

Provided for non-commercial research and education use.
Not for reproduction, distribution or commercial use.

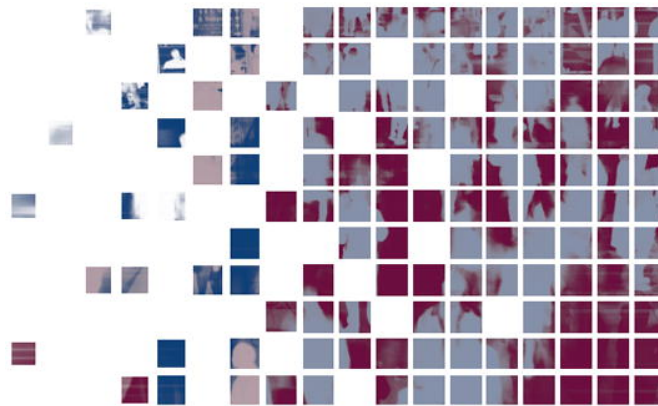


Volume 25 Number 3

ISSN 0276-5624

Research in **SOCIAL
STRATIFICATION
AND MOBILITY**

Editor: Kevin T. Leicht



The official journal of the ISA RC28 on Social Stratification and Mobility

This article was published in an Elsevier journal. The attached copy is furnished to the author for non-commercial research and education use, including for instruction at the author's institution, sharing with colleagues and providing to institution administration.

Other uses, including reproduction and distribution, or selling or licensing copies, or posting to personal, institutional or third party websites are prohibited.

In most cases authors are permitted to post their version of the article (e.g. in Word or Tex form) to their personal website or institutional repository. Authors requiring further information regarding Elsevier's archiving and manuscript policies are encouraged to visit:

<http://www.elsevier.com/copyright>



ELSEVIER

Available online at www.sciencedirect.com

Research in Social Stratification and Mobility 25 (2007) 189–203

**Research in Social
Stratification and
Mobility**

<http://elsevier.com/locate/rssm>

The structure of teenage employment: Social background and the jobs held by high school seniors

Charles Hirschman^{*}, Irina Voloshin

Department of Sociology and Center for Studies in Demography and Ecology, Box 353340, University of Washington, Seattle, WA 98195-3340, United States

Received 21 April 2006; received in revised form 15 December 2006; accepted 14 July 2007

Abstract

Although it is widely assumed that work careers begin after the completion of schooling, most enrolled high school students are also workers. Teenage workers are heavily concentrated in the low wage service sector, but they are also found as supplemental part-time workers in many occupations, including clerical, retail sales, and blue collar employment. Gender, race/ethnicity, and socioeconomic origins are important determinants of the types of jobs that teenage students hold. Students from advantaged socioeconomic origins and students with above average grades are more likely to work in “good jobs,” defined by lower hours of work per week and higher status.

© 2007 Elsevier Ltd. All rights reserved.

Keywords: Teenage employment; Students; Fast food

1. Introduction

Work careers begin after the completion of formal schooling. This is a fundamental assumption of life course research, which identifies “the school to work transition” as one of the most critical stages of the early life course. Yet the reality is that most students are also workers. A third or more of high school students are currently employed, as are the majority of college students (Bureau of Labor Statistics, 2005a).

The paucity of research on the overlap of student and worker roles and on the occupational structure of teenage workers is almost certainly due to the assumption that

most students work in part-time jobs that are unrelated to post-schooling work careers. Indeed, one of the major “problems” of the first Occupational Change in a Generation Survey (the data source for Blau and Duncan, 1967) was that the measurement of “first job” may have conflated student employment and post-student employment (Duncan, Featherman, & Duncan, 1972: 210–224).¹ However, the high level of labor force participation among students, and the fact that teenagers comprise four percent of the American workforce, suggest the need for more research on the prevalence of work and the structure of employment among adolescents prior to the completion of schooling. In this study, we explore patterns of social stratification of teenage workers.

Revised version of a paper presented at the Annual Meetings of the American Association for the Advancement of Science, 17–21 February 2005 in Washington, D.C.

^{*} Corresponding author. Tel.: +1 206 543 5035; fax: +1 206 543 2516.

E-mail address: charles@u.washington.edu (C. Hirschman).

¹ The 1973 OCG replicate attempted to improve the measure of “first job” as subsequent to the completion of schooling (Featherman & Hauser, 1978: 23–24).

Prior research on teenage employment has focused almost exclusively on the impact of work on educational outcomes, including grades and dropping out. The primary theoretical and policy issue is the hypothesis that the roles of worker and student are incompatible, or at least incompatible with educational success (Greenberger & Steinberg, 1986). Yet most studies have concluded that there is little observable harm if students work a moderate number of hours per week; indeed, students who work less than 15 h/week generally have better educational outcomes than students who do not work at all (Carr, Wright, & Brody, 1996; McNeil, 1997; Mortimer & Finch, 1986). Students who work longer hours, especially more than 20 or 25 h/week, do have lower grades and are more likely to drop out of school (D'Amico, 1984), however, it is unclear whether high intensity work is a cause, a consequence, or just a correlate of poorer educational outcomes.

The hypothesized causal impact of teenage employment on educational outcomes hinges, in large part, on the selectivity of students into employment and different types of jobs. Before addressing this question, we describe the occupational structure of teenage employment and its relationship to the adult labor market. Within the teenage labor market structure, we attempt to identify the dimensions of occupational status and preferable job characteristics. Then we address the question of selectivity of students to jobs within the classic analytical framework of social stratification research. Specifically, we ask if family background and ascriptive characteristics, such as gender, and race and ethnicity, influence teenage employment and the attainment of higher status jobs.

Although we refer to teenage employment in general, our empirical focus is on the employment patterns held by several cohorts of high school seniors in a West Coast metropolitan area. Although this is a limited geographical and temporal sample, the patterns reported here are likely to be representative of teenagers more broadly. We find that there is a clear structure between the social backgrounds of students and the jobs they hold. Advantages of family origins and school achievement are positively associated with paid employment, and advantaged students are especially more likely to hold “good jobs” outside of prototypical teenage concentration in the fast food sector and related service sector jobs.

2. Why do teenagers work?

Although there are many reasons why people work, economic necessity ranks near the top of the list. Most high school students, however, live as dependents in

parental households, and very few teenagers have to work to provide their food and shelter. Indeed, state laws “protect” adolescents from becoming regular workers by limiting the hours and nature of paid employment. The one gray area is family employment, especially when families run small businesses. Families that run small businesses generally depend on the unpaid labor of all family members, including school age children and adolescents, as part of a strategy of economic survival.

