CHAPTER 20

Adolescent Work and the Early Socioeconomic Career

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Though formulated well before the life course paradigm had been generally accepted, the sociological theory of status attainment is, in essence, a life course model of the socioeconomic career. The central focus is on pathways of attainment. What do they look like? What are their precursors? What are the mechanisms through which they are produced? Elder's (1998) principles of life course study are well illustrated by this paradigm as well as by the research it has inspired. Studies of the process of stratification clearly demonstrate the connections between earlier and later life events, the consequences of linked lives, career trajectories marked by key transitions, and the importance of human agency. In this chapter, we investigate a relatively neglected set of issues surrounding the place of early work experience in the early socioeconomic career. We describe the diverse features of adolescent work careers, the characteristics of young people who select into them, and the consequences of these pathways for early postsecondary education and full-time work. We consider whether various strategies of investment in early work "pay off" as youth complete school and enter the full-time labor force.*

*This chapter synthesizes work that has been undertaken since the initiation of the Youth Development Study. For a more complete exposition of the central argument and relevant empirical evidence, see Mortimer (2003).

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Investigators of status attainment have long recognized the significance of achievement in adolescence for subsequent educational and occupational attainments (Featherman, 1980). Blau and Duncan's (1967) seminal model of status attainment posited that the socioeconomic standing of the family of origin was a major determinant of a young person's educational attainment. Educational attainment, in turn, was a strong predictor of the prestige level of the first job after finishing school, the starting point of the ensuing occupational career. The status attainment model was subsequently extended by Sewell and Hauser (1975) and their colleagues to include key social psychological mediators, including family members' and other "significant others' " expectations for the adolescent and the adolescent's own aspirations and plans with respect to future educational and occupational attainments. Attitudes and achievement in high school foretell the highest level of schooling that is likely to be reached, which in turn establishes credentials for more or less prestigious, remunerative, and otherwise rewarding occupational positions. Because of its central importance to the attainment process, education has for several decades held center stage in empirical studies of stratification. Typical pathways of educational attainment from the first grade of elementary school have been charted (see Entwisle, Alexander, & Olson, this volume; Gamoran, 1996). Much empirical support has been generated for the model of status attainment; education is clearly a central mediator of the effects of the family of origin on the attainments of each succeeding generation (e.g., see Jencks, Crouse, & Mueser, 1983).

Blau and Duncan (1967) drew attention to the critical importance of the first job after leaving school; in their model, this position constituted the entry portal to more or less rewarding career trajectories. Educational attainment set important limits on the prestige level of the first job, which in turn established the potential for subsequent intragenerational occupational mobility. The status attainment model thus highlighted the first job *after* completing full-time schooling as the starting point to the lifelong occupational trajectory. This model of attainment conforms well to the reigning tripartite conceptualization of the life course: education as preparation for work, adult labor force participation, and retirement (Kohli, 1986).

Still, this portrayal of the transition from education to full-time work bore little resemblance to the reality of most youth's experience in North America and, increasingly, in other modern societies even at the time of its formulation. As a result, researchers in the United States soon recognized that the measurement of this first occupational milestone was not so easy. Even at a time when the early life course was less variable, young adults' frequent movements between full-time schooling and full-time work made it quite difficult to identify the first full-time job. Complex decision rules were formulated (Marini, 1987).

Further departing from this model, most U.S. youth have paid jobs during their teen years and have accumulated a considerable amount of work experience even prior to leaving high school. Those who go on to college continue to combine school and mostly part-time work as they pursue postsecondary studies (Choy, 2002). Status attainment researchers' lack of attention to this early work experience reflects their assumption that jobs held prior to completion of schooling are, for the most part, of relatively little importance for future attainments. As a result, investigators in this tradition have given little attention to the linkages between pathways of adolescent work experience and subsequent socioeconomic outcomes.

Instead, consistent with status attainment researchers' interest in educational attainment, studies of adolescent work experience have focused almost exclusively on its potentially detrimental impact on adolescents' success in school. Attention is directed to the effects of adolescent employment and, particularly, hours of work, on school grades (Marsh, 1991; Mortimer & Johnson, 1998b; Steinberg & Dornbusch, 1991; Steinberg, Fegley, & Dornbusch, 1993;

Warren, LePore, & Mare, 2000) and high school drop-out (D'Amico, 1984; McNeal, 1997; Marsh, 1991; Warren et al., 2000). Prominent developmental psychologists hold that work experience in adolescence poses major opportunity costs, distracting young people from school and other beneficial activities. In their view, adolescent employment should be discouraged (Greenberger & Steinberg, 1986; Steinberg & Cauffman, 1995). Those in public health and employment policy circles have worried about the risks of injury and exploitation of youth in the workforce. Reflecting these concerns, a report commissioned by the National Academy of Sciences was aptly titled *Protecting Youth at Work* (Panel on Child Labor, 1998).

Rather little attention has been given in academic or policy circles to the possibility that early jobs constitute a mechanism through which young people acquire knowledge about the labor force, form occupational values, learn how to behave appropriately in the workplace, and acquire skills that will facilitate their adaptation to work and enhance the likelihood of later success in this domain. The lack of attention to these possibilities is especially surprising in view of the fact that an exceedingly positive view of adolescent paid work is shared by most parents in the United States, as well as by some social scientists. Parents look upon their own past experience, as working teenagers, in a most favorable light (Aronson, Mortimer, Zierman, & Hacker, 1996; Phillips and Sandstrom, 1990). They also think that work experience will enable their adolescent children to acquire a sense of responsibility, to learn the importance of being on time, and to gain interpersonal skills that will assist them in workplace transactions with supervisors, co-workers, and customers. They especially believe that paid jobs during high school will help to make their children more self-reliant.

Sociologists have recognized the potential benefits of employment for subsequent achievement, but mainly in the context of economic hardship and distress. Most notably, Elder (1974) and Elder and Conger (2000) emphasize that Great Depression era teenagers' work experience, as well as that of contemporary rural youth in hard-pressed farm families, builds confidence, instills positive work values, and has other lasting benefits. In like vein, Newman (1999) describes early jobs, even menial fast-food work, as an escape from the disorder and violence of city streets in poor urban areas. For disadvantaged teenagers who grow up in the inner city, even these kinds of jobs serve as an entry to legitimate occupational career paths, otherwise closed off to poor minority youth. They are respected and gain a sense of self-respect as they contribute to their own living expenses and reduce the economic burdens of their families. Studies such as these have drawn attention to the positive role of teenage work under conditions of poverty and economic distress; they do not herald its benefits for the early socioeconomic careers of mainstream youth.

There is reason to believe, however, that work experience during adolescence could be generally advantageous in the contemporary U.S. context. In fact, economists have long recognized that human capital or individual productive capacity is gained through work experience (most clearly, but not exclusively, through explicit job training), as well as through formal education (Becker, 1993). Moreover, particular contemporary conditions may give young people who have had prior work experience a special advantage as they compete for jobs in the full-time, entry-level labor market.

