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High School and Women's Life Course: Curriculum Tracking, Race/Ethnicity, and Welfare Receipt

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Life course scholarship considers how institutional contexts, such as schools, influence adolescent development. Likewise, educational scholars examine how high school experiences influence nonacademic life course outcomes. This study connects these disparate research areas to determine how high school curricular tracks relate to racial/ethnic differences in welfare dynamics. Using National Longitudinal Survey of Youth (1979) data, the author finds that college preparatory coursework provides greater benefits to White women than to Black and Latina women in helping them avoid early welfare receipt. This benefit accrues largely through lowering their chances of dropping out of high school. Theoretical implications and relevance to the current policy environment are discussed.

KEYWORDS welfare, high school curriculum, racial/ethnic differences, life course

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Scholarship from a life course perspective has considered the role of institutional contexts, such as schools, in adolescent development. Likewise, studies of education have increasingly examined how high school experiences relate to nonacademic life course outcomes, such as teen motherhood and poverty. However, these literatures have developed largely in isolation of one another and have not fully examined how schooling contexts matter for early life-course development. One arena in which this balkanization of areas may matter is in understanding the role of particular high school experiences, like course-taking patterns, in shaping young women's risk of early welfare receipt. The current study connects life course and education research to examine how exposure to different curricular tracks in high school relate to racial/ethnic differences in welfare (AFDC) dynamics among a cohort of women coming of age in the 1980s. Although the social organization of tracking and welfare have changed since that time, the relationships uncovered in the current study remain relevant for understanding the connection between adolescent social contexts and outcomes in young adulthood.

Prior research has examined the individual and structural factors that lead to welfare receipt and has identified two key experiences in adolescence—dropping out of high school and becoming a teenage mother—that are particularly influential in determining young women's welfare dynamics (Stier & Tienda, 2001). Scholars have especially highlighted the role of dropping out of school for shaping individual progress toward poverty and have examined the individual, community, and family factors associated with this outcome (Haveman & Wolfe, 1994; Randolph, Fraser, & Orthner, 2006; Randolph, Rose, Fraser, & Orthner, 2004). However, we know little about the ways that more specific experiences in high school, such as the courses students take, shape welfare dynamics directly and indirectly through their effects on dropout, teen motherhood, and other negative outcomes that are closely associated with welfare receipt. The current study seeks to illuminate how specific types of high school experiences are directly and indirectly associated with racial/ethnic differences in young women's welfare risk.

Research on the life course highlights the importance of adolescent contexts for shaping later life outcomes (Elder, 1974). Educational research has identified curricular tracking in schools as a key factor that influences later life attainment (Arum & Beattie, 1999; Carbonaro, 2005; Gamoran & Mare, 1989; Lucas & Gamoran, 2002). However, scholars in these two disparate areas of inquiry have not drawn from one another's insights to establish how adolescent schooling contexts—not only educational attainment—might relate to welfare receipt. Welfare is important to study because it is a key marker of socioeconomic disadvantage in women's—and their children's—lives. In addition, many recipients report feeling "trapped" on public assistance and wishing they had gone further in school, had different

opportunities, or made different choices (Edin & Lein, 1997; Stier & Tienda, 2001). Differential experiences in high school may be important for shaping racial/ethnic variation in young adult outcomes, such as dropping out of school or becoming a teen mother, that relate to welfare dynamics.

The current study advances our understanding of racial/ethnic variation in welfare receipt by making connections between life course scholarship on adolescent transitions to adulthood and educational research highlighting the importance of variation in high school social contexts for adolescent development. I analyze National Longitudinal Survey of Youth (NLSY79; U.S. Department of Labor, 1979) data using event history methods to consider whether curricular tracking directly or indirectly relates to racial/ethnic differences in welfare risk. Although these data are relatively old, they are the only available data that include information on high school curriculum, the timing of outcomes related to welfare receipt, and the timing of welfare receipt. Finally, I discuss limitations, implications, and potential avenues for future research.

Adolescence and the Life Course

Life course scholars have established that adolescent experiences determine life attainments long after the teenage years have passed. The transition from adolescence to adulthood, particularly, is a critical time in young adult lives (Elder, 1974; Marini, 1984). The sequencing and timing of key experiences, such as the relative timing of entry into parenthood and marriage, often help explain subsequent life trajectories (Stier & Tienda, 2001). Achieving adult status depends on a series of events: completing schooling, attaining economic independence via full-time work, entering a marriage, and becoming a parent (Hogan & Astone, 1986).

Women of color and poor women experience these early life course transitions in a different order than White and higher socioeconomic women (Rindfuss, Swicegood, & Rosenfeld, 1987). Thus, some urge that we pay attention to the determinants of role transitions—like entering parenthood or finishing school—rather than examining the timing and sequencing of these experiences (Marini, 1984). High school contexts may be important determinants of young adult welfare dynamics by shaping critical role transitions during adolescence. The life course comprises "age-graded patterns that are embedded in social institutions and history" (Elder, Johnson, & Crosnoe, 2003, p. 4). Thus, to understand individual pathways, we must consider how these pathways take shape within the context of key social institutions. It is clear that individual trajectories differ by social group, such as race/ethnicity and social class (Elder, 1998), and it is likely that social institutions play a role in this differentiation. Disadvantages early in the life course can accumulate during the transition to adulthood, setting young women up for lives of economic instability or self-sufficiency. A life course approach offers a

useful analytic framework for looking at the link between high school contexts and early welfare receipt because it considers the importance of social contexts.

Prior research has demonstrated that adolescent schooling experiences are important for shaping progress toward poverty (and welfare). Dropping out of high school, especially, is associated with several deleterious outcomes for young men and women (Randolph, Rose, Fraser, & Orthner, 2004; Zill, 1991). Women who are high school dropouts are more likely to receive welfare, have a first spell that lasts 2 years longer, and are nearly twice as likely as high school graduates to return to the welfare rolls for a second spell (Bane & Ellwood, 1994; Harris, 1993). Although these studies have established the association between low educational attainment and progress toward poverty/welfare, little research has examined particular features of the school context itself that might matter for such outcomes. Adolescent social contexts, such as high schools, are important for youth development in a general sense, but specific experiences in these contexts may also perpetuate racial/ethnic inequalities throughout the life course (Wilson, 1996).

