supra note 17; Barone, *supra* note 24; MORTIMER, *supra* note 11.

^{27.} See, e.g., Ruhm, supra note 11, at 738.

scores.²⁸ For example, using data from the National Education Longitudinal Study (1988), Kusum Singh found a small negative effect of work hours on student standardized achievement test scores and a larger negative effect on grades.²⁹ Research drawing on more recent data similarly found an overall negative effect of employment on high school grade-point average ("GPA"), controlling for the effects of family background, previous achievement, gender, and ethnicity.³⁰

Even if one assumes as a general matter that "no consensus [exists] on whether student employment improves or worsens school performance,"³¹ scholars are more apt to converge on a narrower claim that, to the extent that student part-time work matters at all, the "intensity" of student part-time work matters.³² Any benefits to a student's academic performance attributable to part-time work tend to correlate inversely with the total number of hours worked per week. That is, costs to student academic performance imposed by part-time work tend to emerge with greater clarity and more consistently where the student part-time work involves a significant amount of time or intensity.³³ Interestingly, evidence of a part-time work intensity penalty is more pronounced for boys.³⁴

Of course, even if clarity exists on student part-time work's implications for short-term student outcomes, mid- and longer-term student outcomes warrant consideration as well. This is so because even where research finds that part-time high school employment imposes either small or no adverse impacts on high school achievement, this same student employment may correlate

^{28.} Singh, Chang & Dika, *supra* note 10, at 12, 20; *see also* Herbert W. Marsh & Sabina Kleitman, *Consequences of Employment During High School: Character Building, Subversion of Academic Goals, or a Threshold?*, 42 AM. EDUC. RSCH. J., 331, 338 (2005).

^{29.} Kusum Singh, Part-Time Employment in High School and Its Effect on Academic Achievement, 91 J. EDUC. RSCH., 131, 136-38 (1998).

^{30.} See Kimberly J. Quirk et al., Employment During High School and Student Achievement: Longitudinal Analysis of National Data, 95 J. EDUC. RSCH., 4, 7-8 (2001).

^{31.} See, e.g., Ruhm, supra note 11, at 738.

^{32.} Id.

^{33.} *Id*.

^{34.} See Glenn I. Roisman, Beyond Main Effects Models of Adolescent Work Intensity, Family Closeness, and School Disengagement: Mediational and Conditional Hypotheses, 17 J. ADOLESCENT RSCH., 331, 340 (2002).

positively with various mid- or longer-term outcomes, including labor force participation rates, employment, and income.³⁵

B. Mid-Term Outcomes

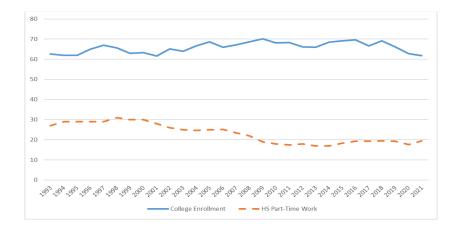
Both theory and common sense imply that part-time work may implicate student outcomes that extend beyond a traditional focus on students' high school academic performance. After all, one factor that may motivate some part-time work among high school students is the need to help secure mid-term outcomes, such as financing post-secondary educational opportunities.³⁶ At the same time, students who work part-time may degrade their high school academic performance which, in turn, may paradoxically reduce options for higher educational opportunities at competitive and selective colleges and universities.

Regrettably, extending the research time horizon to include possible mid-term outcomes does little to reduce research uncertainty and available broad descriptive trend data do not contribute much additional clarity. For example, Table 2 illustrates how two potentially related trends—the rates of high school-age students working part-time and college enrollment for sixteen- to twenty-four-year-olds—vary over time. While these two trends cannot inform a key counter-factual (what college enrollments might look like *absent* student part-time work), taken together these two trends do not suggest any obvious visual relation. Thus, at a general descriptive level, it is simultaneously neither obvious that student part-time work dampens nor fuels students' access to higher education.

^{35.} See, e.g., Carr et al., supra note 15, at 81.

³⁶ See Working While in High School (to Help Pay for College), ARIZ. STATE UNIV., [https://perma.cc/2DGR-HVPA] (last visited Mar. 6, 2024).

Table 2: Percentage of Sixteen- to Nineteen-Year-Olds Enrolled in High School and Working Part-Time and College Enrollment Rates of Recent High School Graduates (Sixteen- to Twenty-Four-Year-Olds), 1993-2021³⁷



NOTES: Data relate to the labor force and enrollment status of persons ages sixteen to nineteen in the civilian noninstitutionalized population during an "average" week of the school year. The percentages represent an average based on responses to survey questions for the months that youth are usually in school (January through May and September through December). Results are based on nine months of data.