First, in accord with the growing income differentials between college-educated and high school-educated workers in the United States, ever larger numbers of high school students are seeking postsecondary education. The strong emphasis on getting into college (Schneider & Stevenson, 1999) leaves little room for significant vocational guidance or other forms of occupational preparation in high school. Youth who wish to acquire knowledge about the world of work must seek information elsewhere. Though school-to-work programs have sought to remedy this problem by establishing closer connections between high schools

and employers, internships, and other innovative programs, they do not reach the vast majority of U.S. youth.

Second, the degrees that are obtained by most school-leavers in the United States, high school diplomas, as well as both 2- and 4-year college degrees, signify general educational attainment, not occupationally-specific credentials. Most young people enter the labor force with no vocationally-relevant credentials that would signal to the employer (or to the job seeker) the kinds of jobs that would constitute a good match with their knowledge and skills (see Kerckhoff, this volume). In their absence, employers base their judgments about the capacity to do particular kinds of work on the highest degree the individual has obtained, a general indicator of intelligence, persistence, and other relevant traits, and, as most youth (and their parents) apparently understand, on prior work experience.

Third, there are few institutional supports that would smooth the transition from school to work. In fact, the school to work transition in the United States is the most loosely structured of all Western countries (Kerckhoff, 2002; and in this volume). Especially unlike Germany, Austria, and Denmark, with their apprentice systems or Japan, with its connections between schools and employers, young people in the United States move into the workplace without clear institutional bridges (Shanahan, Mortimer, & Krüger, 2002). While college graduates can make use of career placement services, most youth who enter the full-time labor force upon leaving high school must rely on their own resources, contacts, and initiative in finding jobs. Approximately two-thirds of recent cohorts of U.S. youth do not obtain 4-year college degrees (Kerckhoff, 2002).

Fourth, structural changes in the character of the labor force have increased the difficulty of becoming established in the world of work. Globalization has heightened economic competition and fostered non-standard employment relations that reduce the employer's commitment to the employee and thereby lessen the worker's security. These employment relations—such as temporary work, part-time employment, employment limited by contract, and outsourcing—are especially prevalent among young people (Kalleberg, Reskin, & Hudson, 2000; Kerckhoff, 2002).

In this contemporary context of prolonged general education and continuing structural changes in the labor force, and the absence of institutional bridges between these spheres, adolescent work experience may have become an important means of human capital acquisition for many young people. Work could, in fact, constitute an integral feature of the adolescent's "biographical action orientation" (Heinz, 1996, 1999, 2002). That is, activities and experiences come to have meaning in the context of long-term self-conceptions, goals, and aspirations for the future. Young people select among the immediate options before them in light of their perceived long-term consequences. Their choices, however, are importantly constrained by the institutional context. As Heinz (2002) observed,

> Transitions and status sequences in the life course are understood not only from the perspective of opportunity structures, career contingencies, and institutionalized rationality, but also in relation to self-initiated and enforced actions that influence the shape and direction of one's life course. (p. 226)

A strategy featuring early employment may be especially germane when resources for higher education appear to be limited. We might expect that adolescents who have restricted interest in or expectations for postsecondary schooling would seek greater work experience and perhaps particular kinds of jobs, so as to advantageously position themselves upon entry to the full-time labor market. But even more advantaged youth, whose parents have higher educational credentials themselves, or greater economic wherewithal to support

their children's higher education, may seek employment for the longer-term, as well as the immediate advantages it can provide. Parents at higher socioeconomic levels show much enthusiasm for their adolescent children's employment, as do their less well-off counterparts (Phillips & Sandstrom, 1990). They especially want their children to develop the requisite independence and sense of responsibility that will serve them well as managers and professionals of the future (Kohn & Schooler, 1983). And parents believe that these traits will be inculcated through experience in part-time jobs.

Young people are urged by their teachers and parents to attend college, but some are limited by their socioeconomic backgrounds, their self-conceptions (e.g., their perceptions of themselves as having limited academic ability), and their prior degree of success in school. They can direct their efforts toward obtaining a 4-year degree or settle for lesser educational accomplishments. Unlike youth in other countries with more clearly specified and differentiated school-to-work mechanisms, they do not encounter clear pathways toward well-defined occupational objectives.

Thus, it is not the case, as has been observed with respect to the global transition to adulthood, that there are innumerable meaningful pathways from school to work (Shanahan, 2000). The number has been seriously constrained by the unique character of the educational system (see Kerckhoff, this volume). As Shanahan and Hood (1999) pointed out, agency is frequently bounded by societal forces, which engender a circumscribed set of pathways.

In this chapter, we examine how initial employment pathways, traversed during the teen years, reflect choices within the context of the U.S. educational system. We analyze data from a unique panel study of adolescents which allow us to address the phenomenon of adolescent employment and its consequences for the early socioeconomic career.

THE YOUTH DEVELOPMENT STUDY

For more than a decade, researchers at the University of Minnesota have been following a panel of adolescents as they move through high school, take up postsecondary schooling, and enter the full-time labor force. The Youth Development Study (YDS) is unique among longitudinal studies of the transition to adulthood in its focus on early work experience—its character during the years of high school, its influence on adolescent mental health, achievement, and behavioral adjustment, and its impacts on the timing and character of the transition to adulthood.

In the 1987–1988 school year, a panel of 1,010 randomly chosen adolescents, from students registered in the St Paul, Minnesota public school district, agreed to participate in the study; 1,000 of these completed first-wave questionnaires. The local character of this panel poses certain advantages (facilitating the logistics of the research and enhancing respondent commitment), as well as disadvantages. Of course, opportunities for employment differ across the United States; work patterns are different in rural areas and urban areas and teenagers in inner cities have especially limited opportunities for employment. But socioeconomic indicators for the city of St Paul and the nation as a whole, as documented by the 1990 Census, are for the most part comparable (see Mortimer, 2003). For example, per capital income nationally (in 1989) was $13,727 in St Paul; in the nation at large it was $14,420. Poverty was slightly more prevalent in St Paul: 12.4% of families fell below the poverty line, in comparison to 10% in the United States. However, the labor market in St Paul presented comparatively good employment opportunities, with relatively low unemployment (4.7% in 1990 vs. 5.5% in the United States) and a relatively high level of labor force participation

(63% vs. 60% in the country at large). As a result, employment conditions for youth in the Twin Cities metropolitan area were quite good during the period in which the YDS participants were attending high school (Fall of 1987 to Spring of 1991). In fact, among 16–19 year olds enrolled in school, 54.1% of youth in the Minneapolis–St Paul area were counted as employed in 1990; the corresponding figure for the nation at large was 37.6%. Given its vibrant economy and abundant opportunities for adolescent job seekers, St Paul might be considered a particularly opportune site for investigating adolescent employment and its attainment-related consequences.

The panel has been shown to well represent the St Paul community and its student body at the initiation of the study. Seventy-four percent of the panel self-identified as White, 10% African-American, 5% Hispanic, and 4% Asian (6% gave "mixed" responses). Among the parents, 11% had less than a high school degree, 39% were high school graduates, 28% had attended but not completed college, 9% had graduated from a 4-year college, and 11% had done graduate work or obtained professional degrees (Mortimer, Finch, Shanahan, & Ryu, 1992). Median household income fell in the range of $30,000–$39,000 in 1988. Though males and socioeconomically disadvantaged young people were more likely to leave the study, the social background of first-wave and twelfth-wave panel members and their work-related attitudes and plans (measured in the ninth grade), were quite similar.