Racial/ethnic variation in welfare receipt, net of socioeconomic origins, is well documented. Black and Latina women experience higher rates of welfare receipt than do White women, as well as greater risks of factors that are proximally related to onset of poverty and welfare reliance, such as teen/single motherhood and dropping out of high school (Bane & Ellwood, 1994; Harris, 1993; Stier & Tienda, 2001). Women of color also experience lower probabilities of leaving the welfare rolls once they start receiving benefits (Harknett, 2001). Some of these differences could be due to racial/ethnic variation in the age norms associated with key role transitions that relate to welfare receipt (like first intercourse, marriage, and childbirth) as well as different expectations about future jobs and educational outcomes (East, 1998). Prior research has not examined whether socialization that occurs in high school courses during adolescence might relate to racial/ethnic variation in the transition to adulthood, specifically risk of welfare receipt.

A life course perspective encourages attention not only to how a given social context relates to a single turning point, but also to consider how each turning point leads to a series of events or experiences, or "series of contingencies" (Sampson & Laub, 1993). In this way, selection of high school coursework can be seen as a turning point that can influence adolescent and young adult experiences with parenthood, schooling, and work. The current study thus considers how curricular tracking might have (1) direct effects on the risk of welfare receipt and (2) indirect influences on welfare risks through its effect on other important young adult outcomes: dropping out of high school, teen and single motherhood, limited work experience, and poverty.

High School Context and Transitions to Adulthood

Dropping out of high school is a key turning point during adolescence that is associated with many negative outcomes in young adulthood (Haveman & Wolfe, 1994; Randolph et al., 2006; Randolph et al., 2004). However, we know little about how specific kinds of student experiences in high school relate to young adult outcomes like poverty and welfare receipt, either indirectly through effects on dropping out or directly on these outcomes themselves. School experiences not only impart academic knowledge, but also help socialize youth to become self-sufficient and productive citizens, sometimes buffering the effects of other structural barriers. Curricular tracking has important influences in shaping various educational, employment, and fertility outcomes that are related to welfare receipt (Arum, 1998; Lucas & Gamoran, 2002; Rosenbaum, 1996; Upchurch & McCarthy, 1990). Youth concentrating in college preparatory curricula have higher achievement motivation and future expectations than do youth in general curricula, as well as greater gains in test scores and higher probability of college attendance (Attewell & Domina, 2008; Gamoran, 1987; Lucas & Gamoran, 2002). Further, compared to youth in a non-college-track ("general") curriculum, those in vocational tracks are more engaged in school and develop superior occupational skills (Rosenbaum, 1996). Youth who concentrate on vocational coursework experience lowered risks of dropping out of high school and incarceration, as well as higher wages among women who do not attend college (Arum, 1998; Arum & Beattie, 1999). Curricular tracks are socialization microcosms within the broader school community that could influence many types of young adult outcomes, including welfare receipt.

Research has demonstrated that that there may be important differences in the effect of high school curriculum by race and ethnicity (Arum, 1998; Arum & Beattie, 1999; Rosenbaum, 1996). Prior studies examining racial/ethnic differences in the effects of tracking have largely focused on differences by race between tracks, but have not considered racial/ethnic differences that may be present within curricular tracks. There are theoretical reasons to believe that high school tracks, particularly the college track, may be associated with different youth outcomes by race/ethnicity. Rosenbaum (1976) argued that one of the key distinctions between college tracks and general or vocational tracks is that lower tracks tend to homogenize (minimize differences between youth) but the higher track tends to differentiate between students within the college track itself (maximize these differences). Thus, the college track may be more likely than lower tracks to sort and categorize students by race/ethnicity, which could exacerbate racial/ethnic differences in student outcomes. There is evidence that the socialization benefits accrued in the college track are not distributed equally by race: racial inequality with respect to teen motherhood, poverty, and single motherhood is greatest in the college track and lower in the two "lower" tracks (Beattie,

2003). Other recent research suggests that advanced math coursework in high school provides less academic benefit to Black and Latino males than it does for Whites and Black/Latina females (Riegle-Crumb, 2006). This highlights the importance of examining differences in the effects of curriculum for different race/gender categories and provides additional basis for expecting racial differences in the effects of tracking on nonacademic student outcomes, like welfare receipt and related experiences.

How might racial/ethnic differences in the effects of college coursework influence behavioral outcomes related to welfare dynamics? Following prior research, I anticipate that White women will have particularly low risks of welfare receipt if their high school coursework was in the college track rather than vocational or general tracks, whereas African American and Latina women's risk of welfare receipt will not be appreciably lowered by college-track placement. If college tracks differentiate between youth to a greater extent than do lower tracks (Rosenbaum, 1976), we would expect a greater amount of inequality in various outcomes among those in higher track curriculum. Such differentiation is likely to occur along dimensions that are visible to teachers and other students, such as race/ethnicity. The effects of high school curriculum on welfare receipt are likely to operate directly and indirectly through their effects on early life course outcomes closely related to receipt (Beattie, 2003). Based on prior studies, I expect that the indirect effect of school curriculum will operate primarily through its influence on experiences with teen pregnancy and dropping out of high school (Stier & Tienda, 2001), with other young adult outcomes (limited work experience, poverty, and single motherhood) mediating smaller portions of the relationship.

METHOD

Data

To examine the longitudinal direct and indirect influence of high school curriculum on welfare risk, I considered the relationship between race/ethnicity, tracking, and welfare. I used National Longitudinal Survey of Youth (NLSY; U.S. Department of Labor, 1979) data. The NLSY are well structured for the current study: the data are longitudinal and include monthly information on welfare receipt (in addition to key covariates such as education, employment, and fertility status) allowing for statistical modeling that accounts for women's dynamic life experiences in young adulthood. The data are superior to more recent educational surveys, such as the National Educational Longitudinal Study of 1988, which have data on high school experiences but do not contain longitudinal information on welfare receipt or poverty status. Likewise, the newest wave of the NLSY (1997 cohort) contains information on welfare and poverty, but insufficient information on tracking.