Among high school students who aspire to post-secondary education opportunities, steadily rising higher education costs might be especially salient to their decisions about pursuing parttime work during high school. If so, one might plausibly assume that the rate of high school students engaged in part-time work tracks annual increases in the cost of higher education that exceed annual inflation rates. Moreover, not only might part-time work increase the probability of a student reducing financial barriers to the higher education market, but it might also inform a student's ability to "persist" through college graduation. Indeed, many

^{37.} See 61.8 Percent of Recent High School Graduates Enrolled in College in October 2021, U.S. BUREAU OF LAB. STAT. (May 23, 2022), [https://perma.cc/3RW6-9K9A]; Korhonen, *supra* note 8.

studies of student higher education persistence (continued enrollment) focus on a student's "ability to pay."³⁸ These studies typically find, unsurprisingly, that a student's "ability to pay has a direct effect on college persistence."³⁹

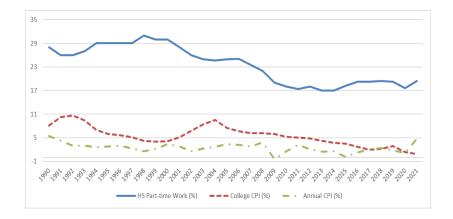
The descriptive trend lines presented in Table 3 do not obviously conflict with this general intuition. The solid line in Table 3 reflects the annual rate of high school students engaged in part-time work. As previously discussed, the percentage of high school students engaged in part-time work began to decline in 2000.⁴⁰ While far from perfect, this uneven drop in the percentage of high school students working part-time during the school year loosely maps onto a steady-if equally unevendecline in college tuition inflation rates (indicated with the dashed line in Table 3). Likely motivating some amount of high school student part-time work, however, at least for those students seeking to increase post-secondary educational opportunities and access, is that annual college tuition inflation rates, while evidencing a decline since 2004, nonetheless continued to exceed annual inflation rates (indicated by the "broken" line in Table 3) almost every year during the past three decades.

^{38.} See, e.g., Alberto F. Cabrera et al., *Exploring the Effects of Ability-to-Pay on Persistence in College*, 13 Rev. HIGHER EDUC. 303 (1990).

^{39.} Id. at 329.

^{40.} Korhonen, supra note 8.

Table 3: Percentages of Sixteen- to Nineteen-Year-Olds Enrolled in High School and Working Part-Time, College CPI, and Annual CPI, 1990-2021⁴¹



NOTES: Data relate to the labor force and enrollment status of persons ages sixteen to nineteen in the civilian noninstitutionalized population during an "average" week of the school year. The percentage represents an average based on responses to survey questions for the months that youth are usually in school (January through May and September through December). Results are based on nine months of data. Annual college inflation data reflect college tuition and fees in U.S. city average, all urban consumers, not seasonally adjusted. Base period: 1982-84=100. Annual CPI data reflect U.S. city average, all urban consumers, not seasonally adjusted.

Generally consistent with trends illustrated in Tables 2 and 3 are the overall mixed findings in empirical scholarship exploring part-time work's implications for a student's probability of pursuing higher educational opportunities.⁴² On

^{41.} See 61.8 Percent of Recent High School Graduates Enrolled in College in October 2021, supra note 37; College Inflation: Prices for Tuition and Fees (1978-2024), U.S. INFLATION CALCULATOR, [https://perma.cc/K6X3-F7QP] (last visited Mar. 6, 2024); Current US Inflation Rates: 2000-2024, U.S. INFLATION CALCULATOR, [https://perma.cc /3FJX-R2W2] (last visited Mar. 6, 2024).

^{42.} See, e.g., ERICA SMITH & ANNETTE GREEN, HOW WORKPLACE EXPERIENCES WHILE AT SCHOOL AFFECT CAREER PATHWAYS 56-60 (2005), [https://perma.cc/D4CX-DDAC]; Peter A. Creed & Wendy Patton, Differences in Career Attitude and Career

the one hand, Herbert Marsh reports that, among those students motivated to save money for college, part-time work during high school yielded important "benefits."⁴³ On the other hand, later work by Marsh and Kleitman reports that employment during high school had "mostly small but consistently detrimental effects on a comprehensive set of Grade 12 and postsecondary outcomes," including college attendance.⁴⁴ Similarly, while Carr et al. note that, overall, the effect of teenage work experience on students who graduated from high school on the "college—no college" decision was negative, they also hint at the possibility that this finding differs between genders.⁴⁵ Relatedly, among those that did proceed to college, those who worked part-time while in high school were systematically less likely to complete their post-secondary studies.⁴⁶

C. Longer-Term Outcomes

Expanding the research focus once again from student academic outcomes and college access to include students' initial entry into the full-time workforce yields a bit more clarity, but, once again, findings from relevant research often conflict. The overall weight of research findings suggests that part-time work during high school correlates with elevated employment rates, initial job-holding, and increased earnings.⁴⁷ This makes particular sense for those students who can use part-time work to enhance their future labor market prospects and earning potential by learning work-related skills and forging contacts with

Knowledge for High School Students with and Without Paid Work Experience, 3 INT'L J. EDUC. VOCATIONAL GUIDANCE 21, 27-29 (2003).

^{43.} Herbert W. Marsh, *Employment During High School: Character Building or a Subversion of Academic Goals?*, 64 SOCIO. EDUC. 172, 184-86 (1991).

^{44.} Marsh & Kleitman, supra note 28, at 352, 363.

^{45.} See Carr et al., supra note 15, at 73-74.

^{46.} Id.