If teenagers are not working to support their families, the most plausible alternative interpretation is that most students work to support their consumption and related lifestyle activities, such as saving for clothing, a car, or other “extras” beyond their family’s economic resources or willingness to provide. Another potential explanation is that students work in order to invest in their future. Students may seek jobs that provide opportunities for achievement, exposure to possible career choices, or to develop ties with persons who could serve as mentors. These explanations are not mutually exclusive, and many teenagers may be motivated by both objectives.

Regardless of the motivations of students, there must be a job market in which employers seek to, or are at least willing to, hire teenagers. Many teenagers may be working in part-time jobs in the general labor market where there is an insufficient supply of relatively cheap and flexible workers. In these jobs, teenagers can be considered as supplemental workers for adults who are the predominant workforce. For example, teenagers often work as receptionists in offices and as cashiers in grocery stores, but teenagers comprise only a small minority of workers in these positions. There may also be niches of teenage jobs where adolescents comprise a significant share of all workers in an occupation or industry. For example, teenage workers appear to be the mainstay of fast food establishments.

The proportional representation of teenage workers (ages 16–19) in the major occupational categories, and their relative share of all workers (employed persons age 16 and above) in each occupation, is presented in Table 1 based on data from the 2005 Current Population Survey. These data do not differentiate teenagers by their enrollment status.

Of the 141 million employed persons in the United States in 2005, about 6 million or a little over 4% are teenagers. Over three-quarters of teenage workers are employed in two major occupational categories: “Service” and “Sales and Office.” But closer inspection shows only one occupational category that might be labeled as a teenage niche—food preparation and serving. About 4 out of every 10 teenagers work in this occupational specialty. Looking at the final column in

Table 1

Percent by occupation of total employed population and employed population age 16–19, and percent age 16–19 in each occupation: United States, 2005

Occupation	Percent distribution		Percent age 16–19 in occupation
	Age 16+	Age 16–19	
Total	100%	100%	4.2%
Number of workers (in thousands)	141,730	5978	
Management, professional, and related occupations	35	6	0.7
Management, business, and financial operations occupations	14	1	0.3
Management occupations	10	1	0.3
Business and financial operations occupations	4	0	0.2
Professional and related occupations	20	5	1.0
Computer and mathematical occupations	2	0	0.5
Architecture and engineering occupations	2	0	0.5
Life, physical, and social science occupations	1	0	0.7
Community and social services occupations	2	0	0.8
Legal occupations	1	0	0.1
Education, training, and library occupations	6	2	1.4
Arts, design, entertainment, sports, and media occupations	2	2	3.4
Healthcare practitioner and technical occupations	5	1	0.5
Service occupations	16	38	9.8
Healthcare support occupations	2	2	3.2
Protective service occupations	2	2	3.4
Food preparation and serving related occupations	5	25	20.0
Building and grounds cleaning and maintenance occupations	4	4	4.9
Personal care and service occupations	3	6	7.6
Sales and office occupations	25	38	6.2
Sales and related occupations	12	24	8.6
Office and administrative support occupations	14	14	4.2
Natural resources, construction, and maintenance occupations	11	8	3.0
Farming, fishing, and forestry occupations	1	2	9.2
Construction and extraction occupations	6	5	3.0
Installation, maintenance, and repair occupations	4	2	2.0
Production, transportation, and material moving occupations	13	11	3.5
Production occupations	7	4	2.4
Transportation and material moving occupations	6	7	4.8

Source: Bureau of Labor Statistics (2005b). Tabulations available online at: <http://www.bls.gov/cps/cpsaat9.pdf>.

Table 1, about one-fifth of all workers in food prep occupations are teenagers. The only other occupation with a substantial over-representation of teen workers is Sales, which employs about a quarter of all teenage workers. Teenagers comprise a little less than 10% of all workers in Sales. There are probably some other teenage occupational specializations, such as child care workers and grocery store courtesy clerks, that might be revealed in more detailed occupational categories.

There are certainly reciprocal influences between the demand for and supply of teenage workers. Teenagers, similar to women and immigrants, probably serve as a source of supplemental labor in occupations and indus-

tries that offer wages below the prevailing minimum or that rely on part-time or seasonal labor. The availability of a potential teenage workforce may sustain and generate the growth of certain industries (e.g. fast food, informal childcare) that would not exist or would be much more costly for consumers in the absence of teenage workers.

The resulting structure of teenage employment is a blend of multiple labor markets, where some students take up the slack in the general labor market while many other students are pulled into jobs in businesses that rely predominantly on teenage workers. Even with these complexities, and given that most students are working

part time and in temporary positions, we expect that there will be a system of stratification, which governs the matching process between the characteristics of jobs and the characteristics of student workers.

3. The consequences of teenage employment

As noted earlier, the dominant hypothesis in the field is that paid employment of students competes with schooling and the time needed for study. Consequently, most research on teenage employment has focused on work intensity—the number of hours worked per week. Greenberger and Steinberg (1986), D'Amico (1984), and D'Amico and Baker (1984), among others, found that employment (mostly at higher levels of intensity) reduces study time as well as time spent pursuing other school-related activities. However, a large number of research findings suggest that non-employment is no guarantee of educational success (Lillydahl, 1990). Some researchers have posited that employment can be positively related to educational outcomes, but only if it does not exceed a certain threshold of intensity (D'Amico, 1984).

Upon reaching a threshold (estimates vary widely, generally between 10 and 20 h of work per week), the student worker's academic standing suffers, his/her educational and occupational aspirations fall, and the likelihood of delinquency increases (Greenberger, Steinberg, & Rugiero, 1982; Mortimer & Finch, 1986). For instance, Barro (1984) found that those who work more than 15 h a week had a 50% higher rate of dropping out than those who worked less. D'Amico (1984) concluded that students who worked less than 10–15 h/week had a higher class ranking, greater knowledge of the working world, and decreased chances of dropping out.

The competition between schooling and employment is not a zero-sum relationship because of the alternative uses of free time, especially watching TV, visiting with friends, and other forms of leisure. Holding a job may decrease the amount of leisure time for students, but it does not necessarily reduce the amount of time they allocate to schoolwork. Learning to manage time commitments, one of the lessons of paid employment, may be beneficial for teenage job holders (Schoenhals, Tienda, & Schneider, 1998). Indeed, the 1974 President's Science Advisory Committee encouraged adolescents to gain work experience as valuable preparation for successful adult roles (President's Science Advisory Committee, 1974).

Reducing the amount of time spent watching television and learning efficiency and responsibility may give an edge to students who work at low intensity jobs.

However, when work intensity is excessive, it becomes increasingly difficult to dedicate the amount of time requisite to maintain good academic progress. There are several studies that report a curvilinear nature of the relationship between hours worked and academic outcomes, first increasing and then decreasing, but there is not a consensus on the exact location of the "point of inflection" in this curve.