The analytic sample included Black, White, and Latina female respondents in the first nine waves of the NLSY data, 1979 to 1987, ages 14 to 21 (Center for Human Resource Research, 1999). There were 4,677 young civilian American women in the sample for whom data on key covariates are available. To isolate racial differences in the effects of tracking on welfare receipt, I analyzed Whites ($n = 2{,}536$) and Black/Latina women ($n = 2{,}141$) separately. I combined Black and Latina women because supplemental analyses (available upon request) indicated that these groups experienced similar effects of tracking and other factors on welfare risk. Analyzing Black and Latina women separately revealed that the direction and magnitude of key coefficients was nearly identical for both groups, and the pattern of key results across the various model specifications were similar to those presented. To further ensure that the effects of key covariates do not significantly differ between these groups, I conducted analyses in the women of color sample interacting the dummy variable identifying Latina women with each of the measures; none were significant. In short, Blacks and Latinas in this sample experienced similar effects of key measures in the analysis. I thus combined the groups for ease of presentation. It is important to note that in spite of the appropriateness of combining these groups in the current study, in a more recent sample it may be less appropriate to combine them given structural changes that have occurred since this cohort came of age. Specifically, the United States has seen a large influx of immigrants from Mexico and Asia since the late 1980s, many of whom possess lower educational attainment and earning potential than previous waves of immigrants. At the same time, welfare reform limited legal immigrants' eligibility for benefits. Thus, future research should consider these changes and examine how they might lead to divergent experiences for these two groups in more contemporary samples of women.

I used event history methods (described below), so the unit of analyses was person-months. Thus, 4,677 NLSY respondents yielded a data set of 177,519 person-months from 1979 to 1987 (each month the respondent was in the data set between ages 14 and 21 and had not yet received welfare). The dependent variable was the probability of first-time welfare receipt in a given month by age 21. Table 1 presents means and standard deviations for the data, separately by race.

Measures

To capture student curricular track in high school, all models incorporated dummy measures indicating college or vocational track placement (with the general track omitted). This measure was constructed from a student self-report. To understand how curricular tracking influences early welfare receipt indirectly through its influence on young adult experiences, the analyses added fixed and time-varying measures of these experiences to models

TABLE 1 Means and Standard Deviations for Variables Used in the Analyses

	Individual-level data	
	Black/Latina (N = 80,893)	White (N = 96,626)
Dependent variable		
Risk of first welfare receipt, ≤ age 21	0.005	0.001
	(0.074)	(0.035)
Independent variables		
Educational experience		
College track	0.292	0.345
	(0.455)	(0.475)
Vocational track	0.163	0.133
	(0.369)	(0.340)
Percent disadvantaged students	0.335	0.153
	(0.201)	(0.132)
Percent students who dropout	0.210	0.141
	(0.195)	(0.190)
Teacher attrition	0.079	0.066
	(0.071)	(0.072)
Student/teacher ratio (square root)	4.492	4.332
	(0.548)	(0.416)
Private high school	0.051	0.076
	(0.220)	(0.265)
AFQT score	49.203	70.781
	(17.637)	(18.480)
High school dropout[a]	0.121	0.083
	(0.326)	(0.275)
Fertility and marital status		
Teen mother	0.114	0.047
	(0.318)	(0.212)
Pregnant[a]	0.081	0.041
	(0.272)	(0.198)
Young child (younger than age 3)[a]	0.140	0.073
	(0.347)	(0.260)
Married[a]	0.110	0.147
	(0.313)	(0.354)
Divorced[a]	0.005	0.007
	(0.069)	(0.082)
Work experience		
Previous year work experience[a]	3.355	5.317
	(4.262)	(4.733)
Previous year poverty[a]	0.064	0.029
	(0.244)	(0.166)
Individual characteristics		
Latina	0.318	—
	(0.466)	
Age[a,b]	18.522	18.670
	(1.671)	(1.635)

(*Continued*)

TABLE 1 (Continued)

	Individual-level data	
	Black/Latina	White
Age squared[a,b]	345.868	351.257
	(60.722)	(60.722)
Family background		
Two-parent family	0.687	0.900
	(0.463)	(0.300)
Number of siblings	4.265	2.950
	(2.914)	(1.881)
Family income (logged)	9.417	9.978
	(0.748)	(0.507)
Mother graduated from high school	0.469	0.750
	(0.499)	(0.433)
Father graduated from high school	0.599	0.753
	(0.490)	(0.431)
Parent's occupation	33.237	39.662
	(11.812)	(13.048)
Social context		
South region[a]	0.501	0.294
	(0.500)	(0.455)
West region[a]	0.168	0.148
	(0.375)	(0.355)
Northeast region[a]	0.187	0.231
	(0.390)	(0.421)
Urban residence[a]	0.348	0.131
	(0.476)	(0.337)
Rural residence[a]	0.188	0.268
	(0.391)	(0.443)
Local unemployment rate[a]	7.400	7.887
	(3.018)	(3.199)

Source. U.S. Department of Labor (1979).

Note. AFQT = Armed Forces Qualifying Test.

Descriptive statistics are weighted using normalized sampling weights. Unweighted means are available upon request. Numbers in parentheses are standard deviations. All means differ significantly for whites and minorities ($p < .05$, two-tailed t test).

[a]Measure is a time-varying covariate (varying either monthly or yearly).

[b]In the event history models, age is included as a direct and squared measure, varying monthly, in order to account for the exponential distribution of the structure of time dependence.

and I observed changes in the effects of tracking on welfare receipt as these measures were included. One fixed measure included to identify which outcomes attenuate the relationship between curricular tracking and welfare was a dummy variable of whether a woman was a teenage mother (gave birth to a child younger than age 20). Time-varying factors varied on either a monthly or yearly basis and were based on self-reported dates of key events. Measures that changed monthly include fertility (indicating if a woman was pregnant in a given month and if she had a child younger than

age 3) and marital status (dummy variables indicating married or divorced, with never-married omitted). I interacted marital status with the pregnancy and young child measures to account for the especially detrimental effect of single motherhood. Variables that changed yearly include the dummy indicating high school dropout status each year (not currently enrolled in secondary school, and not currently possessing a high school diploma or General Equivalency Diploma), work experience (total weeks worked in previous year), and a dummy variable indicating poverty status (in previous year).

All models controlled for individual, family, school, and social characteristics to isolate racial/ethnic differences in the effects of curriculum on welfare risk. Individual-level controls include cognitive skills (composite Armed Forces Qualifying Test, or AFQT, score), current age (varying monthly), and, in the Black/Latina models only, ethnicity (a dummy indicating Latina ethnicity). Controls for family background include number of siblings, logged family income (1979), Duncan Socioeconomic Index (SEI) of the highest parents' occupation. Additional family controls include dummy variables for parents' education (indicating whether mother or father obtained a high school diploma) and family structure (whether the respondent lived in a two-parent family at age 14). These measures were all based on respondents' self-reports in 1979.

