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Adolescent Work, Vocational Development, and Education

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Abstract

This review examines contemporary issues in vocational development with emphasis on adolescents' work experiences in social context. Attention is directed to the changing social and cultural context for vocational development, the influence of work experience on adolescent development and educational achievement, and theoretical approaches that guide contemporary studies of vocational development and career maturity. In light of the utility of current theories, new directions are suggested to enhance understanding of adolescent employment, vocational development, and educational pursuits. Social policy initiatives to promote adolescents' exercise of agency and their vocational development are considered.

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Although working is an integral aspect of most teenagers' lives, little scholarly attention has been given to the developmental consequences of adolescent employment. In this review, we summarize contemporary theoretical and empirical issues, with emphasis on the ways in which adolescent work experience may impact educational, vocational and other domains of development. Integrating our perspectives in lifespan developmental psychology and life course sociology, we address key questions.

Our review is informed by Bronfenbrenner's (1979) dictum that multiple arenas of life must be considered in tandem to comprehend any one sphere's influence on human development. As such, the organizing framework for this review is the influence of environment on adolescent development; the many activities that, when considered together, make up the social ecology of adolescent life, and the objective and subjective qualities of adolescents' activities. We start with the macrosystem by providing some socio-historical background on adolescent work. Following this, we address the question, how do the current social and cultural contexts condition adolescent work and the effects of adolescent employment on vocational, educational and other spheres of development? Next, we continue to emphasize the work environment as consequential in adolescents' lives by reviewing what we know about the influence of work on adolescent development, including educational pursuits.

Following these discussions of contextual influences, we assess current theories that guide contemporary studies of vocational maturation and career choice processes, and new emergent issues. We ask whether this literature informs our understanding of the impacts of adolescent work and the qualities of work on development. We then address research design issues and directions that are needed to enhance our understanding of adolescent employment and

development, and to inform social policies and interventions. We especially highlight the interface of work and school, noting the challenge of the school-to-work transition. Our final concluding comments consider adolescents' agency in choosing both employment settings and their educational futures, and social policy initiatives likely to foster their vocational, educational and intellectual development.¹

The Social and Cultural Contexts of Adolescent Work

The experiences of adolescent work, including tasks and responsibilities, rewards, workplace relationships, and the meanings of these experiences, take fundamentally different form in distinct historical, socio-cultural, institutional and social class contexts. In considering the consequences of adolescent work for development, these must be taken into account. As Shanahan, Mortimer, and Kruger (2002) emphasize in their cross-societal review of adolescents' preparation for adult work, adolescent employment is likely to restrict development in manifold ways in places where working and schooling are direct competitors. Human capital formation is closely linked to school attendance, which, in developing countries, is often incompatible with employment. While many children and adolescents in the developing world struggle to attend school while still active in the informal economy, adolescents' entry to the formal workforce usually means departure from school. Poor parents may have little choice. In deciding whether their children should work, parents may trade off immediate economic returns (their children's wages) with longer-term goals (human capital investment in children, likely to enhance parental support in old age). Middle and upper class young people, and those in developed countries in general, may have more choice, and may choose to work for increased economic independence from the family or for other reasons. Although socioeconomic resources are extremely important in affecting the character and outcomes of adolescent employment (see Blustein, Juntunen, & Worthington, 2000; Bynner & Parsons, 2002; Mortimer, 2003; Newman, 1999), space limits our consideration of this issue. Instead, we describe general historical trends in the next section and mention social class issues briefly.

More Than a Century of Adolescent Work

Beginning with Hall (1904; see also Kett, 1971, 1978), adolescent experts and educators have worried about the balance of school and work. They have questioned whether modern life will encourage adolescents to prematurely assume adultlike behaviors, such as early commitments to work at the expense of the schooling. Contemporary educators believe that extensive formal schooling is more important than ever before (see Mortimer, 2003). They argue that changes in the society, and especially the economy, place a growing premium on knowledge that is gained most effectively in school.

Prior to the twentieth century, however, childhood was marked by considerable economic contribution along with economic and social dependence. For example, the strong presumption that young men would help their farmer fathers, up to the age of 21, persisted in rural America up to the early nineteenth century (Kett, 1978). Apprenticed children were typically placed with relatives or neighbors, not far from their own families. This usually occurred at age 14 (Kett, 1971), but Graff (1995) notes instances of apprenticeship as early as age 8.

¹To identify manuscripts for inclusion in this review, we used the following search terms: adolescent work, adolescent paid labor, adolescent employment, vocational development AND (adolescents OR children OR childhood), career development AND (adolescents OR children OR childhood), identity development AND (adolescents OR children OR childhood) AND (vocation or career). We also searched the literature for the works of authors prominent in the area of adolescent work, vocational development and/or vocational counseling (Blustein, Conger, Elder, Flum, Mortimer, Schneider, Schulenberg, Shanahan, Steinberg, Vondracek and others). Finally, theoretical papers on identity and autonomy development in adolescence and young adulthood are reviewed to provide background for our concluding sections on future directions in theory development and research.