The YDS panel has been surveyed annually from the ninth (1988) to the twelfth (1991) grades in high school, with excellent panel retention (93%) through this period. Yearly questionnaires, administered in school, included a large battery of items tapping experiences in work, occupationally-relevant attitudes, and plans for the future. To understand parental perspectives on teenage employment and to obtain accurate information about socioeconomic status and other family background characteristics, mothers and fathers were surveyed by mail in the first and fourth years of the study. Parents of 96% of the students responded in the first and 79% in the fourth year.

After the young people left high school, they were surveyed annually by mail. The questionnaires again addressed work experiences and orientations, and obtained detailed monthly records (via life history calendars, Freedman, Thornton, Camburn, Alwin, & Young-DeMarco, 1988) of residential arrangements, educational attendance, and both part- and full-time labor force participation. Seventy-six percent of the initial participants have been retained through the twelfth wave of the study, when most respondents were 26 and 27 years old.

We have supplemented annual surveys with qualitative interview studies to better understand the subjective transition to adulthood, how youth themselves perceive the opportunities and constraints that confront them. Interviewees have been selected based on their experiences with welfare dependency (Grabowski, 2001), divergent passages to adulthood featuring early parenthood, higher education, and work (Aronson, 1998), and distinctive patterns of occupational decision-making (Mortimer, Zimmer-Gembeck, Holmes, & Shanahan, 2002). This chapter draws on both the surveys and some illustrative qualitative data in addressing the place of adolescent work in the early socioeconomic career.

EARLY EMPLOYMENT PATHWAYS

Teenage Jobs and Hours of Work

Consistent with national studies (Panel on Child Labor, 1998), the vast majority of adolescents in the YDS held paid jobs. In fact, only 7% of YDS panelists reported no work experience

during high school (while school was in session). But despite the prevalence of paid employment among teenagers, little attention has been directed to the kinds of jobs that young people actually do and the ways they change as youth acquire more work experience. This practice would be justified if, in fact, all teenage jobs were essentially the same, with little attainment-relevant variation or temporal change. But to the contrary, our study reveals considerable variability and distinct shifts over time. We examine early work pathways in several ways (for further detail, see Mortimer, 2003). First, we describe the changing distributions of job types as young people, in the aggregate, move through high school. Second, we assess the young people's increasing hours of work, as well as longer-term and more complex patterns of adolescent investment in employment. Third, we address trends in the quality of adolescent work experience.

We find evidence that adolescent work becomes more "adult-like" and therefore relevant for future socioeconomic attainment as young people progress through high school. Most adolescents start off doing informal work, mainly babysitting and yardwork in their own neighborhoods. After the ninth grade (for most, coinciding with their sixteenth birthday when they are no longer subject to most child labor restrictions), many take on restaurant jobs, particularly in the fast-food industry. Finally, in the latter years of high school, they fan out across a wider range of retail, service, clerical, and laboring jobs (see Mortimer, Finch, Dennehy, Lee, & Beebe, 1994, for these distributions). Viewed in the aggregate, adolescent paid work appears to have some career-like attributes, moving from the kinds of jobs that children and adolescents might otherwise do as unpaid chores in their own households; to stereotypically "teenage" work, often in fast-food outlets whose clientele includes other young people like themselves; to less age-segregated settings, with more opportunities to observe and to relate to older workers in more "adult-like" jobs.

Given the view of adolescent work as "opportunity cost," it is essential to also consider the number of hours young people spend working. Figure 20-1 describes the activity patterns of YDS youth during high school across multiple domains, including homework, extracurricular activities, domestic chores and caregiving, and volunteer work, as well as paid work (for those who participated in each activity). YDS adolescents who were employed during the ninth grade worked on average about 11 hr per week; their mean hours of work increased to more than 20 by the senior year of high school. Clearly, these adolescents spent considerable

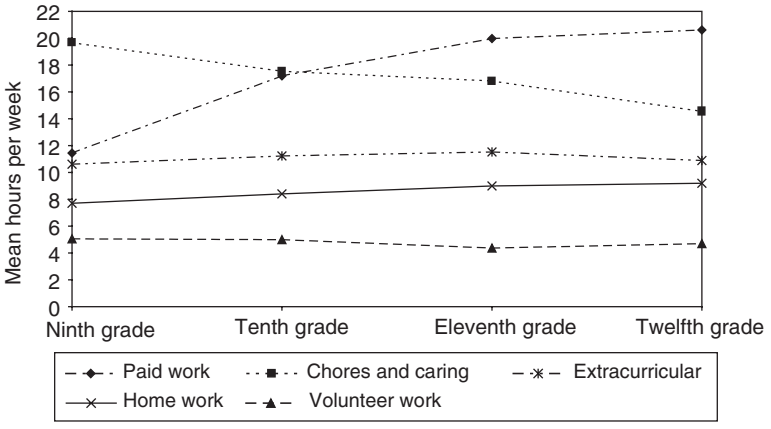

FIGURE 20-1. Average hours of activities in adolescence (1988–1991).

amounts of time working, as do their counterparts nationally (Panel on Child Labor, 1998). In the aggregate, as this activity increased, YDS youth spent less time doing chores in their homes (a trend especially notable for boys; not shown), but their involvement in homework, on average, remained relatively low and remarkably stable during the high school years. Commitment to extracurricular activities and volunteer work also remained quite stable during this period.

As we have seen, concerns about adolescent employment are largely based on the presumption that hours spent in paid jobs cannot be utilized in more developmentally beneficial activities, especially those connected to the school like studying, homework, special school projects, and extracurricular activities. The aggregate trends reported in Figure 20-1 do not speak directly to the notion of opportunity cost, since investigating such trade-offs requires assessment of individual-level patterns. Such analyses, reported elsewhere, provide substantial evidence that this "zero-sum" premise is fundamentally flawed (Mortimer, 2003; Osgood, 1999; Shanahan & Flaherty, 2001). Still, research on adolescent work continues to focus almost exclusively on this simple indicator of temporal investment: hours of employment per week.

A Typology of Investment in Work

Focus on hours of work at single times, or at successive occasions, ignores much of the potentially vocationally-relevant variation in adolescents' employment trajectories. Because adolescents move in and out of the labor force and change their work schedules to enable participation in other activities—in school and elsewhere—hours of employment at any single point in time is a rather poor indicator of longer term labor force involvement (Mortimer & Johnson, 1999). Even measurement of cumulative work hours, summed across years, does not do justice to the complexity of adolescent work patterns.

To obtain a more sensitive indicator, we distinguished two temporal dimensions of adolescent work, duration (in months) and intensity (hours per week) and created a typology of work investment based on their combination. The first dimension, duration, signifies the months of employment during the years of high school (not including the ninth grade, since most paid work at this time is informal). The second dimension, intensity, refers to the hours of work per week during the period of time the adolescent is employed. To construct the typology, both variables were initially dichotomized. Duration was divided at the mean, 18 months of employment (over the total 24 months of observation). Intensity was considered high or low, using the cut point of 20 hr per week (on average, during periods of employment). This amount of employment is widely thought to divide "acceptable" from "excessive" adolescent work (Panel on Child Labor, 1998). The resulting typology based on the cross-classification of these two dimensions is shown in Table 20-1, along with the distribution of the panel, by gender, in each cell.