At the school level, controls include (1) the percentage of students at a respondent's school who drop out, (2) the percentage of students in poverty (eligible for free or reduced-cost lunch), (3) teacher attrition (the percentage of teachers who did not return after the 1978–1979 school year, excluding retirements/deaths), (4) school resources (student teacher ratio, square root), and (5) private school (dummy including Catholic and other religious schools, with public schools omitted). I obtained school-level measures from the 1980 NLSY survey of school administrators. Private school attendance was based on a self-report. I also included time varying (yearly) controls for social context to account for differences in welfare risk in varied locations: dummies indicating South, West, or Northeast residence (with Midwest residence omitted); urban or rural residence (with suburban residence omitted); and the local unemployment rate.

Analytic Technique

I employed event history methods to analyze the probability of first welfare receipt by age 21 (Allison, 1995). Specifically, I conducted multivariate analyses using a discrete-time model because eligibility for welfare receipt is determined on a monthly basis and thus is inherently discrete (Harris, 1996). The dependent variable was a dummy assigned a value of one when the respondent experienced first welfare receipt in a given month and had not received such support in any previous month. The unit of analysis was the person-month: each month a respondent was in the data set and at risk for

first welfare receipt (White $n = 96{,}626$, Black/Latina $n = 80{,}893$). I used maximum likelihood methods to estimate the probability of first welfare receipt. The logistic regression equation I estimated was

$$\text{Log}[\text{P}_{it}/(1 - \text{P}_{it})] = \alpha_{\text{t}} + \beta_1 \text{X}_{it1} + \ldots + \beta_k \text{X}_{itk} + \varepsilon_{it}$$

where,

P_{it} is the conditional probability that individual i had an event at month t, given that the event had not already occurred for that individual
$[P_{it}/(1\text{-}P_{it})]$ is the monthly odds of the event
$X_{1 \ldots k}$ indicates the explanatory variables
$\beta_{1 \ldots k}$ is the effect associated with a given explanatory variable
α is the constant, and ε is the error term.

I conducted sensitivity tests to identify any potential bias associated with left and right censoring, as well as selection into high school track, none of which substantially altered the key findings.

The structure of time dependence was an exponential distribution, with risk of receipt rising sharply as women move toward age 22. I accounted for this in my models by including monthly varying age and age-squared terms (Allison, 1995). I employed the mean substitution method for missing values on control variables and included a dummy variable in the models to control for the effect of this substitution (coefficients not presented). Analyses employing multiple imputation and listwise deletion for missing data yielded similar results.

Model 1 is a reduced model that assessed the direct influence of curricular track on welfare receipt. This model included all measures outlined above, except for measures of early life course experiences related to receipt. In Models 2 through 4, I added measures of young adult experiences sequentially to evaluate the pathways through which tracking influences welfare receipt. Any racial/ethnic differences discussed in the findings are significant at the $p < .05$ level (two-tail test), unless otherwise noted. I evaluated significance by estimating models identical to those presented here on a pooled sample that included relevant interactions between tracking and race/ethnicity.

RESULTS

To examine how tracking influenced racial-ethnic variation in welfare receipt, I present results from a maximum likelihood event history analysis of the risk of first receipt by age 21. I present the coefficients separately for White women (Table 2) and Black/Latina women (Table 3) and discuss parallel models from these two tables concurrently in the text.

TABLE 2 Parameter Estimates of the Effect of Curricular Tracking and Proximate Causes on the Likelihood of First Welfare Receipt among White Women

Independent variable	Model 1	Model 2	Model 3	Model 4
Intercept	−33.830**	−20.767	−27.710*	−27.607*
	(13.604)	(13.533)	(13.827)	(14.820)
Educational experience				
College track	−1.103***	−0.834**	−0.751*	−0.563*
	(0.327)	(0.334)	(0.336)	(0.341)
Vocational track	−0.227	0.107	0.108	−0.046
	(0.218)	(0.225)	(0.225)	(0.238)
Percent poor students	0.452	0.337	0.372	0.316
	(0.462)	(0.463)	(0.466)	(0.531)
Percent students who drop out	0.426	0.366	0.356	0.562
	(0.391)	(0.398)	(0.395)	(0.392)
Teacher attrition	0.524	0.958	1.097	1.424
	(1.111)	(1.136)	(1.124)	(1.170)
Student/teacher ratio (square root)	−0.104	−0.053	−0.043	−0.070
	(0.164)	(0.164)	(0.172)	(0.199)
Private high school	−1.391*	−1.234*	−1.348*	−1.561*
	(0.719)	(0.722)	(0.727)	(0.750)
AFQT score	−0.023***	−0.017***	−0.018***	−0.012*
	(0.005)	(0.005)	(0.005)	(0.005)
High school dropout		1.355***	0.994***	0.375*
		(0.181)	(0.192)	(0.206)
Fertility and marital status				
Teen mother			1.192***	−0.374*
			(0.192)	(0.221)
Pregnant				2.684***
				(0.225)
Young child (younger than age 3)				2.950***
				(0.247)
Married				0.464
				(0.396)
Divorced				−0.705
				(0.763)
Pregnant × Married				−2.301***
				(0.358)
Young child × Married				−0.924*
				(0.426)
Work experience				
Previous work experience				−0.048*
				(0.023)
Previous year poverty				0.622**
				(0.205)
Individual characteristics				
Age	3.402**	1.779	2.433*	2.454
	(1.448)	(1.445)	(1.475)	(1.581)
Age^2	−0.083*	−0.041	−0.057	−0.063
	(0.039)	(0.039)	(0.039)	(0.042)
Family background				
Two-parent family	−0.399*	−0.306	−0.409*	−0.136
	(0.210)	(0.211)	(0.214)	(0.226)
Number of siblings	0.122***	0.118***	0.117***	0.058*
	(0.030)	(0.030)	(0.030)	(0.033)

(*Continued*)

TABLE 2 (Continued)

Independent variable	Model 1	Model 2	Model 3	Model 4
Family income (logged)	−0.473**	−0.365*	−0.313*	−0.236
	(0.160)	(0.160)	(0.163)	(0.175)
Mother's education	−0.160	−0.036	−0.038	0.205
	(0.186)	(0.188)	(0.186)	(0.192)
Father's education	−0.355*	−0.261	−0.271	−0.243
	(0.182)	(0.184)	(0.184)	(0.192)
Parent's occupation	−0.004	0.000	0.001	0.000
	(0.008)	(0.008)	(0.008)	(0.009)
Social context				
South region	−1.446***	−1.514***	−1.594***	−1.615***
	(0.237)	(0.241)	(0.242)	(0.251)
West region	−0.138	−0.215	−0.192	−0.300
	(0.212)	(0.214)	(0.216)	(0.229)
Northeast region	−0.610**	−0.599**	−0.554**	−0.587*
	(0.235)	(0.236)	(0.237)	(0.262)
Urban residence	0.217	0.116	0.166	0.208
	(0.236)	(0.237)	(0.237)	(0.248)
Rural residence	0.135	0.232	0.198	0.281
	(0.186)	(0.189)	(0.190)	(0.199)
Local unemployment rate	−0.011	−0.012	−0.018	−0.018
	(0.024)	(0.024)	(0.024)	(0.027)
Pseudo R^2	0.111	0.133	0.147	0.279

Source. U.S. Department of Labor (1979).