Schoenhals, Tienda, and Schneider (1998) posit that the lack of consensus on the consequences of high school employment is due to unobserved effects of selection into employment. Specifically, they argue that the backgrounds and other characteristics of students predispose some to be employed and others to not work. Student characteristics may also affect their propensity to be employed at various levels of intensity. For example, if adolescents who are less academically invested to begin with also tend to work more hours, it is not surprising that these teens may have lower overall educational attainment compared to students who work at a lower intensity (Ruhm, 1997). Efforts to "unpack" the causal connections between student employment and later outcomes will be more tractable once we have a better handle on the determinants of patterns of student employment.

Building on the premise that selectivity into jobs is the question that must be addressed before measuring the consequences of teenage employment, our objective is to examine the extent to which ascriptive background and achievement characteristics affect employment status, time intensity, and occupational structure. The logic is akin to studies of patterns of stratification/inequality characterizing the adult labor market. Race, ethnic and gender disparities in outcomes are persistent features of the general labor market, and similar processes (namely, unequal access to opportunities) may affect the teenage labor market.

4. Data and measures

This study is based on data from the University of Washington Beyond High School (UW-BHS) project (<http://depts.washington.edu/uwbhs/>). All high school seniors in four cohorts (or classes) in several Western Washington school districts were surveyed (in 2000, 2002, 2003, and 2004) as part of a longitudinal study of educational attainment and young adulthood. For each cohort of high school seniors, we administered an in-school paper and pencil questionnaire in the spring (April or May). In some schools, seniors completed the survey in regular classrooms, while in other schools the students were assembled in an auditorium to take the survey. Overall, student cooperation was very good and

less than 2% of enrolled seniors (or their parents) refused to participate. In addition to in-school data collection, a series of mailings were sent to “enrolled seniors” who were not present in the school on the day of the survey following the Dillman (2000) procedures to increase survey response. These additional mailings increased the number of completed senior surveys by 10–15%.

Evaluation of the completeness of coverage of the senior survey is clouded by the (sometimes ambiguous) definition of who is a high school senior, as well as the logistics of locating students who are nominally registered, but are not attending school on a regular basis. In theory, high school seniors are students who have completed the 11th grade, are currently enrolled in the 12th grade, and are likely to graduate from high school at the end of the year. In practice, however, there are considerable variations from this standard definition. Some students consider themselves to be seniors (and are taking senior classes and are listed as seniors in the school yearbook), but are classified in school records as juniors because they have not earned sufficient credits. In addition to “fourth-year juniors,” there are a number of “fifth-year seniors,” who were supposed to have graduated the year before. Many of the fifth year seniors are enrolled for part of the year or are taking only one or two courses in order to obtain the necessary credits to graduate. Both fourth-year juniors and fifth-year seniors are at high risk of dropping out of high school.

In addition to the problems of identifying the potential universe of seniors, the UW-BHS survey had a low response rate among the 10% of students who are enrolled in alternative programs that are independent of the five comprehensive high schools in the district. Alternative programs include a small number of home-schooled students and a variety of special programs for students with academic, behavioral, or disciplinary problems. Because many of these seniors have only a nominal affiliation with the public schools – the largest group was enrolled in high school equivalency courses at community colleges – they are less likely to respond to our request to complete a survey of high school seniors. Even among students enrolled in comprehensive high schools, there were “non-mainstream” students who completed the survey at lower rates than others, including the 6% of seniors who were taking community college classes for college credit and another 7% of students who were in special education classes for part or all of the school day.

The problems of defining senior status and locating students (to take the survey) reduced the coverage of our senior survey. For regular students – graduating seniors enrolled at one of the five major high schools

– the response rate is about 80%. If we consider a broader universe of students, including students with marginal affiliation to high school and other hard-to-contact students, our effective rate of coverage of all potential seniors is probably less than 70%. Although our rate of survey coverage of all high school seniors is less than desirable, the problems we encountered are endemic in survey research of high school students. Most national surveys of students are limited to students who are present on the day the survey is conducted and probably have even lower levels of coverage than the UW-BHS senior survey. During data processing, we excluded a small number of exchange students, developmentally disabled students, and a few students who appeared to have answered the questionnaire with random responses or who could not be matched with school records. This leaves an effective sample of 5980 senior students of whom 3251 were employed the week prior to their interview.

5. The dimensions of teenage employment

The decision to work and the characteristics of employment are not completely independent outcomes. For adults, the standard assumption is that labor force participation is normative behavior—it is expected that most people will have a job unless they are constrained by family responsibilities or health conditions. Thus, it is typical to first consider the decision to enter the labor force and then address the characteristics of jobs among those who are working. For teenagers, the decision to work may be affected by the overall availability of jobs or of jobs with certain characteristics.

Employment is based on the standard labor force concept of currently working for pay (at the time of the interview). This excludes unpaid work at home, such as chores, mowing the lawn, or taking care of younger siblings. However, paid childcare or running a lawn mowing business would count as employment. Since the survey was conducted during the school year, summer jobs (when school is not in session) are not included here.

Work intensity is measured by the number of hours worked during a “usual week” during the school years. Based on the past research literature and exploratory analysis with our data, we have dichotomized work intensity into two categories: 15 or fewer hours per week and 16 or more hours per week. One of the advantages of collecting detailed survey data on economic status is the possibility of more accurate measures of employment. In our survey, all jobs reported by students were coded into detailed (3-digit) census occupational and industrial categories. In our analysis, we construct sev-

eral summary occupational classifications of employed teenagers based on characteristics of the positions and the concentrations of students in different categories.

6. The teenage occupational structure

There has been surprisingly little research on the structure of teenage employment beyond description that most student workers are relegated to the lowest rungs of the labor market (Greenberger & Steinberg, 1986; McNeil, 1997; Rosenbaum, Deluca, Miller, & Roy, 1999; Schoenhals, Tienda, & Schneider, 1998), or are primarily located in poorly paid positions in the service sector (McNeil, 1997; Entwisle, Alexander, & Olson, 2000). In this study, our first goal is to identify the major features of the employment structure of teenage workers. As noted earlier, most teenagers are concentrated into a few major occupational categories and in a few specific occupations within the major categories. After considerable exploratory analysis, we have rearranged, compressed, and combined a number of categories to highlight the main features of the occupational structure of teenage workers.

Table 2 shows the distribution of employed teenagers in three broad (major) occupational groups, each of which is divided into two or three more detailed occupational groups. In each of the detailed occupational groups, we list the top three occupational titles and a residual classification. The first two columns of the table show the distribution of teenage workers across the major and detailed occupational categories. These columns also show the percentages of each major occupational group in the detailed categories and the percentage of each detailed category in the specific occupational titles. To provide some general indication of occupational characteristics and composition, we show the mean hours worked (per week) and mean hourly wages of the teenage workers in each occupational category (major, detailed, and title). The final columns show the percent female and percent white of the teenage workers in each occupational category.