Employed adolescents in the "most invested" (high duration–high intensity) and least invested "occasional" (low duration–low intensity) categories accrue the most and the least work experience, respectively, during high school. It is especially noteworthy, however, that the two groups in between, the "steady" (high duration–low intensity) and "sporadic" (low duration–high intensity) workers accumulate almost identical cumulative hours of work experience. Yet, these patterns of work were found to have quite different precursors and consequences, as we shall detail later in this chapter, indicating that the pattern of work investment deserves greater attention in studies of the socioeconomic consequences of adolescent employment.

TABLE 20-1. Patterns of Labor Force Participation by Gender

	Percentage distribution			Mean months of work		Mean hours of work	
	Total	Boys	Girls	Boys	Girls	Boys	Girls
Not working	7.0	9.9	4.6	0.0	0.0	0	0
Occasional: Low duration–Low intensity	23.7	23.2	24.1	9.8	11.7	578	650
Sporadic: Low duration–High intensity	18.4	23.2	14.3	10.4	11.8	1,216	1,376
Steady: High duration–Low intensity	24.9	18.2	30.6	22.0	22.0	1,263	1,328
Most invested: High duration–High intensity	26.0	25.6	26.4	21.9	22.2	2,678	2,587
Total	100.0	100.0	100.0				
n	887	406	481				

The Quality of Adolescent Work

Aside from the temporal investment in employment, adolescent work pathways are characterized by varying qualities of experience. Each year the respondents were asked about a variety of job dimensions, including their tasks, their intrinsic and extrinsic rewards, and the stressors to which they were exposed. Most adolescents described their jobs in quite favorable terms, as allowing them to use their skills and abilities, enabling them to help others, and to learn new things. They tended to perceive opportunities for advancement in their employing organizations and to feel that they could keep their jobs for as long as they wished (Mortimer et al., 1994). Importantly, the adolescents' jobs became more complex and required them to assume greater responsibility as they moved through high school. They received more training from their employers, they were more likely to be supervisors themselves, and their jobs came to have higher mean *Dictionary of Occupational Titles* complexity ratings.

Thus, we find substantial evidence that the character of adolescents' jobs changes and becomes more challenging as they mature, invest more time in work, and acquire greater work experience. Such would have to be the case if adolescent work is to be a continuing source of human capital acquisition.* Importantly, we find that investment in work and work quality are linked;† more intensive employment (including the "most invested" and "sporadic" patterns) is both more stressful and associated with more learning potential and opportunities for advancement. Adolescents who pursued "occasional" and "steady" work limited their hours of work while at the same time obtaining lower earnings, experiencing less stress, and gaining fewer experiences that are likely sources of human capital development (Mortimer, 2003).

*More subjective evaluations of their employment, however, such as assessments regarding learning opportunities, stressors, and relationships in the workplace, remain rather constant in the aggregate over time. These judgments may be responsive to shifting standards of evaluation, as well as change in objective work conditions.

†Unlike the continuous measures of duration and intensity drawn from retrospective work histories obtained annually, measures of the quality of work were only obtained for jobs held at the time of each survey administration. The quality of work through time was measured by averaging work quality scale scores at each observation (tenth, eleventh, and twelfth grades). As a result, they are based on one to three jobs.

These patterns suggest two general pathways of human capital acquisition during high school. Whereas both involve paid work, the pathway involving moderate work accommodates greater involvement in both the academic and extracurricular dimensions of school activities, as well as other components of adolescent life. Adolescents who pursue less-intensive employment (20 hr per week or less, on the average) can participate in "well-rounded" adolescent lifestyles, involving multifaceted time use patterns (Mortimer, 2003; Shanahan and Flaherty, 2001). Their work experience is less demanding and stressful than that of their more intensively-employed peers, but it is also less rewarding (intrinsically and extrinsically).

Adolescents who pursue the second pathway have heightened work investment. Their more "adultlike" work experience—characterized by longer hours, higher incomes and more occupational prestige, greater advancement possibilities, more stressors, but also and, quite importantly, greater learning opportunities—would appear to maximize their capacity for human capital acquisition through work.

In accord with this line of reasoning, the distinctive work experiences that were obtained by the more intensively employed adolescent workers were found to be associated with shifts in work attitudes that signify progress in vocational development. For example, learning opportunities at work enhance both intrinsic and extrinsic work values (Mortimer, Pimentel, Ryu, Nash, & Lee, 1996). Evaluations of the rewards that work has to offer are prominent bases of occupational choice and career decision-making.

Finally, there is evidence that even stressors on the job, a more prominent feature of the jobs of those youth who pursued highly intensive work patterns, can serve as beneficial preparation for adult employment. For those young people who experienced less stress in adolescent jobs, self-esteem and self-efficacy declined as they encountered similar conditions in their jobs 4 years after high school (Mortimer & Staff, 2002). The frequency of depressed mood states also rose as they experienced increasing adult job stressors. In contrast, those young people who had more stressful adolescent work experiences did not suffer these decrements in psychological functioning as their early adult job stress rose. There was some evidence that work stressors in adolescence contributed to coping skills in dealing with problems at work, which partially mediated these conditional effects.

Selection to Employment Pathways

It is quite apparent from our analyses that patterns of adolescent labor force activity do not occur randomly. Instead, they are related to the adolescents' social backgrounds and their early proclivities for the educational enterprise. Table 20-2 presents estimates from a multinomial logistic regression analysis predicting selection to the five patterns of labor force activity during adolescence (the "most invested" high duration–high intensity work pattern is the reference category). The table shows logistic regression coefficients and their standard errors. It also provides the exponents of the coefficients (odds ratios), indicating differences in the likelihood of being in each employment category, in comparison to the most highly invested reference category, as one moves across levels of the independent variables. The Wald test statistic indicates whether each independent variable has a statistically significant effect on the outcome (Long, 1997).

As shown in Table 20-2, adolescents in each of the work pattern categories came from higher socioeconomic backgrounds (as indicated by the highest educational degree of their mother or father) than those in the "most invested" reference category. At their first year of high school (ninth grade), those who were to become low-intensity workers (steady and occasional)

TABLE 20-2. Multinomial Logistic Regression: Selection to High School Work Investment Patterns