Note. AFQT = Armed Forces Qualifying Test.

Estimates are generated with maximum likelihood event history models predicting the risk of first welfare receipt in any given month by the age of 21, among young women under 21 at the start of the survey in 1979. Numbers in parentheses are standard errors. Models include controls for mean substitution on missing values, these coefficients are not presented on this table. $N = 96{,}626$ person-months.

$^{*}p < .05$, $^{**}p < .01$, $^{***}p < .001$ (one-tailed test).

Model 1 on Tables 2 and 3 provides estimates of the effects of curricular tracking—net of family background, cognitive skills, and school context—on first welfare receipt. For White and Black/Latina women, the college track was significantly and negatively associated with welfare risk, and as predicted, this beneficial effect was significantly greater for White women. Vocational track placement for minority women (but not Whites) was also associated with a reduced risk of receipt; however, these racial differences were not statistically significant in pooled models. Supplemental calculations of predicted probabilities of welfare receipt by race/ethnicity and curricular track (derived from Model 1 on Tables 2 and 3) illustrated that racial gaps in the likelihood of young receipt were greatest, and statistically significant, in the college track (where African American and Latina women were 5 times more likely than Whites to receive), yet the gap in other tracks was more modest and did not reach statistical significance (minorities were only 2 times more likely than Whites to receive welfare in either the vocational or general track).

TABLE 3 Parameter Estimates of the Effect of Curricular Tracking and Proximate Causes on the Likelihood of First Welfare Receipt among Black and Latina Women

Independent variable	Model 1	Model 2	Model 3	Model 4
Intercept	−58.462***	−54.032***	−65.657***	−53.256***
	(9.525)	(9.483)	(9.849)	(10.376)
Educational experience				
College track	−0.275*	−0.189	−0.119	0.062
	(0.138)	(0.140)	(0.141)	(0.144)
Vocational track	−0.345**	−0.289*	−0.130	−0.010
	(0.145)	(0.145)	(0.148)	(0.154)
Percent poor students	0.469*	0.439*	0.365	0.399
	(0.242)	(0.243)	(0.239)	(0.252)
Percent students who dropout	−0.625*	−0.750*	−0.701*	−0.481
	(0.327)	(0.326)	(0.335)	(0.350)
Teacher attrition	−0.122	−0.086	−0.382	−1.064
	(0.715)	(0.706)	(0.739)	(0.777)
Student/teacher ratio (square root)	0.024	0.000	0.028	0.030
	(0.094)	(0.093)	(0.108)	(0.116)
Private high school	−0.151	−0.134	0.168	0.298
	(0.332)	(0.332)	(0.335)	(0.338)
AFQT score	−0.022***	−0.015***	−0.014***	−0.005
	(0.004)	(0.004)	(0.004)	(0.004)
High school dropout		0.865***	0.272*	0.052
		(0.117)	(0.125)	(0.130)
Fertility and marital status				
Teen mother			1.857***	0.473***
			(0.112)	(0.135)
Pregnant				1.147***
				(0.123)
Young child (younger than age 3)				2.947***
				(0.145)
Married				0.275
				(0.370)
Divorced				−0.958*
				(0.475)
Pregnant × Married				−0.602*
				(0.342)
Young child × Married				−2.153***
				(0.385)
Work experience				
Previous work experience				−0.038**
				(0.015)
Previous year poverty				0.211
				(0.148)
Individual characteristics				
Age	5.836***	5.369***	6.338***	4.959***
	(1.014)	(1.009)	(1.045)	(1.103)
Age squared	−0.149***	−0.137***	−0.161***	−0.126***
	(0.027)	(0.027)	(0.028)	(0.029)
Latina	−0.759***	−0.894***	−0.751***	−0.374**
	(0.142)	(0.141)	(0.146)	(0.149)

(*Continued*)

TABLE 3 (Continued)

Independent variable	Model 1	Model 2	Model 3	Model 4
Family background				
Two-parent family	−0.038	−0.026	0.040	0.107
	(0.121)	(0.119)	(0.118)	(0.125)
Number of siblings	0.048**	0.041**	0.037*	0.011
	(0.016)	(0.016)	(0.016)	(0.017)
Family income (logged)	−0.209**	−0.209**	−0.092	−0.082
	(0.085)	(0.085)	(0.086)	(0.090)
Mother's education	−0.284*	−0.292*	−0.227*	−0.138
	(0.130)	(0.129)	(0.130)	(0.134)
Father's education	0.212	0.268*	0.327*	0.096
	(0.139)	(0.140)	(0.143)	(0.147)
Parent's occupation	−0.003	−0.003	−0.002	0.001
	(0.006)	(0.006)	(0.006)	(0.006)
Social context				
South region	−0.892***	−0.874***	−0.920***	−1.101***
	(0.141)	(0.141)	(0.142)	(0.154)
West region	−0.252	−0.265	−0.298	−0.226
	(0.184)	(0.183)	(0.184)	(0.190)
Northeast region	−0.574***	−0.629***	−0.692***	−0.905***
	(0.165)	(0.166)	(0.168)	(0.174)
Urban residence	−0.011	−0.001	0.016	0.011
	(0.123)	(0.124)	(0.123)	(0.129)
Rural residence	0.214	0.206	0.171	0.212
	(0.139)	(0.139)	(0.141)	(0.150)
Local unemployment rate	−0.041**	−0.034*	−0.013	−0.032*
	(0.017)	(0.017)	(0.017)	(0.018)
Pseudo R^2	0.071	0.081	0.129	0.245

Source. U.S. Department of Labor (1979).

Note. AFQT = Armed Forces Qualifying Test.

Estimates are generated with maximum likelihood event history models predicting the risk of first welfare receipt in any given month by the age of 21, among young women under 21 at the start of the survey in 1979. Numbers in parentheses are standard errors. Models include controls for mean substitution on missing values, these coefficients are not presented on this table. $N = 80{,}893$ person-months.

$^{*}p < .05$, $^{**}p < .01$, $^{***}p < .001$ (one-tailed test).