The three major occupational groups in Table 2 are: (1) managerial/teaching/clerical/tech, (2) retail/food prep/service, and (3) blue collar/labor/production, which could be re-labeled as white/pink collar jobs, teenage jobs, and blue collar jobs. Almost two-thirds of student workers are in the middle category (retail, food prep, and personal service) and the largest share (41%) are employed in the detailed food prep category. About half of the food prep workers (about one in five of all student workers) are in the two specific occupational titles—"fast food prep" and "food counter clerk."

The share of student workers in food prep occupations from our survey data is almost exactly the same in the national Current Population Survey. As noted earlier, the prototypical teenage job is working in a fast food establishment. Students employed in fast food-related occupations tend to work more hours per week and have lower hourly wages than students working in other occupations.

The first major occupational category (white/pink collar) includes a range of semi-professional or technical positions, such as lifeguards, coaches, and tutors who tend to work a modest number of hours per week and have average wages well above that for all teenage workers (reported in the last line of the table). Another major category in the white/pink collar sector is clerical occupations, including receptionists and secretaries. Teenage clerical workers are almost entirely female. They work fewer hours per week than the overall average, but their wages are about average.

The third occupational group, "blue collar", is composed of what Greenberger and Steinberg (1986) called the "old core" of student employment, which consists of jobs stocking shelves in stores, packaging goods for shipment, or working in subordinate positions in construction, landscaping, farming, and in factories/shops. Teenage workers in blue collar occupations are predominately male, and jobs in this sector offer above average pay rates, but with more hours of work per week. If students working in these positions do not attend college, these jobs may provide entry into early career employment.

The teenagers who work in the first and third categories are generally supplemental workers in fields where adults constitute the dominant share of the workforce. These establishments may be hiring children or relatives of other employees or may simply be proximate to students (e.g. schools may employ student clerical workers). Another possibility is that some firms decide to adapt to the part-time schedules of students in return for paying them less than the prevailing wages of adult workers.

The jobs in the middle category, which include retail sales workers and personal service workers (most dealing with childcare) in addition to food preparation, are almost all part time and low wage positions. These jobs are not skilled in the technical sense, but they do require interpersonal skills and high energy to deal with customers in retail stores and restaurants and to cope with young children in nursery schools and recreational facilities. These positions are characterized by a below average pay scale and a predominately female workforce. Teenage jobs have many of the same

Table 2

Detailed occupational structure of teenage workers, by average hours of work and wages, 2000–2004

	% of major		Mean hours worked (h/week)	Mean hourly wages	% female	% white	N
	% of total	Category (%)					
Managerial/teaching/clerical/tech	17.2	–	15	\$8.76	74	66	558
Managerial/teach/tech	7.7	45	13	\$9.63	66	64	249
Lifeguard (395)	–	34	13	\$8.75	62	64	85
Athletic coach (272)	–	18	9	\$9.77	50	73	44
Tutor (234)	–	12	7	\$10.75	64	31 ^a	31
Other MTT (101–395)	–	36	18	\$10.06	72	61	89
Clerical/office support	9.5	55	17	\$8.07	80	67	309
General office clerk (586)	–	30	14	\$7.83	85	66	92
Receptionist (540)	–	27	19	\$7.58	93	71	84
Secretary (570)	–	10	14	\$8.41	90	74	31
Other (511–593)	–	33	13	\$9.63	63	62	102
Retail/food prep/service	64.9	–	20	\$7.95	66	60	2111
Retail sales	15.1	23	21	\$7.78	68	64	492
Sales clerk (476)	–	56	20	\$7.60	68	62	275
Sales cashier (472)	–	28	22	\$7.45	75	64	139
Rental clerk (474)	–	7	22	\$7.36	57	74	35
Other (470–495)	–	9	20	\$10.86	51	67	43
Food prep	40.8	63	21	\$8.06	62	57	1326
Fast food prep (405)	–	33	22	\$7.42	68	48	436
Food counter clerk (406)	–	14	20	\$7.40	63	63	191
Busser (413)	–	13	18	\$8.99	53	58	166
Other (401–415)	–	40	21	\$8.50	59	60	533
Personal services	9.0	14	18	\$7.76	79	71	293
Childcare (460)	–	58	18	\$7.47	91	73	169
Recreational attendant (443)	–	23	18	\$7.90	54	69	67
Activity coordinator kids (462)	–	4	17	\$8.53	69	62	13
Other (423–465)	–	15	19	\$8.44	75	68	44
Blue collar/labor/production	17.9	–	20	\$8.55	25	66	582
Labor/production	17.9	100	20	\$8.55	25	66	582
Stocker (562)	–	29	21	\$7.63	34	59	170
Packing/packaging (964)	–	15	18	\$7.11	45	61	85
Landscaping (425)	–	9	15	\$9.35	4	78	51
Other (374–964)	–	47	20	\$9.40	17	70	276
Characteristics of all workers	–	–	19	\$8.19	60	62	3251

^a East Asian students dominate this category.

characteristics of occupational positions that are often designated as “women’s jobs”—part time schedules, requiring high energy, good “people skills,” and a willingness to accept below average pay.

Many firms (but not all) in the food preparation, retail sales, and personal service sectors have very high employee turnover rates. This means that many establishments are continuously hiring, which may make these jobs more accessible to teenagers without contacts. The lower turnover in white/pink collar and blue collar occupations may mean that employers can be more

choosy and rely on informal networks rather than help wanted ads. Teenagers seeking employment in these sectors may need to have special skills or contacts (social capital), while employment in the teenage sector may be available to anyone looking for work.

In the following analysis, we focus on two attributes of jobs: hours worked per week and occupational status. Although there is some overlap in these two variables (see Table 2), they are sufficiently independent to justify a parallel analysis of the impact of social origins on both dimensions of teenage workers.