^{47.} Ruhm, supra note 11, at 739.

employers.⁴⁸ In addition, the impact of early work experience on earnings may have increased as the return to skill has risen.⁴⁹

Any potential longer-term benefits attributable to student part-time work in high school may wane over time, however. A study of annual earnings for twenty-three- to twenty-nine-yearolds for two cohorts of workers separated by almost twenty years (1979 and 1997) finds that the magnitude of any annual earnings benefit owing to student part-time work decayed over the two decades studied.⁵⁰ While work experience during a student's high school senior year overall correlates with generally positive labor market outcomes, including annual earnings, the magnitude of these labor market gains decreased between 1979 and 1997.⁵¹ These (diminishing) earnings' benefits distribute similarly across men and women, with the benefits being comparably higher for those students who attend college.⁵²

That most of the research on this issue dwells on students' initial entry into the workforce, however, limits it generalizability. Owing to this research limitation, it remains whether any longer-term employment benefits unclear attributable to part-time work in high school represent permanent structural gains or, instead, merely short-term, transitory advantages. Even where student part-time work corresponds with initial, short-term employment outcome benefits, the part-time work may simultaneously impose potentially steeper longer-term costs by reducing a student's overall human capital investment. A risk of reduced human capital investment might arise where the part-time work experience in high school harms academic performance, including high school completion and college attendance rates.⁵³ That is, longer-term costs flowing from

^{48.} See Charles L. Baum & Christopher J. Ruhm, *The Changing Benefits of Early Work Experience*, 83 S. ECON. J. 343, 343 (2016); Stephen Billett & Carolyn Ovens, *Learning About Work, Working Life and Post-School Options: Guiding Students' Reflections on Paid Part-Time Work*, 20 J. EDUC. & WORK 75, 83 (2007); Melanie J. Zimmer-Gembeck & Jeylan T. Mortimer, *Adolescent Work, Vocational Development, and Education*, 76 REV. EDUC. RSCH. 537, 553 (2006).

^{49.} See Oettinger, supra note 17, at 137.

^{50.} See Baum & Ruhm, supra note 48, at 343.

^{51.} *Id.* at 350-51; *but see* Carr et al., *supra* note 15, at 76-79 (arguing more forcefully for positive net effects); *see also* SMITH & GREEN, *supra* note 42, at 14.

^{52.} Baum & Ruhm, supra note 48, at 353.

^{53.} Monahan et al., supra note 9, at 105-06.

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reduced human capital investment may outweigh any initial, though transitory, short-term employment benefits.

III. METHODOLOGICAL, DATA, AND CONCEPTUAL LIMITATIONS

As an organizing topic for this special issue, *Children at* Work, broadly understood, necessarily straddles a wide swath of legal and policy terrain and is located at the intersection of multiple and competing public policies. To be sure, at one extreme, practices involving forced child labor, child labor trafficking, and child labor that runs afoul of prevailing state and federal labor laws, are certainly easy to condemn. Examples found the other extreme, however, such as instances involving part-time work by a high school honors student seeking to help finance post-secondary education options, will strike many as easy to applaud, at least in the abstract. Within the exceptionally broad space that separates both extremes, this Article selfconsciously takes on only one very narrow slice by specifically focusing on lawful part-time work pursued by full-time high school students (or, more accurately, sixteen- to nineteen-yearolds).

Even within this discrete, narrow slice of the *Children at Work* debate, however, important complications, complexities, and uncertainties lurk. Key factors limiting existing empirical research include methodological and data limitations as well as some consequential conceptual uncertainties. Due to these (and other) limitations, what is *not* known about the costs and benefits to students attributable to part-time work during high school risks overwhelming what is known. One immediate consequence of this under-developed research base is that efforts to comfortably moor general policies governing student part-time work in high school are fraught with peril.

A. A Brief Summary of Some Leading Data Sets

While this Article can be plausibly characterized as generally skeptical of existing empirical scholarship on the impacts of part-time high school student work, much of the leading empirical scholarship in this area levers an array of leading major data sets. Given these data sets' prominence in much of the important and influential research in this area, a brief description of six major data sets that dominate empirical assessments of part-time work's implications for full-time high school students is warranted.

1. National Longitudinal Study (1972)

The National Longitudinal Study of the High School Class of 1972 ("NLS:72") is among the National Center for Education Statistics' ("NCES") earliest forays into longitudinal research on high school students and began with a sample that included over 21,000 high school seniors in 1972.⁵⁴ Data were primarily gathered in a base-year (1972) and five follow-up surveys (1973, 1974, 1976, 1979, and 1986) as well as from a collection of postsecondary transcripts from the colleges and universities attended by participating students.⁵⁵ With this data set, the NCES began providing longitudinal information to educational policymakers and researchers that linked educational experiences with later outcomes, including early labor market experiences and postsecondary education enrollment and attainment.⁵⁶

2. National Longitudinal Survey of Youth (1979)

Sponsored by the U.S. Department of Labor, the National Longitudinal Study of the High School Class of 1972 ("NLSY:79") data set was originally administered to a nationally representative sample of 12,686 students who were between fourteen and twenty-one years old in 1978, including 1,149 high

^{54.} See NAT'L CTR. EDUC. STAT., NATIONAL LONGITUDINAL STUDY OF THE HIGH SCHOOL CLASS OF 1972 (NLS:72) at 1 (2018), [https://perma.cc/P9HA-8FDW] [hereinafter NLS:72]; National Longitudinal Study of 1972 (NLS-72), NAT'L CTR. EDUC. STAT., [https://perma.cc/C872-W9HL] (last visited Mar. 8, 2024): see, e.g., Spyros Konstantopoulos, Trends of School Effects on Student Achievement: Evidence from NLS:72, HSB:82, and NELS:92, 108 TCHRS. COLL. REC. 2550, 2556 (2006).