To determine the indirect pathways through which curricular tracking affected welfare receipt, and to understand how racial/ethnic differences in the effects of college curricula identified in Model 1 shaped women's early life course, I sequentially added measures of fertility, work, and education outcomes to Model 1. I identified a pathway through which curricular tracking influenced welfare receipt when entering a given measure into the model lowered the effects of tracking found in the previous model. Model 2 added a measure of dropping out of high school. For White women, the coefficient indicating college track placement was reduced by about 24% but remained significant; for women of color it was reduced by 30% and rendered nonsignificant. The effect of vocational tracking among minority women remained negative and significant; however, including the dropout measure diminished the effect of vocational track among minority women by

16%. These results suggest that part of the effects of college track placement for women of all racial/ethnic origins, and vocational track placement for minorities, operated through the track's association with a greater likelihood of high school completion.

Adding a dummy variable measuring teenage motherhood in Model 3 further illustrated the pathways through which tracking influenced welfare receipt. Including this measure diminished the effect of college track on White welfare risk by an additional 10% (from the prior model), but it remained significant. Among African American and Latina women, the effect of vocational tracking was reduced by 55% and was no longer significant. Thus, the vocational track was associated with minority women's reduced risk of receipt because it was associated with a lowered risk of experiencing a teen birth. Again, I caution that the benefit of the vocational track for women of color was not significantly different than that for White women so further research is needed to explore this finding in more depth. Lowering risks of teen pregnancy did not appear to be a key way that college preparatory coursework helped White women avoid early welfare, since the coefficient changed only modestly from the prior model.

Model 4 added the remaining measures of the proximate causes of welfare receipt, including work experience, prior year poverty, and time-varying marital status and fertility measures. Supplemental models adding these measures sequentially suggested that work experience and poverty were not associated with any change in the coefficients for curricular track, so I added them at the same time as marriage/fertility measures to conserve space. In this fully specified model, White women continued to benefit from college track placement, suggesting that college track placement also helped White women avoid welfare through mechanisms not specified in the current study. However, the coefficient was reduced (by an additional 25%) from the prior model, with the majority of this reduction due to longitudinal fertility/parenting status. Supplementary analyses adding these measures separately suggested that fertility measures were associated with the majority of the change in the coefficient (16%) whereas work experience (5%) and poverty (4%) had more minor influences. College track placement did not operate through an association with marital status. In addition, none of the family background measures remained significant for women of color in this model, suggesting that these factors were less influential than subsequent experiences in shaping welfare dynamics. In the fully specified models, contextual control variables for region were also significant. For White women and women of color, the risk of early welfare receipt was lower in the South and Northeast (compared to the Midwest). This is consistent with prior research analyzing the same NLSY cohort examined in the current study (Harris, 1996; Pepper, 1995) and may relate to differences in benefit levels and cost of living in the different regions (Cao, 1996).

In summary, analyses of the effect of tracking on first welfare receipt revealed important racial/ethnic differences in how high schools influence young women's transition to a self-sufficient adulthood. College track placement was associated with substantially lower risk of welfare receipt for White women, but not for African American and Latina women. The majority of this effect operated through reducing young women's likelihood of dropping out of high school. The remainder was primarily due to diminished risks of teen pregnancy and single motherhood for Whites in the college track. Nonetheless, a portion of the college track's benefit for Whites remained unexplained in the fully specified model. For Black and Latina women, college and vocational track placement were only modestly associated with a lowered risk of welfare receipt, and these benefits were explained by differential early life course outcomes. College track placement primarily helped minority women avoid welfare by increasing their likelihood of completing high school. Reducing the risk of teenage motherhood and, to a lesser degree, diminishing the probability of dropping out of high school were the pathways through which vocational tracks reduce African American and Latina women's risk of welfare receipt.

DISCUSSION

Adolescent schooling contexts are associated with racial variation in young women's risk of early welfare receipt. This research has identified important racial/ethnic differences in the effects of high school curricular tracks on welfare dynamics, directly and indirectly through its influence on early life course experiences that are associated with welfare such as high school dropout and teen motherhood. Particularly striking is the continued benefit to Whites of college track placement, even with controls for longitudinal variation in experiences with fertility, work, poverty, marital status, and education. This benefit is especially important to note in contrast to the more minimal effects of college track placement for women of color that operate primarily through lowering Black and Latina women's risk of dropping out of high school. These differences by race and ethnicity suggest that the relationship between curricular tracking and welfare receipt deserves further investigation, especially given the long-term socioeconomic trajectories of young welfare recipients.

This research has demonstrated that scholarship can fruitfully draw from a life course perspective to understand how specific kinds of school experiences shape the transition to adulthood. Likewise, scholars of school contexts can expand the scope of their research to consider a variety of life course outcomes, rather than focusing solely on educational experiences. Not only do school contexts matter for shaping welfare trajectories, the pathways of influence for such contexts differ depending on a woman's race

or ethnicity. School curriculum matters for Whites primarily due to effects on dropping out of school. Curriculum affects welfare risk among Black and Latina women mostly due to variation in the probability of teenage motherhood. This adds greater detail to life course research that has highlighted the importance of dropping out of high school and teen motherhood as turning points in adolescence that influence welfare and poverty outcomes (Zill, 1991). These experiences are forged by not only families and neighborhoods, but also by school curricula.

There are limitations to the current study that must be considered so that future research can improve upon them. Some unknown portion of these findings may be driven by selection bias. Specifically, because childhood poverty is linked to placement in lower curricular tracks, higher risk of dropping out, and poverty later in life (Oakes, 1985; Randolph et al., 2006), some portion of the observed relationships between tracking and welfare receipt may be the result of inadequate controls for poverty early in life. I conducted supplemental analyses to examine the sensitivity of the results which demonstrated that the results are robust, even among subsamples of youth from single-parent or low-income families and whose parents had limited educational attainment. Finally, if the results of the current study are purely a result of selection processes, one would expect these processes to operate similarly for young women regardless of their race/ethnicity, such that those of poverty origins would be in the general or vocational track that would be associated with a greater risk of welfare receipt compared to students whose courses were in the college track. The results actually indicate a compelling racial/ethnic difference in the effect of college track placement that does not comport with the selection bias story. Nonetheless, future research should examine these issues further to more completely rule out selection bias.

Another possible limitation is that the age of the cohort analyzed in the current study could limit its generalizability. In particular, because policy changes with respect to welfare and education have occurred since the NLSY79 data was collected, it is important to consider the current relevance of the findings. Unfortunately, there is not currently another data set available that contains information on curricular track, the timing of welfare receipt, along with other key young adult experiences. Nonetheless, in spite of the age of the NLSY79 cohort, the findings contribute to the understanding of welfare dynamics and the nonacademic outcomes of education, as I discuss below.