Table 3

Employment and hours worked by high school seniors in selected high schools in the Pacific Northwest: 2000–2004

Race/ethnicity	Percent of all students							
	Female				Male			
	15 h or fewer (%)	16 h or more (%)	Not employed (%)	Total (N)	15 h or fewer (%)	16 h or more (%)	Not employed (%)	Total (N)
Black	14	37	49	476	10	36	54	329
Asian	18	31	50	530	17	27	55	419
East Asian	18	32	50	227	16	23	61	171
Cambodian	16	40	44	80	25	32	43	63
Vietnamese	27	24	50	93	20	24	56	87
Filipino/other Asian	16	30	54	130	12	36	52	98
Hispanic and other minorities	15	36	49	446	13	35	52	319
Hispanic	16	36	48	296	15	36	49	207
Amer. Ind/Pac Islander	13	37	51	150	9	33	58	112
White (non-Hispanic)	26	38	37	1900	18	34	48	1561
Total	22	36	42		16	33	50	
Total N	724	1217	1411	3352	431	878	1319	2628

7. Descriptive patterns

We first explore descriptive patterns of employment and work intensity of high school seniors by race and ethnicity and gender. Table 3 shows the percentages of students in three categories: works 15 or fewer hours per week, works 16 or more hours per week, and not employed. Distributions of students into these categories are cross-classified by four major race/ethnic groups: Black, Asian, Hispanic & Other, and White (non-Hispanic), and are tabulated separately for females and males. The Asian students are subdivided into four national origin groups and the Hispanic & Other category is also subdivided into two groups: Hispanics and American Indians/Pacific Islanders.

Overall, about half of students are not working, one in five is working in a low intensity job (15 or fewer hours per week) and one-third work in high intensity jobs (16 or more hours per week). Females are slightly more likely to work than males, both in good (low intensity) and bad (high intensity) jobs. White females are the group most likely to work.

White students (especially females) are more likely to be employed and to work in the good, less time-intensive jobs, but the differences are relatively small and whites are also well represented in the high-intensity category. In general, the minority/white differences are most pronounced in the 'Not Working' category, and whites are somewhat more concentrated than minority groups in low-intensity work. For example, Black students (both female and male) are less likely to work (than white

students), less likely to have low intensity jobs, and they have above average representation in high intensity jobs. Work patterns among some of the smaller Asian groups are more varied and do not always conform to a simple interpretation of minority disadvantage.

If minorities are less advantaged in terms of access to the less intensive jobs, can the same pattern be found in occupational patterns? This question is addressed in a preliminary fashion in Table 4, which shows the occupational structure of employed high school seniors by race/ethnicity. Specifically, the percentages of working students (excluding those not employed) are shown for three general occupational categories—the teenage job sector (food prep/sales/service), white/pink collar (managerial, teaching, clerical, tech), and blue collar (labor/production).

The most notable feature in Table 4 is the gender difference in teenage occupations, although differences by race/ethnicity are also evident. Female students are much more likely to be found in the teenage jobs than are males (71–56%). Although the fast food sector has only a slight over-representation of female students relative to the overall employment gender balance (Table 2), females are much more likely than males to be found in the other detailed occupational categories (retail sales and personal services) in the teenage job sector. In particular, females are much more likely to work as sales clerks, cashiers, and childcare service workers than are males.

Females are also over-represented in clerical and office support jobs, while men dominate the blue collar

Table 4
Type of jobs held by high school seniors in selected high schools in the Pacific Northwest, 2000–2004

Race/ethnicity	Percent of all students							
	Female				Male			
	Service/retail “fast food” (%)	White/pink collar (%)	Blue collar (%)	Total (N)	Service/retail “fast food” (%)	White/pink collar (%)	Blue collar (%)	Total (N)
Black	78	16	6	242	66	6	28	150
Asian	73	20	7	266	57	13	30	188
East Asian	73	21	6	114	49	18	33	67
Cambodian	78	18	4	45	64	6	31	36
Vietnamese	72	19	9	47	61	13	26	38
Filipino/other Asian	72	20	8	60	60	13	28	47
Hispanic and other minorities	72	20	8	229	57	13	30	153
Hispanic	71	21	8	155	61	12	26	106
Amer. Ind/Pac Islander	73	19		74	47	15	38	47
White (non-Hispanic)	69	23	8	1204	53	11	36	819
Total	7	21	8		56	11	33	
Total N	1383	413	145	1941	728	145	437	1310

category because they are over-represented in stocking, packaging, and other laborer positions. These patterns among teenagers closely resemble the well-known gender divisions in adult employment.

Interestingly, Table 4 reveals a pattern of white student avoidance of the “teenage job sector.” This is a relative, not absolute, pattern since the majority of white male (53%) and white female (69%) student workers are in food prep/sales/service occupations. But in general, minorities are even more concentrated in these jobs. The largest disadvantage is for black student workers, who are 13 and 9 percentage points more likely than white students to be in teenage jobs among males and females respectively. The same general pattern holds for other (but not all) minority groups, though the gaps are somewhat less than the black-white differential.

If white students are able to reach beyond the stereotypical teen job market, what sorts of jobs are they able to find? For females, it is the white/pink collar jobs, most likely in clerical positions. For males, it is the blue collar jobs in production and related laboring positions. These positions may not be prestigious in the general labor market, but for teenagers, these jobs typically offer higher wages, more flexible work schedules, and possible exposure to adult vocations. In contrast, teenagers in fast food jobs encounter few expectations about long-term employment, a low ceiling on wages, and limited exposure to a post-schooling career. Teens in fast food jobs also work longer hours.

The over-representation of minority groups among workers in the “typical teen” sector suggests that social capital may play an important role in the teenage job market. Getting a job as a receptionist or working in a lumber yard probably requires some “inside contacts” from family, neighbors, and friends. In contrast, most fast food establishments, as well as many retail stores, typically have permanent “help wanted” signs to encourage a continuous flow of job applications to counter the high turnover rate. Differences in social capital, or social networks, may explain why minority students are more likely (relative to whites) to work in the teenage job sector. Greenberger and Steinberg (1986), among others, suggest that the most abundantly available jobs – those in the retail/service job sector – are the least beneficial to student employees, as they constitute inadequate sources of positive socialization and may constrain rather than expand available social network resources. On average, those employed in the retail/service sector work longer hours per week than students in other positions, especially those in the white/pink collar category.

8. Multivariate models

The bivariate patterns invite speculation, but with so many possible interpretations, it is difficult to draw clear conclusions. In Tables 5 and 6, we extend the descriptive analysis of the time intensity and occupational status of teenage workers with logistic regression models that

Table 5

Multinomial logistic regression of not working (and 16 h or more) relative to working 15 or fewer hours (2000–2004)