		Not employed[a]		Occasional: low duration–low intensity[a]		Sporadic: low duration–high intensity[a]		Steady: high duration–low intensity[a]	
Background	Wald test	*b* (S.E.)	exp (*b*)	*b* (S.E.)	exp (*b*)	*b* (S.E.)	exp (*b*)	*b* (S.E.)	exp (*b*)
Male (vs. female)	23.04***	0.666 (0.325)	1.95*	0.017 (0.209)	1.02	0.475 (0.226)	1.61*	−0.489 (0.212)	0.61*
White race (vs. non-White)	14.95**	−0.620 (0.396)	0.54	−0.329 (0.275)	0.72	−0.796 (0.277)	0.45**	0.227 (0.298)	1.25
Parental education	24.13***	0.386 (0.113)	1.47***	0.341 (0.080)	1.41***	0.295 (0.091)	1.34**	0.265 (0.080)	1.30***
Family income	4.16	−0.151 (0.085)	0.86	−0.053 (0.056)	0.95	−0.087 (0.060)	0.92	−0.054 (0.055)	0.95
Intact family (vs. non-intact)	13.66**	0.100 (0.379)	1.10	−0.256 (0.248)	0.77	0.581 (0.276)	1.79*	0.487 (0.264)	1.63
U.S. born (vs. foreign born)	12.19*	−0.077 (0.575)	0.93	0.140 (0.443)	1.15	2.068 (0.802)	7.91**	0.570 (0.489)	1.77
Peer orientation									
Time with friends	10.20*	−0.027 (0.065)	0.97	−0.025 (0.043)	0.97	−0.002 (0.047)	1.00	−0.123 (0.043)	0.88**
Problem behavior									
School misconduct	19.16***	−0.171 (0.091)	0.84	−0.063 (0.052)	0.94	0.110 (0.049)	1.12*	−0.084 (0.054)	0.92
Educational promise									
High promise (vs. low promise)	18.52***	0.160 (0.346)	1.17	0.724 (0.227)	2.06***	−0.055 (0.253)	0.95	0.664 (0.223)	1.94**
Intercept	14.25**	−1.153 (0.821)		−0.557 (0.598)		−3.03*** (0.943)		−0.625 (0.632)	
−2 log likelihood	−2252.5								
Number of cases	808								

[a]Reference category for high school work categories is most invested (high duration, high intensity).
***$p < 0.001$, **$p < 0.01$, *$p < 0.05$.

had higher "educational promise" than the most invested workers; that is they had experienced both more success in the school domain and were more optimistic about their future achievement in school. (Our indicator of "educational promise" was based on grade point average, the degree of intrinsic motivation toward school work, the sense of academic self-esteem, and educational plans in the ninth grade.)* Youth who followed a pattern of sporadic employment (low duration–high intensity) and the non-workers were similar to the most invested workers (the reference category) in their educational promise in the ninth grade. Those who were to become sporadically employed during high school may also have faced higher levels of employment discrimination, as they were disproportionately non-White. They also were found to have higher levels of school misconduct (as indicated by an index formed by two indicators: the frequency of getting into trouble at school and having to go to the principal in the ninth grade).

Indicating their distinctive orientations to work, the low-intensity adolescent workers were also found to be more likely to be saving their earnings to go to college (not shown); youth who opted for high-intensity jobs were especially likely to report that they sought their jobs to obtain work experience (see Mortimer, 2003).

The entire pattern of findings suggests that adolescents exercise agency in their decisions about employment—in their temporal investment in work and their selection into jobs of varying quality. Ninth graders whose aspirations, attitudes, and prior achievements indicated higher educational promise opted for less-intensive employment. Youth whose family background and orientation indicate greater resources and greater likelihood of being successful in college opt for patterns of lesser investment in employment. Those who are less advantaged at the outset, and whose psychological orientations indicate less interest in academic achievement, opt for greater human capital accumulation through work experience. The findings also indicate that adolescent work, particularly intensive work, has the potential to enhance vocational development and the capacity to successfully enact adult work.

We now consider whether work experiences in adolescence do in fact predict early adult activities that have pronounced relevance for socioeconomic attainment. Since the YDS panel members have now (at the time of the most recent data collection, in 2000) been out of high school for 9 years (since the spring of 1991), we can observe their initial investments in post-secondary education and movements into the full-time labor force, as well as longer-term trajectories of these experiences. We assess months of education and full-time work during the years after high school.

It should be noted that these variables have distinct meaning and importance at this phase of life. During this transitional period, the more advantaged young people invest in postsecondary education which yields future gains in occupational prestige and economic attainment. The payoff of their educational investment will not be evident for some years, as they become more or less successful in obtaining 4-year college degrees and other educational credentials. They forego full-time work in favor of part-time employment which is more compatible with higher education. It is for this reason that we chose to examine months in education and full-time work during the years immediately after high school, not "final" educational attainment or occupational prestige, which would be more appropriate indicators of socioeconomic attainment subsequently. Though months of education and full-time work are not "attainments" per se, they are strongly linked to them. For example, average months of education (during the years following high school) are linked to final degrees attained (F-value,

*Youth were coded 1 if they had scores above the median in ninth grade on each of these four variables, or were below the median on only one, and 0 if they scored below the median on two or more of the measures.

$p < 0.001$). Those who received MA degrees by age 26–27 (in 2000) obtained 7.6 months of postsecondary education on average per year, those who obtained BA degrees gained 6.3 months on average, those who obtained associates degrees went to school for 4.6 months, "some college" 3.5 months; etc. The correlation between average months of postsecondary education and occupational prestige (Stevens & Hoisington, 1987) at age 26–27 (2000) is 0.332 ($p < 0.001$). The correlation between log income and average months of full-time work is 0.330 ($p < 0.001$). The more highly educated youth have had relatively little time, however, to advance to higher paid positions; when most respondents are 26–27 there is relatively little association between income and average months of education (the correlation of log income is 0.125 [$p < 0.01$] with average months of schooling). We would expect that the income "payoff" for educational investment will become more pronounced as occupational careers unfold.

Months of Postsecondary Education

The patterns of work investment during high school are significantly linked to higher education. The "steady" work pattern, characterized by high-duration and low-intensity employment, was found to be conducive to obtaining more months of postsecondary education in the 4 years immediately after high school (Mortimer & Johnson, 1998a, 1998b). While many youth move in and out of education over an extended period (Pallas, this volume), higher education is especially likely to be obtained in the years immediately following high school. The distinctive proclivity for higher education among the prior "steady" workers was manifest even when a variety of relevant background characteristics and early indicators of educational interest and achievement were controlled. As is evident from Figure 20-2 (which displays unadjusted mean months of education each year), youth who worked at lower intensity during high school (steady and occasional workers, as well as non-workers) obtained more months of education thereafter than the higher intensity (sporadic and most invested) workers. This pattern persisted until 6 years following high school (up to 1997, when the respondents were about the

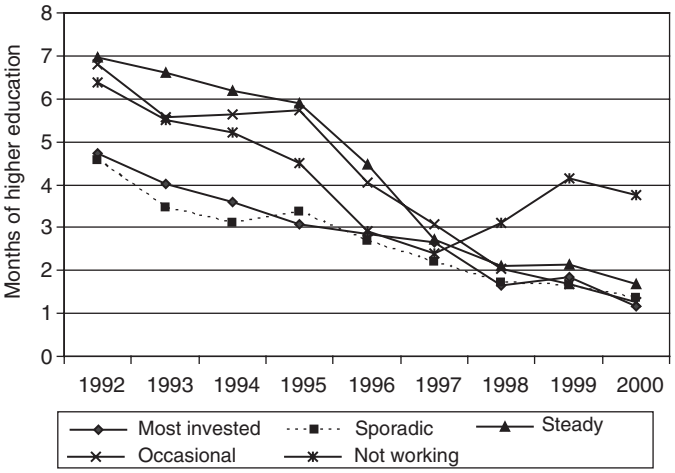

FIGURE 20-2. Months of higher education in young adulthood (1992–2000) by high school work investment (unadjusted means).

age of 23 and 24), when four of the groups converge. (The small group of non-workers during high school increases their educational investment after this point.)