Changes in welfare policy are important to consider in relationship to these findings. In 1996, there were sweeping transformations to federal laws governing how welfare is administered by the states under the Personal Responsibility and Work Opportunities Reconciliation Act (PRWORA). The reform aimed to move recipients into the workforce more quickly, promote family stability, and give states more flexibility to structure their own

cash assistance programs for low income families (now called Temporary Assistance for Needy Families, or TANF). The number of families receiving welfare benefits plunged dramatically after the reform due to eligibility restrictions. However even among eligible families, enrollment in the program dropped from 80% in 1996 to 48% in 2002 (Golden, 2005). Also, the percentage of children living in poor and near-poor families increased between 2000 and 2008 (Wight & Chau, 2009). These statistics highlight that although rates of welfare receipt have declined in the wake of reforms, the economic well-being of poor families has not suddenly improved.

Today, welfare receipt has become a less reliable proxy for economic disadvantage than it was for the cohort analyzed in the current study. Further, a comparison of teenagers' fertility, marital, and welfare decisions between the NLSY79 and NLSY97 cohorts indicates that the welfare "take-up" rate was 50% lower among 17-year-olds in the more recent cohort, but equal among 19–year-olds in the two cohorts (Kaestner, Korenman, & O'Neill, 2003). Even though the overall rate of teen pregnancy has decreased since reform was implemented (as it had started doing before 1996), older teen mothers' likelihood of welfare receipt remains similar to what it was prereform. Thus in the current era, the results of the current study might be more relevant to the experiences of older young adult recipients (age 19–21) than those age 17 and 18. Even if the effects of curriculum on welfare receipt were weaker in a more modern cohort, the research retains relevance for our thinking about how high school curriculum directly and indirectly influences welfare receipt through influencing fertility, education, work, and marital outcomes among young women, as well as how these effects differ by race.

One explicit aim of PRWORA was to reduce teen motherhood and high school dropout among poor youth. However, recent evidence using a difference-in-difference approach suggests that adolescent women in low-income and welfare reliant families are more likely to experience these outcomes after welfare reform than before (Hao & Cherlin, 2004; see also Orthner & Randolph, 1999). Although not designed to test the effects of welfare reform, the current study offers suggestive evidence of another approach to helping poor adolescent women successfully navigate the transition to adulthood by avoiding dropout and early pregnancy. Namely, through enrolling in college preparatory high school curriculum which is associated with lowered risk of welfare receipt directly (for Whites) and indirectly (for all racial/ethnic groups through lowered risk of high school dropout and teen motherhood). Future research should consider how high school experiences can help disrupt disadvantaged youths' progress toward poverty.

The organization of curricular tracking has also changed since the cohort examined in the current study attended high school in the late 1970s and early 1980s. Following scholarship in the 1980s and 1990s highlighting

social inequalities in track placement, coupled with more recent reports by the Gates Foundation, high school curricula has grown increasingly academically focused over the past 25 years or so. This "constrained curriculum" (Lee, Croninger, & Smith, 1997) basically phases out a "general track" in high schools and makes it so that even students who are concentrating on vocational curricula are likely to invest in college preparatory coursework. These reforms have increased the overall number of students taking a college preparatory curriculum and decreased the rigidity and consistency of course placements across subjects. Now, a student could be taking advanced English while also taking remedial math. In spite of these changes, research shows that de facto tracking continues and results in curricular differentiation that looks quite similar to earlier forms of tracking with respect to student racial/ethnic and poverty composition, with the exception that all students take more core academic courses (Alexander, 2002; Mickelson & Everett, 2008; Yonezawa, Wells, & Serna, 2002).

How might these changes in the structure of tracking influence the relationship between tracking and welfare? Given that adolescents—regardless of race/ethnicity—are increasingly enrolled in academic coursework, it is likely that recent curricular changes might actually exacerbate the types of inequality by race/ethnicity identified in the current study. Indeed, a recent report to the Gates Foundation suggests that a "one-size-fits-all" curriculum focused on college preparation turns many students away from high school and increases dropout rates (Bridgeland, DiIulio, & Morison, 2006). The current analyses likewise suggest that educators should proceed cautiously when they require college preparatory coursework for all students, because there may be unintended negative consequences for some groups if the changes are not accompanied by transformation in the school culture, teacher training, and administrative organization (Corbett & Huebner, 2007). Future research should investigate racial/ethnic differences in the effects of curriculum on welfare and other related early adult outcomes among more recent cohorts to see how changes to curriculum relate to the group differences observed in the current study.

In sum, though much has changed in the policy arena since the cohort in the current study made the transition from adolescence to adulthood, this research nonetheless builds important bridges between education and life course scholarship that continue to hold relevance for understanding how school experiences can directly and indirectly shape young women's risk of welfare reliance, specifically, and thus their risk of poverty, more generally. Theoretically, this research highlights the importance of considering school experiences that shape turning points during adolescence and young adulthood that have profound implications for how the life course unfolds. In terms of policy, the research adds to a growing number of studies that highlight the importance of high school experiences in shaping a variety of nonacademic outcomes; this body of research should be exploited to inform

and develop policies aimed at reducing young women's risk of poverty and welfare reliance.

REFERENCES

Alexander, N. A. (2002). Race, poverty, and the student curriculum: Implications for standards policy . *American Educational Research Journal*, *39*, 675–693.

Allison, P. D. (1995). *Survival analysis using the SAS system*. Cary, NC: SAS Institute.

Arum, R. (1998). Invested dollars or diverted dreams: The effect of resources on vocational student educational outcomes. *Sociology of Education*, *71*, 130–151.

Arum, R., & Beattie, I. R. (1999). High school experience and the risk of adult incarceration. *Criminology*, *37*(3), 515–539.

Attewell, P., & Domina, T. (2008). Raising the bar: Curricular intensity and academic performance. *Educational Evaluation and Policy Analysis*, *30*, 51–71.

Bane, M. J., & Ellwood, D. T. (1994). *Welfare realities: From rhetoric to reform*. Cambridge, MA: Harvard University Press.

Beattie, I. R. (2003). *Tracking women's transitions to adulthood: High school experiences, race/ethnicity, and the early life course outcomes of schooling* (Unpublished Ph.D. dissertation). Department of Sociology, University of Arizona.