	Odds ratios relative to working 15 or fewer h/week					
	Not working			Working 16 or more h/week		
	Model 1: ascription	Model 2: ascription and SES	Model 3: ascription, SES, and academic characteristics	Model 1: ascription	Model 2: ascription and SES	Model 3: ascription, SES, and academic characteristics
Gender						
Female	0.62	0.62	0.68	0.81	0.79	0.91
Male	–	–	–	–	–	–
Race/ethnicity						
Black	2.25	2.20	2.04	1.80	1.66	1.51
Asian	1.45	1.38	1.43	0.99	0.90	0.96
Hispanic and other minorities	1.90	1.80	1.66	1.58	1.38	1.26 ^a
White (non-Hispanic)	–	–	–	–	–	–
Nativity						
1st generation	1.16	1.09	1.10	1.07	0.94	0.96
2nd generation	1.01	0.99	1.04	0.97	0.94	0.99
3rd generation	–	–	–	–	–	–
Highest education of parent						
H.S. diploma or less		1.52	1.23		2.43	1.85
Some college		1.07	0.94		1.51	1.27
College graduate		–	–		–	–
Missing		b	b		b	b
Educational expectations						
Some college or less			1.59			1.90
4-Year degree			1.06			1.25
Post-graduate degree			–			–
Missing			b			b
Grades						
2.5 or less			1.64			1.99
Between 2.5 and 3.0			1.67			1.83
Between 3.0 and 3.5			1.15			1.52
3.5 or higher			–			–
Missing			b			b
Intercept only model				417.6	991.5	4222.1
–2 log likelihood				276.8	759.4	3862.2
Pseudo- R^2 (Nagelkerke)			0.027	0.043	0.067	

Notes: (–) Reference category. Bolded coefficients are statistically significant at the 0.05 level. Bolded/italicized coefficients are statistically significant at the 0.001 level.

^a Coefficient approaches significance (p -value between 0.06 and 0.1).

^b Missing data dummy variables are included in the equation, but the coefficients are not reported.

allow for the introduction of covariates and interpretations beyond those observed in Tables 3 and 4. In particular, we are interested in whether the observed race/ethnic patterns might be explained in terms of socioeconomic origins and academic achievement. The independent variables include measures of gender and race/ethnicity, as in the cross tabulations, as well as two additional measures of ascription: immigrant generation and parental education, and two intermediate variables of educational expectations and high school GPA.

Immigrant generation is measured with three categories: 1st generation (student was born outside the United States and parents were also foreign born), 2nd generation (student is native born, but one or both parents were born outside the United States), and 3rd and higher generations (student and both parents are native born). Parental education is measured by the highest level achieved by either parent: (1) high school completed or less, (2) some college, and (3) college graduate or higher. Educational expectations are measured in response to a

Table 6
Multinomial logistic regression of working in typical teen and blue collar jobs relative to working in white/pink collar jobs, 2000–2004

	Odds Ratio relative to white/pink collar employment					
	Typical teen jobs			Blue collar jobs		
	Model 1: ascription	Model 2: ascription and SES	Model 3: ascription, SES, and academic characteristics	Model 1: ascription	Model 2: ascription and SES	Model 3: ascription, SES, and academic characteristics
Gender						
Female	0.67	0.65	0.72	0.12	0.11	0.13
Male	–	–	–	–	–	–
Race/ethnicity						
Black	1.73	1.60	1.49	1.16	1.05	0.97
Asian	1.04	0.99	1.02	0.80	0.76	0.79
Hispanic and other minorities	1.08	0.96	0.89	0.95	0.82	0.75
White (non-Hispanic)	–	–	–	–	–	–
Nativity						
1st generation	1.15	1.01	1.03	1.40	1.23	1.27
2nd generation	1.01	0.97	1.01	0.70 ^a	0.68	0.71 ^a
3rd generation	–	–	–	–	–	–
Highest education of parent						
H.S. diploma or less		2.21	1.70		2.43	1.82
Some college		1.59	1.35		1.83	1.54
College graduate		–	–		–	–
Missing		b	b		b	b
Educational expectations						
Some college			1.96			1.82
4-Year degree			1.26			1.54
Post-graduate degree			–			–
Missing			b			b
Grades						
2.5 or less			1.84			1.83
Between 2.5 and 3.0			1.64			1.58
Between 3.0 and 3.5			1.44			1.09
3.5 or higher			–			–
Missing			b			b
Intercept only model				620.4	994.8	2656.8
–2 log likelihood				221.2	550.7	2144.7
Pseudo- <i>R</i> ² (Nagelkerke)				0.139	0.154	0.175

Notes: (–) Reference category. Bolded coefficients are statistically significant at the 0.05 level. Bolded/italicized coefficients are statistically significant at the 0.001 level.

^a Coefficient approaches significance (*p*-value between 0.06 and 0.1).

^b Missing data dummy variables are included in the equation, but the coefficients are not reported.

survey question, “Realistically speaking, how far do you think you will get in school?” The responses are coded into a three-category scale containing: (1) less than a 4-year degree, (2) college (4-year) degree, and (3) post-graduate degree. Students reported their average high school grades in response to the question, “In general, what grades do you get?” Their categorical responses were coded here into a simple four category classification of: (1) 2.5 or less, (2) between 2.5 and 3.0, (3) between 3.0 and 3.5, and (4) 3.5 and higher. Missing data (for

each independent variables) were entered as additional dummy variables in each logistic regression model, but the coefficients are not reported here.

Table 5 shows the results of multinomial logistic regression models of the determinants of work intensity of jobs held by students. There are two outcomes reported for the dependent variable: non-employment (relative to working 15 or fewer hours) and working 16 or more hours (relative to working 15 or fewer hours). Three sequential and cumulative models are presented for each

outcome. Model 1 includes only the ascriptive characteristics of gender, race/ethnicity, and nativity/generation as independent variables. Model 2 adds highest level of parental education as a measure of socioeconomic origins, and Model 3 adds educational expectations and self-reported high school GPA as potential intervening variables. There are two parallel panels of logistic regression coefficients: on the left hand side are the odds ratios of not working (relative to working 15 or fewer hours per week) and on the right are the odds ratios of working 16 h or more per week (relative to working 15 or fewer hours per week). The odds ratios are exponentiated and expressed relative to the omitted category for each independent variable (males, non-Hispanic whites, parent is a college graduate, expecting to attain a post-graduate degree, and having a 3.5 or higher GPA).

Gender patterns are pervasive with female students less likely than males to not work and also less likely to be working in jobs with long hours—both of these patterns are relative to working in low-intensive (15 or fewer hours per week) jobs. The gender differentials are statistically significant and unaffected by the inclusion of covariates with one exception—the 3rd model predicting high intensive employment. Female students are more able than males to avoid jobs with longer working hours because of their higher educational ambitions and grades. Many of the traditional female occupations that employ a lot of teenage workers, such as clerical, retail sales, and childcare occupations, are less labor intensive than the blue collar jobs held by many male teenagers. Another possibility is that the preferences of females (and employers) may lead to female advantages in the teenage labor market.