We use growth curve analysis (see Halaby, this volume), a method well-suited to the analysis of panel data involving change over time. It uses a dynamic approach by modeling the starting point of individuals' trajectories, as well as their patterns of change. We are especially interested in the consequences of adolescent work patterns. That is, net of well-known precursors of attainment, do work patterns make a difference for early attainment-relevant activities? Do youth who limit their employment during high school have more postsecondary schooling than those who have the most invested work pattern, net of socioeconomic background and earlier measured educational promise? We examine the two outcomes described above: months of education and months of full-time employment after high school over the 9-year period 1992–2000. Each model predicts initial status in 1992 and a linear rate of change over the full period.

The first column of the upper panel of Table 20-3 provides estimates of the effects of early work careers (and other predictors) on the number of months of postsecondary education obtained initially in 1992 or the first year after high school. The first column in the lower panel presents the effects of the predictors on change in months of education each year over the period after high school. In these analyses, the work investment patterns are represented by dummy variables. As before, those who made the greatest investment in employment during high school (the "most invested" high-duration/high-intensity workers) constitute the reference category. Control variables in the analyses include social background characteristics and other variables that are likely to influence higher educational and other attainments—gender, race, nativity, the intact or non-intact character of the family of origin, parental education, family income, school misconduct, peer orientation (indicated by time spent with friends), and educational promise.

The results of this analysis yield further evidence that the pattern of adolescent work influences postsecondary educational investment. Looking first at initial status (top panel), it is not surprising to find that parental education, family income, and educational promise have significant positive effects on the number of months of schooling obtained during the first year after high school, 1992.* Foreign birth also confers an advantage. Early school misconduct reduces educational attendance during the year after high school. Controlling these influences, we still find that youth who pursued low-intensity employment during high school, the steady and occasional workers, initially obtain more months of postsecondary schooling (than the high-duration–high-intensity group). In contrast, those who pursued sporadic, low-duration/high-intensity employment and those who did not work at all are not significantly different from the most invested, high-duration/high-intensity workers in their educational investment right after high school.

As shown in Figure 20-2, the general trend is one of declining months of higher education as the youth progress beyond high school. The observed pattern of change, as well as the direction and magnitude of the estimates on change, is governed to some extent by initial status. For example, youth who are full-time students in 1992, attending school 9 or 10 months, start out near the ceiling of the yearly indicator (there are only 12 months during the year and most college programs involve summer vacations). As young people move out of school into the labor force, they show declines in yearly months of educational attendance. Thus, a negative effect on the estimated rate of change indicates a steeper slope of decline in annual

*Of the YDS panel, 24% indicated that they had no months of education, that is, they did not attend school in 1992. Fifty-seven percent reported no work involvement during that year. These persons were scored zero in the analysis.

Table 20-3. Growth Curve Analysis: The Effects of Early Work Patterns (1989–1991) on Months of Higher Education and Full-time Employment (1992–2000)

Initial Status (1992)	School		Full-time work	
Background variables	*Est.*	(S.E.)	*Est.*	(S.E.)
Male (vs. female)	−0.055	(0.28)	0.584*	(0.27)
White race (vs. non-White)	0.240	(0.36)	1.337***	(0.37)
U.S. born (vs. foreign born)	−1.882**	(0.60)	−0.779	(0.56)
Intact family (vs. non-intact)	0.354	(0.34)	0.141	(0.35)
Parental education	0.503***	(0.09)	−0.417***	(0.08)
Family income	0.189**	(0.07)	0.033	(0.07)
Time with friends	−0.111	(0.06)	0.128*	(0.06)
School misconduct	−0.293*	(0.14)	0.040	(0.13)
Educational promise	2.360***	(0.32)	−1.351***	(0.31)
Work Patterns (1989–1991)[a]				
Sporadic (low duration–high intensity)	−0.263	(0.42)	−0.296	(0.45)
Steady (high duration–low intensity)	1.468***	(0.39)	−1.635***	(0.39)
Occasional (low duration–low intensity)	0.969*	(0.40)	−1.541***	(0.41)
Not employed	−0.043	(0.51)	−1.395*	(0.56)
Intercept	3.698***	(0.83)	4.137***	(0.83)
Rate of Change (1992–2000)				
Background variables				
Male (vs. female)	−0.003	(0.05)	0.120*	(0.05)
White race (vs. non-White)	−0.083	(0.07)	−0.093	(0.07)
U.S. born (vs. foreign born)	0.238*	(0.11)	0.160	(0.12)
Intact family (vs. non-intact)	−0.034	(0.06)	−0.084	(0.06)
Parental education	−0.024	(0.02)	0.012	(0.02)
Family income	−0.019	(0.01)	0.025	(0.01)
Time with friends	0.006	(0.01)	−0.006	(0.01)
School misconduct	0.051	(0.03)	−0.056*	(0.03)
Educational promise	−0.244***	(0.06)	0.226***	(0.06)
Work Patterns (1989–1991)[a]				
Sporadic (low duration–high intensity)	0.034	(0.08)	−0.022	(0.09)
Steady (high duration–low intensity)	−0.207**	(0.07)	0.198*	(0.08)
Occasional (low duration–low intensity)	−0.157*	(0.07)	0.203*	(0.08)
Not employed	0.096	(0.11)	0.006	(0.13)
Intercept	−0.387*	(0.15)	0.473**	(0.17)
n	782		782	

[a]Reference category for high school work categories is most invested (high duration–high intensity).
***$p < 0.001$, **$p < 0.01$, *$p < 0.05$.

months of education, as one would expect for those whose starting points are high. As shown in Table 20-3 (lower panel), the low-intensity steady and occasional workers during high school experienced more rapid linear declines in annual months of school attendance over time (consistent with their high starting points). Youth who had higher educational promise also experienced more rapid declines. The native born manifested a less rapid rate of decline in months of education than the foreign born.*

*Although the results reported in Table 20-3 are based on a linear rate of change in months of schooling and full-time work in the period following high school, we also considered the possibility of non-linear growth. We found significant "deceleration" or a slowing in the growth process in the rate of change in full-time employment from 1992–2000. These results must be viewed with caution, however, as this non-linear effect is likely artifactual resulting from the "ceiling" by which growth in full-time work is limited to 12 months in a year. We did not find a significant non-linear rate of change in months of school. As more waves of data are collected, we will continue to explore possible non-linear change.

We thus find that the steady and occasional (low intensity) workers acquired more months of postsecondary education initially after leaving high school and manifest a relatively steep reduction in their educational investment over time. But is there an advantage in educational attainment for the low intensity workers? To examine this possibility, the analysis shown in Table 20-4 estimates the likelihood of obtaining a BA degree by the ninth year after high school (in 2000) based on early work histories. Using logistic regression analysis, we find the steady workers (high duration–low intensity) are more likely to receive a BA than their most invested peers (high duration–high intensity) even after controlling average months of schooling from 1992–2000, socioeconomic background, and prior educational promise, and other relevant variables. With the latter taken into account, the occasional (low duration–low intensity) pattern appears to confer no advantage.