^{55.} NLS:72, *supra* note 54, at 2.

^{56.} Konstantopoulos, supra note 54, at 2552.

school freshman and sophomores.⁵⁷ Annual interviews were conducted beginning in 1979, with a shift to biennial interviews after 1994.⁵⁸ As of the 2020 interview round, surviving NLSY:79 women respondents had attained the ages of fifty-five to sixty-four.⁵⁹ This data set is notable for its duration which allows researchers to observe respondents' mid- to long-term employment outcomes.⁶⁰

3. High School and Beyond (1980)

The High School and Beyond (1980) ("HSB:80") data set, the second in the series of NCES' longitudinal surveys of high school students, launched in 1980 with two high school cohorts.⁶¹ The HSB:80 base-year (1980) interview involved nearly 30,000 high school sophomores and an equal number of seniors distributed across approximately 1,000 different U.S. high schools.⁶² Approximately 15,000 sophomores and 12,000 seniors in the original (1980) sample were selected for follow-up interviews.⁶³ These subsamples were re-interviewed biennially until 1986, and the sophomore subsample was also re-interviewed in 1992.⁶⁴

4. National Education Longitudinal Study (1988)

The National Education Longitudinal Study of 1988 ("NELS:88") data set, launched in the spring of the 1987-1988 school year, includes an initial sample of 24,599 participating eighth graders along with one parent of each student participant,

^{57.} See *NLSY79 Child and Young Adult Data Overview*, U.S. BUREAU LAB. STAT. (Aug. 8, 2023), [https://perma.cc/QQ2P-AEFQ].

^{58.} Id.

^{59.} Id.

^{60.} Id.

^{61.} See NAT'L CTR. EDUC. STATS., HIGH SCHOOL & BEYOND (HS&B) LONGITUDINAL STUDY 1 (2018), [https://perma.cc/SE6X-LVZG] [hereinafter HS&B]; *High School & Beyond (HS&B)*, NAT'L CTR. EDUC. STAT., [https://perma.cc/XS97-YZVC] (last visited Mar. 8, 2024).

^{62.} HS&B, *supra* note 61, at 1.

^{63.} Id. at 5.

^{64.} Id. at 2-3.

two of the students' teachers, and the students' school principal.⁶⁵ Along with a general survey, students were tested in reading, mathematics, science, and social studies during their eighth, tenth, and twelfth grade years.⁶⁶

5. Education Longitudinal Study (2002)

The Education Longitudinal Study of 2002 ("ELS:02") data set is best viewed in the context of NCES' prior longitudinal high school data sets.⁶⁷ The ELS:02 data set was expressly constructed to build and expand on earlier NCES data sets.⁶⁸ The ELS:02 set out to do so with a nationally-representative sample of more than 15,000 tenth graders from more than 750 public and private schools in 2002, supplemented with periodic follow-up data gathering (in 2004, 2006, and 2012).⁶⁹

6. High School Longitudinal Study (2009)

The High School Longitudinal Study of 2009 ("HSLS:09") data set, currently the only ongoing NCES longitudinal study, focuses on the transition of American students from secondary schooling to subsequent education and work roles with a particular emphasis on STEM-related issues.⁷⁰ The HSLS:09 sample includes approximately 21,000 ninth graders

^{65.} See NAT'L CTR. EDUC. STAT., NATIONAL EDUCATION LONGITUDINAL STUDY OF 1988 (NELS:88), at 1 (2018), [https://perma.cc/RXX7-FXBK] [hereinafter NELS:88]; National Education Longitudinal Study of 1988 (NELS:88), NAT'L CTR EDUC. STAT., [https://perma.cc/M7TG-VPEJ] (last visited Mar. 9, 2024); see, e.g., Quirk et al., supra note 30, at 4-5.

^{66.} NELS:88, supra note 65, at 1-2.

^{67.} See NAT'L CTR. EDUC. STAT., EDUCATION LONGITUDINAL STUDY OF 2002 (ELS:2002), at 1 (2018), [https://perma.cc/JR32-5SC6] [hereinafter ELS:02]; Education Longitudinal Study of 2002 (ELS:2002), NAT'L CTR. EDUC. STAT., [https://perma.cc /2WDX-YFPQ] (last visited Mar. 9, 2024); see, e.g., David S. Knight & Julia C. Duncheon, Broadening Conceptions of a "College-Going Culture": The Role of High School Climate Factors in College Enrollment and Persistence, 18 POL'Y FUTURES EDUC. 314, 319 (2020).