The preliminary finding from the bivariate analysis that majority students are advantaged relative to minorities is confirmed in the multivariate analysis. Asian, and especially Black and Hispanic students, are much less likely to find good low-intensity jobs (relative to not working) than are white students, and this disadvantage is only slightly attenuated by the introduction of covariates of social class (parental education) and school performance (educational expectations and GPA). The same pattern holds for the other outcome—white students are able to avoid jobs that require longer working hours, though the gaps are smaller and do not hold for Asian students. Employers that hire students for desirable jobs (15 or less hours per week) may be able to exercise more discretion and they appear to prefer white students, all other things being equal.

There are strong effects of socioeconomic origins on student employment. Students whose parents did not attend college are less likely to find desirable jobs than

students whose parents attended college. Avoidance of high intensity teenage employment was more likely for students who had a parent with a college degree. The impact of parental education on work in low intensity jobs is partially mediated by other variables, namely, high school GPA and expectations for post-secondary educational attainment.

There are very strong associations between educational success – indexed by college expectations and GPA – and teenage employment in low intensity jobs. The causal direction of GPA and employment undoubtedly runs in both directions, but the assumption here is that academic achievement is a resource, similar to socioeconomic origins, that enables some students to find good jobs that do not require an excessive level of time investment. Students who are struggling in high school and who have lower educational ambitions are significantly more likely to be in jobs that require or expect student workers to put in many more hours. Or perhaps, students without college ambitions choose to invest more time in their part time jobs.

Table 6 shows a comparable multivariate analysis of the determinants of occupational outcomes among student workers (the non-employed are excluded from this analysis). Similar to our work intensity analysis, the types of jobs that teenagers get are presented as a function of three sets of determinants: ascriptive characteristics, socioeconomic origins, and academic achievement/orientation. The left-hand panel of coefficients in Table 6 contains the odds ratios of working in the typical teen sector (fast food, retail, and service) relative to good white/pink collar jobs. The right-hand panel shows odds ratios of being employed in the blue collar/production sector relative to white/pink collar jobs.

More than half of high school senior males and more than two-thirds of high school senior females work in stereotypical teenage service jobs in the food preparation/service/retail sector (Table 4). However, the comparisons in Table 6 show that females are less likely than males to be in teenage jobs relative to working in white and pink collar jobs and much less likely to be in the blue collar sector. As noted earlier, there are strong gender differences in teenage employment that resemble those of the adult labor market. These patterns appear to be evident in the two sectors when students are supplementary workers in labor markets that are dominated by adults. Female students are more likely to fill clerical and related pink collar positions while male students are much more likely to hold jobs in stocking, packing, and landscaping than female students.

These gender differences are unaffected by any of the measured covariates in Table 6. There is no

correlation between gender and the ascriptive characteristics in Table 6, since the sex of a child is a random event, but there are gender differences in school performance. Inclusion of educational aspirations and GPA, however, has little impact on the over-representation of females in white/pink collar occupations or on the under-representation of females in the blue collar ranks. Sex typing of jobs starts early in life, and seems to be a structural regularity of the labor market.

The multivariate analysis of race/ethnic differences in teenage occupational outcomes in Table 6 indicates a slight revision of the descriptive findings from the crosstabulations. Although most minorities are over-represented (relative to white students) in the teenage sector (relative to those in the white/pink collar sector), only the black–white gaps are statistically significant in the multivariate analysis in Table 6. Since white and pink collar jobs are generally preferable to teenage (fast food) jobs, it appears that employed black students face systematic disadvantages in finding these better jobs relative to whites and other students. There are only modest race and ethnic differences in blue collar employment (relative to the white and pink collar employment) in the multivariate analysis (only one of the nine coefficients in Table 6 is significant). Immigrant generation is largely unrelated to occupational outcomes with one exception—second generation youth are able to avoid blue collar occupations (relative to white/pink collar employment). This finding is consistent with other evidence of upwardly mobile orientations of the second generation.

There is very strong evidence of socioeconomic origins (parental education) and schooling outcomes (aspirations and GPA) on the occupations held by teenage workers. Students with fewer home advantages (lower parental education), lower educational expectations, and lower GPAs are more likely to work in fast food or as a sales clerk than in a better job, compared to students with higher levels of parental education and higher academic credentials and ambitions. The impact of lower socioeconomic origins is mediated slightly by poorer school performance and lower expectations, but most of the impact is direct. The child of highly educated parents is able to find better employment prospects independently of how well she or he is doing in school.

The impact of parental education, educational expectations, and GPA on blue collar employment (relative to the white/pink collar sector) parallels patterns for those in the teenage sector (fast food and service). Disadvantaged students are less able to find white/pink collar jobs and are more likely to be working in the blue collar sector

than are students from advantaged backgrounds. Additional results (not presented here) show that the effect of SES and school performance on blue collar employment is much less when the comparison is made to the teenage (fast food) sector.

We have replicated these multivariate models separately for male and female students, and also have estimated models that include work intensity as an intervening variable in predicting occupational attainment (and vice versa). None of these additional results change the basic portrait of findings reported from Tables 5 and 6.

9. Conclusions

With almost 6 million workers – a little over 4% of all employed persons – teenagers are a non-trivial fraction of the American workforce. Although most high school and college students are working for pay, their work is generally considered to be marginal since most teenagers work part time to support lifestyle consumption and in occupations that are unrelated to their future careers. The one aspect of teenage employment that has generated considerable policy interest — the potential impact of student work on education outcomes—has been clouded because of the uncertainty of selectivity into student work roles. If students are negatively selected into employment roles, perhaps because the least successful students invest more in work than schooling, the observed correlation between work and education may be spurious. There is much more speculation than evidence on the meaning and consequences of student employment.

The measurement of student labor force activities is complicated because student employment is frequently short term and concentrated in a small number of occupations and industries. Most students work part-time in occupations with low pay, high turnover, and few prospects for upward mobility. Students are prominent in the food service industry as waiters, waitresses, and busboys in restaurants, cashiers, courtesy clerks, and stockers in grocery stores, and most of all, as employees in fast food establishments. Many teens also work in a broad range of other low wage occupations as sales clerks, clerical assistants, and child care workers, both as paid baby sitters and in daycare establishments. The attributes of these jobs resemble those of others who were historically considered to be “supplemental workers,” such as women and the elderly. Since supplemental workers generally work part-time for “extra money” (not to support a family), low wages were all that were necessary to attract a competent, if highly transitory, workforce.

The evidence presented here shows that many teenagers are in occupations that have historically been dependent on women workers. Indeed, the majority of teenagers working in clerical, sales and service occupations are female. Sex typing of work begins early and sex-segregation of occupations is one of the primary features of teenage employment. The one exception appears to be fast food employment, which attracts both male and female teenage workers in large numbers.