We also found a significant interaction between educational promise and the steady (high duration–low intensity) work pattern on BA receipt by 2000 (analysis not shown). Figure 20-3 shows unadjusted mean differences in BA receipt by the work pattern groups, conditional on high and low promise. Youth who had lower educational promise upon entry to high school were markedly more likely than their similar low-potential counterparts to achieve BA degrees if they pursued the "steady" high-duration/low-intensity work pattern. Thus, while low-promise youth were in general more likely to select intensive work patterns, when they did take on the steady work pattern it was particularly beneficial for them.

Table 20-4. The Effects of Early Work Patterns (1989–1991) and Average Months of School (1992–2000) on Educational Attainment (BA degree, 2000)

	BA degree by 2000	
	b	(S.E.)
Average months of school (1992–2000)		
Average months of school	0.771***	(.076)
Work patterns (1989–1991)[a]		
Sporadic (low duration–high intensity)	−0.133	(.532)
Steady (high duration–low intensity)	0.954*	(.396)
Occasional (low duration–low intensity)	0.476	(.413)
Not employed	0.937	(.726)
Background variables		
Male (vs. female)	−0.204	(.276)
White race (vs. non-white)	0.198	(.403)
U.S. born (vs. foreign born)	−0.633	(.597)
Intact family (vs. non-intact)	0.095	(.361)
Parental education	0.419***	(.098)
Family income	−0.033	(.070)
Time with friends	−0.020	(.044)
School misconduct	−0.150	(.087)
Educational promise	1.545***	(.331)
Intercept	−6.461***	(.901)
Number of cases	665	

[a]Reference category for high school work categories is most invested (high duration–high intensity).
***$p < 0.001$, **$p < 0.01$, *$p < 0.05$.

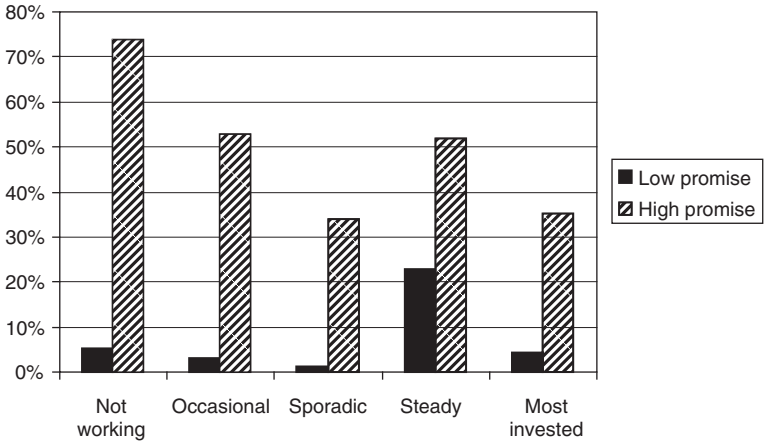

FIGURE 20-3. BA degree receipt by high school work investment and educational promise.

Full-time Employment

We now consider the starting point and trajectory of full-time work following high school. We find that the most invested and sporadic (higher intensity) workers during high school pursued more months of full-time employment than the other groups, until about 6 years after high school, in 1997 (Figure 20-4 shows unadjusted means).

Returning to the growth curve analyses (Table 20-3), males have more months of full-time employment than females and Whites more than non-Whites at the start. Early peer orientation also predicts more full-time work after high school. Parental education reduces investment in full-time employment immediately after high school, as does the young person's educational promise. The steady and occasional (low intensity) career patterns and the non-working pattern are associated with less early investment in full-time work. Finally, the increase in involvement in full-time employment in the years after high school is enhanced by the prior steady and occasional work patterns, as well as by being male and by educational promise. As one might expect, earlier school misconduct reduced growth in full-time employment.

These analyses indicate the trade-off between higher education and employment in the years after high school. That is, the lower intensity adolescent workers show greater propensity toward higher education initially, in the year immediately after high school and less propensity toward full-time work. The pattern is reversed thereafter, as they increase their full-time labor force involvement and diminish their investment in education (comparing columns 1 and 2 in Table 20-3). Many of the more intensively working adolescents also balance school and work after high school. However, high-intensity workers during high school start out working more months of the year than the occasional and steady workers and show less rapid increase in involvement in full-time employment, as they do not have as far to reach the maximum number of months on this variable.

It might be expected that youth who pursued distinct pathways of employment during high school, having accrued varying amounts of labor force experience, would be more or less "savvy" about finding jobs and would use distinct (and differentially productive) job search strategies. Attesting, however, to the unstructured transition from school to work in the U.S.

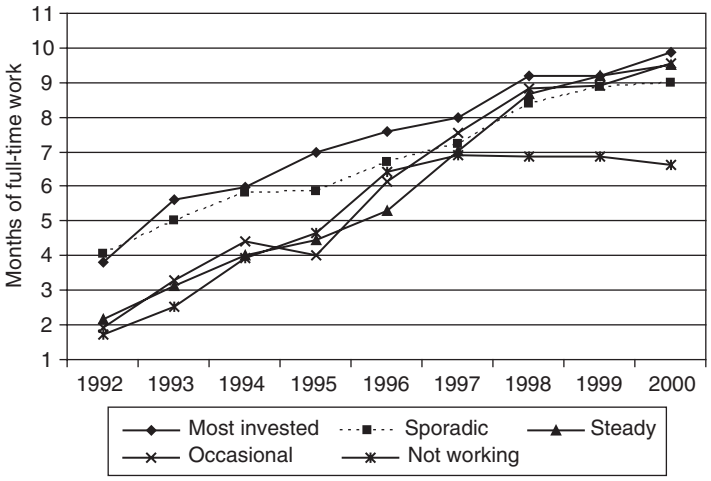

FIGURE 20-4. Months of full-time employment in young adulthood (1992–2000) by high school work investment (unadjusted means).

context, we find substantial use of "informal" networks and very little difference between the adolescent work pattern groups in their job-locating methods. All appear to take rather similar actions in seeking employment. Each year we asked about how the youth located their present jobs, providing somewhat different response options geared to their changing circumstances. (Fifteen potential ways of finding jobs were provided in 2000 and the respondents checked all that applied to them.) Taking the 2000 data (9 years after high school) as a case in point (patterns in other years were similar), we observe that youth use several direct modes of job acquisition. They locate jobs through friends (24%), parents (15%), other relatives (12%), neighbors (9%), and contacts at work (10%). They also inquire about job openings (13%) and answer advertisements (18%). Thus, most young adults appear to draw on their social networks and use their own initiative to situate themselves advantageously in their early forays into the labor force, irrespective of their work investment pattern during high school.

DATA FROM THE QUALITATIVE INTERVIEWS

Qualitative interviews provide a glimpse into young people's subjective understandings of how their early work might have influenced their future occupational attainments. Whereas status attainment researchers assess the level of educational and occupational aspirations and others have measured control orientations of various kinds (Bandura, 1997; Clausen, 1991; Grabowski, Call, & Mortimer, 2001; see Shanahan & Hood, 1999, for a review), these general constructs do not capture the specificity and nuances of how youth think about their futures. YDS interviews reveal young people's understandings about how their early employment contributed to their capacity to perform adult work and to the occupational decision-making process itself.