^{68.} See Education Longitudinal Study of 2002 (ELS:2002), supra note 67.

^{69.} ELS:02, *supra* note 67, at 1, 7-8.

^{70.} See NAT'L CTR. EDUC. STAT., HIGH SCHOOL LONGITUDINAL STUDY OF 2009 (HSLS:09), at 1-2 (2018), [https://perma.cc/MS5M-PG4T] [hereinafter HSLS:09]; *High School Longitudinal Study of 2009 (HSLS:09)*, NAT'L CTR. EDUC. STAT. [https://perma.cc /USH2-M54F] (last visited Mar. 9, 2024); *see, e.g.*, Brian Holzman et al., *Gaps in the College Application Gauntlet*, 61 RSCH. HIGHER EDUC. 795, 800 (2020).

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from 940 schools (in 2009), with follow-up data gathering in 2012, 2013, and again in 2016 and 2017.⁷¹

B. Research Design, Data, and Conceptual Limitations

While leading data sets in this research space (including those briefly described above) include important and obvious strengths, they are not without equally important and obvious limitations. Among the ways that most leading data sets confine research efforts seeking to assess the various impacts on key student outcomes attributable to student part-time work while in high school relate to important constraints incident to research design, data, and conceptual limitations. Each of the specific limitations identified below is important in its own right. The collective weight of these limitations restricts these data sets' efficacy.

C. Structural Data Set Limitations—Selection Effects

Even the leading data sets that fuel empirical scholarship on part-time work's implications for high school students are not immune from structural limitations that limit research in this area in important ways. The most serious research design challenge flows from studies comparing various student outcomes as a function of, in part, whether students engage in part-time work. At bottom, this research design understandably pivots on comparing outcomes from two discrete student sub-groups: those high school students who work part-time and those students who do not.

One important limitation to such a research design, however, is that it ignores the critical selection processes that systematically distinguish those students who engage in part-time work and those who do not work. The risk of bias flowing from non-random student sorting into one of these two subgroups is difficult to over-estimate and cannot be properly ignored as these two distinct student subgroups may (or, indeed, likely) systematically differ from each other in ways that influence the

^{71.} HSLS:09, supra note 70, at 1-2.

dependent variable (or outcome) of interest. To put the point more concretely, selection effects pose a risk if, for example, the "more able or motivated students systematically choose different patterns of high school employment than students with less ability or motivation."⁷² If this is the case, then observed patterns of student part-time employment (and non-employment) during high school are "unlikely to occur randomly."⁷³

Research design threats posed by selection effects are easy to illustrate. For example, scholarly efforts seeking to assess the impact of student part-time work on academic achievement (e.g., student high school GPAs) typically involve comparing the academic achievement of those students who engage in part-time work and those students who did not work. Complicating-and limiting-the efficacy of such a comparison, however, is the possibility that these two distinctive streams of high school students-those who pursue part-time work and those students who do not-may systematically vary in ways that inform the outcome of interest: student academic achievement. Consequently, any observed difference in the outcome variable of interest (academic achievement, or GPAs) may have far more to do with systematic differences in the two subgroups of students (those who work part-time and those who do not) than the independent influence of any student part-time work itself.

Complicating this matter further is that the impact of this selection effect threat can plausibly run in many directions. One possibility is that the stream of students engaging in part-time work includes comparatively weaker and less motivated students. Another possibility is that students pursuing part-time work are comparatively stronger and more motivated students whose aspirations include college attendance. For those students whose post-secondary educational options might be restricted owing to economic hardship, pursuing part-time work during high school may be necessary to help preserve financial access to postsecondary educational opportunities. And if this dynamic informs student self-selections into part-time work, the threat to these students' high school academic outcomes posed by part-

^{72.} Oettinger, supra note 17, at 138.

^{73.} Baum & Ruhm, supra note 48, at 349.

time work is lessened owing to their comparatively stronger motivations to achieve academically.

Additional complications also lurk. For example, even if the subgroup of students who pursue part-time work is dominated by comparatively higher academic performers and more motivated students, yet another possibility is that the burden of part-time work nonetheless imposes a cost in terms of their potential academic achievement. How to best interpret such a cost, however, is not obvious. A focus on immediate deleterious short-term consequences to high school achievement attributable to part-time student work may obscure students' more complex balancing of short-term costs (student high school GPA) with mid-term benefits (greater financial access to post-secondary education). That is, by engaging in part-time work, students may simultaneously increase their access to higher education in general despite the cost of decreasing their potential attractiveness to highly selective colleges and universities due to part-time work's penalty on their high school GPAs. Regardless of how selection effects may cut, the larger point is that studies failing to account for selection effects risk inviting biased results and confound clear causal explanations.

To their credit, many researchers acknowledge the critical limitations imposed by selection effects issues.⁷⁴ Equally unsurprising are an array of methodological efforts that attempt to adjust for bias introduced by selection effects. Various, and more recent, approaches to better account for assumed unobservables range from including a greater number and wider array of control variables⁷⁵ and controlling for time-lagged covariates⁷⁶ to propensity score matching research designs.⁷⁷ Despite emerging modeling and statistical efforts designed to better "control" for such selection effects, these efforts invariably amount to "second-best" research designs.