In spite of the truncated variance of teenage employment patterns, there appears to be a clear, hierarchical structure of teenage occupations. The preliminary effort to classify teenage occupations in Table 2 by attributes of occupational incumbents shows that students working in stereotypical teenage jobs – food preparation, retail sales and personal services – have the lowest wages and work the longest hours. Although this is not true for every occupational title in these categories, it is an accurate description of most of them. Higher status jobs in white and pink collar occupations, such as coaches, tutors, and secretaries have somewhat higher wages and worked fewer hours per week. There was more variance in blue collar occupations, which tended to have higher wages, but entailed working longer hours.

There are clear patterns of social stratification in teenage jobs. We examined two dimensions of teenage employment: hours worked per week and occupational patterns. The links between social origins and teenage work were higher for hours worked than for occupational roles, but generally similar patterns held for both. Congruent with other research results, we establish a generally negative association between ethnic/racial minority status and the likelihood of employment, relative to whites. In particular, black students seem to be disadvantaged in finding jobs, and in particular, good jobs— those characterized by low work intensity and those in the white/pink collar ranks. We suspect that social networks (which may be important for finding good jobs), spatial mismatch (lack of transportation), and employer preferences may play a role in these differentials.

Our results indicate a shift toward more comparable rates of female and male participation in the teenage labor force relative to previously observed employment rates. For example, D'Amico (1984), among others, has established that males are more likely to work than females, and more likely to work longer hours. More recent studies have indicated a shift in gender-related work patterns, with female students' employment rates rising to parity with males (Mortimer, 2003). The results presented here are consistent with this observed shift and

show that female students are significantly more likely to work than males, and that females are over represented in both low-intensity and high-intensity employment. Although there could be many reasons for these gender-based patterns, we suspect that there has been a temporal shift in gender work patterns among teenagers just as there has been among adults. At present, female students are more likely to have working mothers than was the case a few decades ago. These changes in adult female labor force participation as well as other major societal changes probably had an impact on gender patterns of teenage employment. Despite the observed changes in rates of employment and work intensity between male and female students, teenage females are over-represented in sex-typed occupations, including positions as sales clerks, clerical roles, and assisting in child care. While some of these jobs may be relatively good ones for teenagers, they may be the precursors of sex typed employment so prevalent in the adult labor market.

One of the most important and consistent associations relating student characteristics and work patterns is between socioeconomic background and job type. Students with a disadvantaged background (those whose parents have, at most, a high school diploma) are shown to be at a much greater likelihood of working in the teenage job sector relative to students with more advantaged socioeconomic origins. Teenagers from modest socioeconomic origins are also more likely to work in jobs with long hours while they are still full time students in high school. In addition, students with lower grades and lower educational ambitions are less likely to be employed in good low intensity jobs and in white/pink collar occupations. Students who do not plan to attend college may decide to invest more in working than in high school.

The traditional hypothesis in the research literature generally assumes that student employment holds negative consequences. However, we find that there is positive selection into employment among high school seniors. In general, students with more social and academic advantages are more likely to work, and especially to work in good jobs with shorter hours. In addition to the income, some teenage jobs may provide skills, learning experiences, and contacts that facilitate higher education and socioeconomic attainment. Other jobs may provide only wages and the chance to become familiar with the discipline and routines of dead-end careers. Differentiation among these different types of employment is a fundamental prerequisite for research that examines the impact of teenage jobs on educational attainment and subsequent career outcomes.

Acknowledgments

The research reported here is supported by grants from the Andrew W. Mellon Foundation and the Bill and Melinda Gates Foundation. The authors thank Adam Gamoran and the RSSM reviewers for their comments on earlier versions of this article.

References

- Barro, S. (1984). *The incidence of dropping out: A descriptive analysis*. Washington, DC: Economic Research.
- Blau, P., & Duncan, O. D. (1967). *The American occupational structure*. New York: Wiley.
- Bureau of Labor Statistics (2005a). College Enrollment and Work Activity of 2004 College Graduates. *News Release of the United States Department of Labor*, March 25, 2005. Washington, DC: Bureau of Labor Statistics.
- Bureau of Labor Statistics (2005b). *Labor Force Statistics from the Current Population Survey*, Table 9: Employed Persons by Occupation, Sex, and Age. Retrieved on December 14, 2006 online at <http://www.bls.gov/cps/cpsaat9.pdf>.
- Carr, R., Wright, J., & Brody, C. (1996). Effects of high school work experience a decade later: Evidence from the national longitudinal survey. *Sociology of Education*, 69, 66–81.
- D'Amico, R. (1984). Does employment during high school impair academic progress? *Sociology of Education*, 57, 152–164.
- D'Amico, R., & Baker, P. (1984). The nature and consequences of high school employment. In P. Baker, et al. (Eds.), *Pathways to the future*. Columbus: Ohio State University, Center for Human Resource Research.
- Dillman, D. A. (2000). *Mail and internet surveys: The tailored design method*. New York: John Wiley & Sons.
- Duncan, O. D., Featherman, D., & Duncan, B. (1972). *Socioeconomic background and achievement*. New York: Seminar.
- Entwisle, D. R., Alexander, K. L., & Olson, L. S. (2000). Early work histories of urban youth. *American Sociological Review*, 65(2), 279–297.
- Featherman, D. L., & Hauser, R. M. (1978). *Opportunity and change*. New York: Academic Press.
- Greenberger, E., & Steinberg S L.D. (1986). *When teenagers work: The psychological and social costs of adolescent employment*. New York: Basic.
- Greenberger, E., Steinberg, L., & Ruggiero, M. (1982). A job is a job. . . or is it? *Work and occupations*, 9, 79–96.
- Lillydahl, J. H. (1990). Academic achievement and part-time employment of high school students. *Journal of Economic Education*, 21, 307–316.
- McNeil, R. B., Jr. (1997). Are students being pulled out of high school? The effect of adolescent employment on dropping out. *Sociology of Education*, 70(3), 206–220.
- Mortimer, J. T. (2003). *Working and growing up in America*. Cambridge, Massachusetts: Harvard University Press.
- Mortimer, J. T., & Finch S M.D. (1986). The effects of part-time work on adolescent self-concept and achievement. In K. Borman & J. Reisman (Eds.), *Becoming a worker*. Norwood, NJ: Ablex.
- President's Science Advisory Committee. (1974). *Youth: The Transition to Adulthood*. Chicago, IL: University of Chicago Press.
- Rosenbaum, J. E., DeLuca, S., Miller, S. R., & Roy S K. (1999). Pathways into work: Short- and long-term effects of personal and institutional ties. *Sociology of Education*, 72(3), 179–196.
- Ruhm, C. J. (1997). Is high school employment consumption or investment? *Journal of Labor Economics*, 15(4), 735–776.
- Schoenhals, M., Tienda, M., & Schneider, B. (1998). The educational and personal consequences of adolescent employment. *Social Forces*, 77(2), 723–761.