Bridgeland, J. M., DiIulio, J. J., & Morison, K. B. (2006). *The silent epidemic: Perspectives of high school dropouts*. Washington, DC: Civic Enterprises, LLC.

Cao, J. (1996). *Welfare recipiency and welfare recidivism: An analysis of the NLSY data* (Discussion Paper no. 1081–96). Madison, WI: Institute for Research on Poverty.

Carbonaro, W. (2005). Tracking, student effort, and academic achievement. *Sociology of Education*, *78*, 27–49.

Center for Human Resource Research. (1999). *NLSY79 user's guide: 1999*. Columbus, OH: The Ohio State University.

Corbett, G. C., & Huebner, T. A. (2007). *Rethinking high school: Preparing students for success in college, career, and life* (A study for the Bill and Melinda Gates Foundation). San Francisco: WestEd.

East, P. L. (1998). Racial and ethnic differences in girls' sexual, marital, and birth expectations. *Journal of Marriage and Family*, *60*, 150–162.

Edin, K., & Lein, L. (1997). *Making ends meet: How single mothers survive welfare and low wage work*. New York: Russell Sage Foundation Press.

Elder, G. H., Jr. (1974). *Children of the great depression*. Chicago: University of Chicago Press.

Elder, G. H., Jr. (1998). Life course and human development. In W. Damon (Ed.), *Handbook of child psychology* (pp. 939–991). New York: Wiley.

Elder, G. H., Jr., Johnson, M. K., & Crosnoe, R. (2003). The emergence and development of life course theory. In J. T. Mortimer & M. J. Shanahan (Eds.), *Handbook of the life course* (pp. 3–16). New York: Kluwer Academic/Plenum Publishers.

Gamoran, A. (1987). The stratification of high school learning opportunities. *Sociology of Education*, *60*, 135–155.

Gamoran, A., & Mare, R. (1989). Secondary school tracking and educational inequality: Compensation, reinforcement, or neutrality. *American Journal of Sociology*, *94*, 1146–1183.

Golden, O. A. (2005). *Assessing the new federalism: Eight years later*. Washington, DC: Urban Institute.

Hao, L., & Cherlin, A. J. (2004). Welfare reform and teenage pregnancy, childbirth, and school dropout . *Journal of Marriage and Family*, *66*, 179–194.

Harknett, K. (2001). Working and leaving welfare: Does race or ethnicity matter? *Social Service Review*, *75*, 359–385.

Harris, K. M. (1993). Work and welfare among single mothers in poverty. *American Journal of Sociology*, *99*, 317–352.

Harris, K. M. (1996). Life after welfare: Women, work, and repeat dependency. *American Sociological Review*, *61*, 407–426.

Haveman, R., & Wolfe, B. (1994). *Succeeding generations: On the effects of investments in children*. New York: Russell Sage Foundation.

Hogan, D. P., & Astone, N. M. (1986). The transition to adulthood. *Annual Review of Sociology*, *12*, 109–130.

Kaestner, R., Korenman, S., & O'Neill, J. (2003). Has welfare reform changed teenage behaviors? *Journal of Policy Analysis and Management*, *22*, 225–248.

Lee, V. E., Croninger, R. G., & Smith, J. B. (1997). Coursetaking, equity, and mathematics learning: Testing the constrained curriculum hypothesis in U.S. secondary schools. *Educational Evaluation and Policy Analysis*, *2*, 99–121.

Lucas, S., & Gamoran, A. (2002). Tracking and the achievement gap. In J. E. Chubb & T. Loveless (Eds.), *Bridging the achievement gap* (pp. 171–198). Washington, DC: Brookings Institute Press.

Marini, M. M. (1984). Age and sequencing norms in the transition to adulthood. *Social Forces*, *63*, 229–243.

Mickelson, R. A., & Everett, B. J. (2008). Neotracking in North Carolina: How high school courses of study reproduce race and class-based stratification. *Teachers College Record*, *110*, 535–570.

Oakes, J. (1985). *Keeping track: How schools structure inequality*. New Haven, CT: Yale University Press.

Orthner, D. K., & Randolph, K. A. (1999). Welfare reform and high school dropout patterns for children. *Children and Youth Services Review*, *9/10*, 881–900.

Pepper, J. V. (1995). Dynamics of the intergenerational transmission of welfare receipt in the United States. *Journal of Family and Economic Issues*, *16*, 265–279.

Randolph, K. A., Fraser, M. W., & Orthner, D. K. (2006). A strategy for assessing the impact of time-varying family risk factors on high school dropout. *Journal of Family Issues*, *27*, 933–950.

Randolph, K. A., Rose, R. A., Fraser, M. W., & Orthner, D. K. (2004). Examining the impact of changes in maternal employment on high school completion among low-income youth. *Journal of Family and Economic Issues*, *25*, 279–287.

Riegle-Crumb, C. (2006). The path through math: Course sequences and academic performance at the intersection of race-ethnicity and gender. *American Journal of Education*, *113*, 101–123.

Rindfuss, R. R., Swicegood, C. G., & Rosenfeld, R. A. (1987). Disorder in the life course: How common and does it matter? *American Sociological Review*, *52*, 785–801.

Rosenbaum, J. E. (1976). *Making inequality: The hidden curriculum of high school tracking*. New York: John Wiley and Sons.

Rosenbaum, J. E. (1996). Policy uses of research on the high school-to-work transition. *Sociology of Education*, *69*, 102–122.

Sampson, R. J., & Laub, J. H. (1993). *Crime in the making: Pathways and turning points through life*. Cambridge, MA: Harvard University Press.

Stier, H., & Tienda, M. (2001). *The color of opportunity: Pathways to family, welfare, and work*. Chicago: University of Chicago Press.

Upchurch, D. M., & McCarthy, J. (1990). The timing of first birth and high school completion. *American Sociological Review*, *55*, 224–234.

U.S. Department of Labor, Bureau of Labor Statistics. (1979). *National Longitudinal Survey of Youth 1979 Cohort*. Columbus, OH: Center for Human Resource Research at The Ohio State University.

Wight, V. R., & Chau, M. (2009). *Basic facts about low-income children: Children under 18*. New York: National Center for Children in Poverty.

Wilson, W. J. (1996). *When work disappears*. New York: Knopf.

Yonezawa, S., Wells, A. S., & Serna, I. (2002). Choosing tracks: "Freedom of choice" in detracking schools. *American Educational Research Journal*, *39*, 37–67.

Zill, N. (1991). *The life circumstances and development of children in welfare families*. Washington, DC: Child Trends.