^{74.} See, e.g., Monahan et al., supra note 9, at 96.

^{75.} See, e.g., Baum & Ruhm, supra note 48, at 348-49.

^{76.} See, e.g., James J. Heckman & V. Joseph Holtz, Choosing Among Alternative Nonexperimental Methods for Estimating the Impact of Social Programs: The Case of Manpower Training, 84 J. AM. STAT. ASS'N., 862, 872 (1989).

^{77.} See, e.g., Jennifer C. Lee & Jeremy Staff, When Work Matters: The Varying Impact of Work Intensity on High School Dropout, 80 SOCIO. EDUC. 158, 160-62 (2007); Monahan et al., supra note 9, at 98-99.

Despite increasingly sophisticated modeling and statistical efforts designed to "control" for such systematic differences between two plausibly distinct subpools of students, the differences that separate these two student subpools likely elude even the most careful empirical specifications or modeling. To be sure, threats to research findings posed by selection effects flowing from this non-randomization extend beyond short-term student academic achievement and into mid- and long-term outcomes of interest as well, including access to college, employment, and annual earnings.

Indeed, Monahan et al. describe selection effects as "[o]ne of the greatest limitations" on empirical scholarly work in this area.⁷⁸ To illustrate their point, Monahan et al.'s 2011 paper reanalyzes Steinberg et al.'s data set with a slightly different and more granular research design.⁷⁹ Specifically, Monahan et al. use multiple imputation to address size estimation bias and a propensity score matching strategy to better account for selection bias. As one would expect (and, frankly, hope) given that both studies use the identical data set, Monahan et al.'s findings are, in the main, "substantially similar" to Steinberg et al.'s original findings which derive from a slightly different research design.⁸⁰ While findings from these two separate studies evidence some degree of overlap, Monahan et al.'s reanalysis nonetheless uncovered "two primary differences" involving possible effects on student outcomes flowing from high-intensity part-time student employment.⁸¹ And according to Monahan et al., these two differences in the findings "may be the result of inadequately accounting for selection effects in the original [Steinberg et al.] analyses."⁸²

It remains difficult to over-estimate the threats posed by selection effects to research in this area. In a perfect world (from a research design perspective), to facilitate more robust and reliable causal inferences social scientists would have the ability to randomly assign students into part-time work and, as well,

^{78.} See Monahan et al., supra note 9, at 96.

^{79.} Id. at 97; Steinberg et al., supra note 25, at 174-75.

^{80.} Monahan et al., supra note 9, 103-05; Steinberg et al., supra note 25, at 175-77.

^{81.} Monahan et al., *supra* note 9, at 107.

^{82.} Id.

randomize workplace intensity (hours worked per school week) and experiences (types of part-time work). Given obvious research ethical concerns, as well as institutional review boards that monitor university-sponsored research involving human participants,⁸³ what may be ideal for social science is simply not possible in the real world. As such, social scientists are functionally confined to various "second-best" research designs.

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1. Limited Data

Setting aside methodological challenges posed by selection effects, various data sets include structural and variablelevel limitations that impose additional challenges for researchers exploring the effects of part-time work on high school student outcomes. These limitations involve sample and response bias, data set design issues, and insufficient granularity for key variables of interest.

First, the potential for sample and response bias risks can quickly compound problems introduced by selection effects (discussed above). That is, even if one assumes away the critical limitations imposed by selection effects, related—though distinct—limitations generated by sample and response biases persist. While the leading data sets strive for nationally representative samples, in the ELS:02 data set, for example, participating schools and their students were not randomly assigned and, consequently, the data set may be distorted by schools' and students' "willingness to participate."⁸⁴ Similarly, while the HSLS:09 data set includes a national sample of schools, individual student-level data derives from, on average, only twenty-seven students per school.⁸⁵

^{83.} This includes my own research at Cornell University. *See Research with Human Participants*, CORNELL UNIV. (Feb. 1, 2023), [https://perma.cc/N2SF-RK5D].

^{84.} Rochelle L. Rowley & David W. Wright, No "White" Child Left Behind: The Academic Achievement Gap Between Black and White Students, 80 J. NEGRO EDUC. 93, 103 (2011).

^{85.} Luronne Vaval et al., *Identifying a Typology of High Schools Based on Their Orientation Toward STEM: A Latent Class Analysis of HSLS:09*, 103 SCI. EDUC. 1151, 1170 (2019); *see also* STEVEN J. INGELS ET AL., HIGH SCHOOL LONGITUDINAL STUDY OF 2009 (HSLS:09) BASE YEAR TO FIRST FOLLOW-UP DATA FILE DOCUMENTATION 35 (2013).

Another related—though distinct—form of response bias derives from data sets that rely on respondents' self-reports. For example, the NCES, the federal organization that initiated and sponsored the NLS:72 data set, has noted evidence of "substantial discrepancies between student-reported postsecondary attendance in the NLS:72 follow-up surveys and the evidence obtained from official school transcripts collected."⁸⁶ Obviously, while "perfect" data sets are illusive, data sets that rely on self-reports are unusually exposed to this genre of error.