Our qualitative interviews show that young people in their mid-twenties (1999) give high marks to their early work experiences, just as their parents did when describing their own adolescent jobs (Aronson, Mortimer, Zierman, & Hacker, 1996). For example, the jobs they held

as teenagers were seen as improving their interpersonal skills. The youth thought that their early jobs helped them to learn how to get along with other people in the workplace, to overcome shyness and insecurity in relating to adults, and to be assertive. As one respondent noted,

> … the development I've had was from working because I remember being very shy when I first started. Like, I never wanted to talk to anybody and I was like, ah, I can't talk now, but after working, I think, it's more like you realize that, especially in the context of selling something to somebody, that everyone is just a person and they have the same needs … So, I think that was one of the things that I took from it is kind of developing more interpersonal skills … (female)

The youth appreciated many other advantages of employment that their parents also recognized: working during high school gave them greater confidence and made them more aware of labor force opportunities and the credentials that they would need to reach their career goals. The experience also enhanced their sense of responsibility and independence. We provide two illustrative quotes:

> I learned to work for what I want in life. I learned some responsibility. I had to be on time. I had to get it done before I went to school. I had to collect the money. (male)

> I think it helped me to develop a good work ethic like my parents hoped. (female)

Occupational decision-making sometimes involves an exploratory process of successive elimination, as individuals come to recognize that they are not suited for certain options (Mortimer et al., 2002). Some of our respondents learned through their high school jobs more about what they did not want to do later in life:

> It taught me I never wanted to work in an office again. Seriously. (female)

> It taught me I didn't want to work at a gas station for the rest of my life. (female)

> [High school jobs] narrowed it down and helped me figure out what I did not want to do. (male)

> Made me resolve never to have another food service job. I promised myself, I said, oh, God, I really got to do well in college, so I don't have to do this the rest of my life. (female)

Less frequently, teenagers acquired vocational skills through their early jobs, which developed later as careers. For example, one female interviewee obtained considerable human capital through her employment in a photography shop in high school, before going to photography school.

> It helped me learn a lot more about photography and printing on a basic level. I learned about over-exposure and under-exposure. I learned what the different film speeds did. I learned a lot more about customer service. I learned how to work the printing machine. (female)

Space limitations preclude more ample illustration of youth's own thinking about their early employment experiences in relation to their subsequent work careers and attainments (for additional illustration, see Mortimer, 2003; Mortimer et al., 2002). Suffice it to say here that youthful agency is not only indicated by the selection to employment patterns (which showed the significant effect of educational promise) and their attainment-relevant consequences, as revealed by the multinomial logistic regression and the growth curve analyses. Young people themselves recognize that their early work experiences contributed to their career decision-making and their human capital development.

CONCLUSION

In an institutional environment characterized by an absence of clear bridges from school to work, adolescents in the United States make their way to adult full-time employment by constructing distinct combinations of secondary school and work experience. They do this in a variety of ways, depending on their socioeconomic and personal resources, especially their interest in and proclivity for education. Young people who are less likely in fact to be able to complete college, invest in more intensive work during high school. Many seek employment to gain job skills (along with a host of other reasons). Intensive employment is more adult like, both with respect to its temporal features, as well as its extrinsic rewards, advancement and learning opportunities, and stressors. In contrast, those young people who have greater resources early on—higher socioeconomic backgrounds and stronger educational engagement—also hold paid jobs while in high school, but their investment in employment is likely to be limited.

This research thus points to two general pathways for U.S. adolescents as they make the transition to adulthood. The first features employment in the naturally occurring labor market during high school that is often fairly continuous but limited in intensity, followed by prolonged postsecondary schooling and delayed entry to the full-time labor force. These youth appear to intentionally limit their early work involvement and thereby optimize their educational qualifications.

The second involves more intensive labor force participation during high school, more limited postsecondary schooling, and rapid acquisition of full-time employment. These youth develop human capital through high school work experience; this strategy pays off in terms of the rapid acquisition of full-time employment. Adolescents who do not work at all during high school are a small but especially interesting group, with particularly lengthy transitions from school to full-time labor force participation. More attention should be directed to selection processes surrounding the non-workers—the reasons why persons in this group forego employment during high school.

It is important to emphasize that high school work patterns are influenced by young people's social locations and prospects for the future—defined by gender, race, parental education, and early educational promise. But even when these and other relevant factors are controlled, teenage work patterns have independent influence on postsecondary educational investment and the acquisition of full-time work. These attainment pathways may be considered the consequences of agency—biographical accomplishments in the fullest sense of the term (Heinz, this volume; Heinz, 2002), resulting from long-term patterns of investment in schooling and work from adolescence onwards.

The findings of the YDS indicate that adolescent work experience is an integral part of the process of socioeconomic attainment among contemporary adolescents. The work pattern groups are found to have significant explanatory power in our growth curve models predicting initial (first year after high school) months of educational investment and full-time work. They also influence patterns of growth or change during subsequent years, taking into account the differences in initial starting points (and the many associated bases of heterogeneity) and even after a wide range of well-established predictors of attainment have been controlled. The work patterns also exert significant independent influence on receipt of the highly coveted BA degree.

The strategies of transition involving social background, educational engagement, and teenage work that we observe in the YDS panel must be understood within the contemporary institutional context. As we have noted in the introduction to this chapter, they take place in

a context of expansion of higher education, "destandardization" of education and work sequences, rapid change in technology and occupational structures, and increasing fragility and transience of the employment contract. These environments represent new challenges and opportunities for contemporary youth as they make the transition to adulthood.

Our data suggest that young people are exercising agency in their rapidly changing environments, as they pursue distinct strategies of transition from school to work, linked to their personal resources and outlooks for the future. Youth who pursue different patterns of employment during high school seek jobs for different reasons and use their earnings in different ways (see Mortimer, 2003). The important role that educational promise plays in the analyses presented here is especially pertinent. High promise youth are more likely to pursue low-intensity employment during high school, which independently enhances their proclivity to obtain postsecondary education immediately after high school, while foregoing immediate full-time employment. Moreover, both high educational promise and low-intensity work patterns promote increases in full-time work during the 9 years following high school, while at the same time investment in postsecondary education diminishes.

Clearly, pathways through the life course are products of choice-making and institutional processes. The patterns of adolescent work investment we have identified, along with their subsequent attainment-relevant sequelae, are reflections of both social structure and individual agency as young people make the transition to adulthood. As we observed at the outset, low- and high-intensity employment patterns must be understood within the context of "bounded agency" (Shanahan & Hood, 1999). Our relatively undifferentiated educational system, which provides general credentials, presents the prospect of what Kerckhoff (2002) has called "college or nothing" and offers little in the way of occupationally-relevant credentials for young people who are less successful in the academic enterprise. Still, they can augment their human capital through work experience during high school. But even the more academically promising youth seek employment, albeit of limited intensity, so as to reach immediate economic goals as well as to acquire work experience. Through further qualitative and survey research, we plan to continue following this panel to monitor the continuing consequences of early work experiences for socioeconomic attainments as the youth become more established in their occupational careers, exhibit diverse patterns of intragenerational occupational mobility, and traverse other significant markers of adulthood.*

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*Furthermore, we will address the possibility that gender conditions the patterns described in this chapter; the linkages between early work experience and attainment-relevant experiences are likely to be different for males and females.

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