Finally, various data gathering methods and variable constructions introduce limitations as well. For example, data contained in the NLSY:79 data set were primarily gathered through telephone interviews with respondents.⁸⁷ However, the accuracy of self-reports solicited over telephone interviews, at least as compared to other standard self-reporting methods, continues to receive scholarly attention.⁸⁸

Second, an important design feature that leading data sets promote is their longitudinal structure. One obvious strength of longitudinal data sets is that they track information from the same respondents over time.⁸⁹ One accompanying—and inevitable weakness, however, is that some portion of respondents drop out during a study.⁹⁰ And what can be especially troublesome is when the respondents who drop out systematically vary from the respondents who persist over the entire span of the study.

While all of the six leading data sets briefly described above are longitudinal in design, many published studies in this field draw instead from cross-sectional data sets that include information from a single moment in time (or sometimes from multiple discrete moments in time). What cross-sectional data

^{86.} NLS:72, *supra* note 54, at 11.

^{87.} Donna S. Rothstein et al., *Cohort Profile: The National Longitudinal Survey of Youth 1979 (NLSY79)*, 48 INT'L J. EPIDEMIOLOGY 22, 22c-d (2019).

^{88.} See, e.g., Frieder R. Lang et al., Short Assessment of the Big Five: Robust Across Survey Methods Except Telephone Interviewing, 43 BEHAV. RSCH. METHODS 548, 549 (2011); Donald J. Brambilla & Sonja M. McKinlay, A Comparison of Responses to Mailed Questionnaires and Telephone Interviews in a Mixed Mode Health Survey, 126 AM. J. EPIDEMIOLOGY 962, 962 (1987).

^{89.} Edward J. Caruana et al., *Longitudinal Studies*, 7 J. THORACIC DISEASE E537, E537 (2015).

^{90.} Id. at E538.

sets that include multiple points of time do not feature, however, is a fixed set of respondents over multiple time periods. Because the effects of high school student part-time work typically do not present until some amount of time has passed, studies using crosssectional data sets are comparatively less well-positioned to detect reliable information on part-time work's treatment effect.

Third, even leading data sets do not typically include the universe of variables necessary to estimate models seeking to reliably explain how part-time work influences observed variation in various student outcomes. Relatedly, some of the key variables that the data sets do include lack necessary granularity or important information. For example, the NLS:72 data set, similar to others, includes an array of standard student- and school-level control variables.⁹¹ These student-level variables typically include information on student gender, race/ethnicity, and socioeconomic status.⁹² At the school-level, data sets usually include measures of a school's socioeconomic status, minority concentration, daily attendance, dropout rates, college attendance rates, and pupil-teacher ratio.⁹³ Despite its helpful array of control variables, what the NLS:72 data set lacks, however, is information on student motivations for engaging in part-time work. To the extent one may plausibly hypothesize a student's motivation for pursuing (or not pursuing) part-time work may speak to dependent variables of interest (e.g., high school academic performance, post-secondary educational options), data sets without such information may be incomplete and lack the necessary suite of relevant control variables.

By contrast, the HSB:80 data set includes variables designed to provide insights into students' motivations for parttime employment during high school.⁹⁴ Researchers using HSB:80 data have found, for example, that while various student job-related circumstances correspond with various negative student outcomes in the aggregate, a student motivated to pursue part-time work to save for college "was a notable exception."⁹⁵

^{91.} See NLS:72, supra note 54, at 4-5; Konstantopoulos, supra note 54, at 2556-57.

^{92.} NLS:72, supra note 54, at 1.

^{93.} Konstantopoulos, supra note 54, at 2556-57.

^{94.} See HS&B, supra note 61, at 3-4.

^{95.} See, e.g., Marsh, supra note 43, at 183, 185.

That is to say, hours worked by students motivated to save money for college "had particularly beneficial effects on actual attendance at college, educational aspirations, academic selfconcept, and time spent on homework."⁹⁶ Thus, in slight opposition to "zero-sum" models which imply that a student's commitments in one sphere (*e.g.*, part-time work) reduce that student's commitments in other spheres (*e.g.*, high school academic achievement), Marsh instead finds that "students who worked and saved their money for college actually spent more time on homework."⁹⁷ Data sets that include information on student motivation for part-time work provide researchers with the opportunity for much richer and nuanced analyses.

Even where data sets include important variables, some of these variables are not sufficiently granular. Ironically, even variables measuring student part-time work in leading data sets elicit criticism. Although the leading data sets typically include variables germane to "part-time employment for high school students," these variables can take a range of different forms. This range can be important where a variable does not fully capture variation in student part-time work intensity. In terms of student part-time work intensity, the weight of existing research appears to coalesce around twelve to twenty hours of part-time work as a flashpoint.⁹⁸ As John Tyler notes, while in a perfect world the student work experience variable would be a continuous measure, the NELS:88 data set reduces the information to a categorical variable with ten bins.⁹⁹

Other variables receive criticism for their construction and lack of completeness. One example involves the HSLS:09 data set, designed to focus on the influence of student STEM-related high school coursework.¹⁰⁰ While the HSLS:09 data set includes a variable that indicates those students who enrolled in AP-level STEM-related math or science high school courses, the variable

^{96.} Id. at 185.

^{97.} Id. at 186.

^{98.} See, e.g., Quirk et al., supra note 30, at 4, 8.

^{99.} John H. Tyler, Using State Child Labor Laws to Identify the Effect of School-Year Work on High School Achievement, 21 J. LAB. ECON. 381, 389-90 (2003).

^{100.} HSLS:09, supra note 70, at 1.

does not distinguish *which* specific AP-level STEM-related math or science course (*e.g.*, physics, biology, calculus AB, etc.).¹⁰¹

To be sure, while it is perhaps easy to identify how these data sets may fall short and ways in which they can be improved, it remains important to emphasize that these data sets nonetheless continue to provide helpful information to researchers. The broader-and more important-point is that securing a more robust and reliable understanding of the various costs and benefits uniquely attributable to high school students' part-time work patterns will, of course, require more-and better-data and research designs. This is especially true for related questions about how any of these costs and benefits may vary across groups of students, social contexts, and types and magnitude of part-time high school work. It is particularly critical that researchers focus on how the effects—costs and benefits—of part-work distribute across various student subpopulations (e.g., urban, suburban, or rural students; at-risk students; college-bound versus vocational students). The consequences of work by high school students also likely varies by work intensity and social contexts. More focused analyses on student subgroups, part-time work intensity, and type of work will likely produce more precise and specific information for scholars as well as policymakers in addition to high school counselors, parents, and students.

2. Various Conceptual Limitations

Even with the benefit of "perfect" data sets and the absence of any selection-effects, complex conceptual challenges endure for research seeking to assess how part-time work impacts high school students. One important challenge on this front relates to good-faith debates about *which* student outcomes (short-, mid-, or long-term outcomes) are more important from a policy perspective. Impeding the development of any firm consensus on how to best prioritize various student outcomes are the ways in which the various sets of student outcomes interact and, quite possibly, collide with one another. For example, it

^{101.} Elizabeth C. Jewett & Rong Chen, *Examining the Relationship Between AP STEM Course-Taking and College Major Selection: Gender and Racial Differences*, 111 J. ENG'G. EDUC. 512, 518 (2022).

remains possible that while part-time student work may yield short- and mid-term costs (*e.g.*, lower student academic achievement which, in turn, may reduce selective post-secondary educational opportunities), that same student part-time employment experience may also yield longer-term benefits, including a boost to students' initial full-time employment prospects and earnings.

Another conceptual challenge involves distributional questions. While some important exceptions in the research literatures exist,¹⁰² much of the empirical literature implicitly presumes that these costs and benefits attributable to student part-time work in high school distribute monotonically and equally across all students and stably over time. Such a presumption, however, blinks at reality and the possibility that student part-time work's costs and benefits may matter more for some students than others and that key outcomes likely vary not only across students but over time as well.

CONCLUSION

Even many of those who generally oppose part-time work for full-time high school students, certainly part-time work in excess of twenty hours per week, typically recognize some potential benefits flowing from student part-time work, including "income, valuable lessons about responsibility and finances, and transferrable job skills."¹⁰³ Such benefits can be consequential, especially for those students who can contribute financially to their households or, relatedly, increase their access to higher educational opportunities.

Despite any possible benefits, critics of part-time work for full-time students emphasize that the costs attributable to an array of implications for various student outcomes, including "less academic success in high school, increased absences and drop-out rates, and lower grade-point averages than those who do not work or those who work fewer hours,"¹⁰⁴ overwhelm any purported

^{102.} See, e.g., Carr et al., supra note 15, at 73-74 (noting how college access findings may distribute unevenly across genders).

^{103.} See, e.g., Moskowitz, supra note 6, at 108.

^{104.} Id. at 109.

benefits. Additionally, and at a more general level, some critics argue that student work experience tends to "weaken the social controls exerted by school and family restraining deviant behavior."¹⁰⁵

While proponents and opponents of part-time work for full-time high school students proffer potentially quite different visions of the costs and benefits attributable to part-time student work, one challenge, at least for scholars, is that even the leading data sets cannot yet persuasively scaffold the rigorous empirical testing that these two quite different and competing hypotheses deserve. Indeed, as the title of this Article itself alludes, existing methodological and data limitations as well as some persisting conceptual contestations limit research in this area in important ways.

And even if such limitations did not exist, secondary and tertiary challenges also lurk. For example, nested within assessments of part-time work's influence on key student outcomes are necessary—and key—normative judgments, which among the array of plausible student outcomes is the most salient for policymakers. While each of the individual challenges alone is substantial, the collective weight of these various challenges to research on part-time work's impacts on full-time high school students threatens to overwhelm the necessary empirical foundation that sound public policy typically seeks if not requires.

^{105.} Id.; see also, Jeremy Staff & Christopher Uggen, The Fruits of Good Work: Early Work Experiences and Adolescent Deviance, 40 J. RSCH. CRIME & DELINQ. 263, 267 (2003).