As America began to industrialize, as in Britain and other nations, whole families were recruited to work in mills and factories (Hareven, 1982; Smelser, 1959). Children's wages were considered to be the family's property. In fact, children constituted more than half the textile operators in Rhode Island in 1820, and many worked in southern mills as well (Zelizer, 1985). At this time, school and work competed for teenagers' time and energies. After the age of 14, many young people concentrated on work (Graff, 1995). In the late 1800s and early 1900s, childhood and adolescence came to assume fundamentally new meanings (Kett, 1978). Zelizer (1985) documents the emergence of the "priceless child" – no longer economically useful but of immense emotional value – between 1870 and 1930. Middle class children were increasingly excused from labor to devote time to education and leisure. Yet, in the urban working class, many children continued to labor in paid jobs. Concerns about precocity, especially for these children, and the altered perception of the child provided ideological justification for the restriction of child labor in favor of educating youth in schools. Schooling could preserve and extend childhood. New activities, such as student government, were added to allow young people to internalize norms of citizenship (Dreeben, 1968).

The primary business of the child's life, especially in the middle class, came to be understood as attending, and succeeding in, school. Educators and policymakers still worried about children who worked on farms, and those, mainly from the urban working class, who labored in factories. In early twentieth century America, most parents could still not afford to allow their children to attend school for very long after puberty (Kett, 1978). The proportion of the population reaching high school graduation increased from less than 5% in 1890 to just over 50% in 1940 (Historical Statistics of the United States, 1997).

Critics also began to point to the drawbacks of schooling. Concerns about the isolated character of the school and the segregation of school from "real work," date back to the early establishment of schools in Western Europe. Ariés (1962) describes a current opinion hostile to formal schooling in the seventeenth century, when many saw apprenticeship as more useful than school for one's future life in society. Though school attendance continued to extend to older age groups in the early twentieth century, work was not eliminated. Rural children and adolescents continued to work on farms and elsewhere. Young people in urban areas, particularly those from economically pressed families, found many ways of earning money. In his classic work, Elder (1974) notes that work and domestic tasks were considered "virtuous activity for children" (p. 68) in traditional family cultures. He also recounts the manifold ways that teenagers contributed to their families in the hard times of the 1930s depression.

By 1940, knowledge gained through formal schooling gained importance because of greater occupational specialization and complexity of tasks. Yet, three decades later, worries about limiting young people to the childlike role of student persisted when The Panel on Youth of the President's Science Advisory Committee was convened (Panel on Youth, 1974 chaired by James Coleman). This panel considered what attributes youth needed to become effective adults and what institutions would contribute to their development. The panel questioned whether the school environment could fulfill the multifaceted needs of young people. Given the increasing age segregation of society, the report noted that young people were spending most of their days in school with other young people. The panel recommended closer connections between school and workplace, and more opportunities for young people to be employed while still in school.

Consistent with these recommendations, the proportions of young people employed part-time during the school year continued to rise, especially among young women (Kablaoui & Pautler, 1991). This growth in teenage employment resulted from market forces, however, rather than active intervention. Young people wanted to increase their economic independence and they were needed to fill roles in the expanding retail and service sectors. When asked, contemporary

adolescents will say they work “for the money” (Greenberger & Steinberg, 1986) and parents now believe that adolescents should have discretion over how they spend their earnings (Phillips & Sandstrom, 1990). Young people have become a major consumer group, which has not gone unrecognized by business and marketing sectors (Palladino, 1996).

The Contemporary Context of Adolescent Work

As we have just described, educators and policymakers continued to debate the appropriate balance of working and schooling for teenagers throughout the twentieth century. Yet, the current circumstances surrounding adolescent education and work in Western countries, such as the United States and Canada, Western Europe, Japan and Australia are somewhat different when compared to prior historical periods. Today, secondary and postsecondary education credentials are more important than ever before (Schoon & Parsons, 2002). Nevertheless, adolescents in North America are likely to combine secondary school attendance and employment, not to trade off one against the other (Shanahan & Flaherty, 2001). A large majority of U.S. high school students are employed at least some time while school is in session (Committee on the Health and Safety Implications of Child Labor, 1998). In the Youth Development Study (YDS; Mortimer, 2003), a longitudinal study with annual assessments starting with 1000 adolescents (grade 9, age 14–15) in 1987–1988, 58% of boys and 70% of girls were employed in grade 12 (also see Steinberg & Cauffman, 1995). These percentages were not much lower in the earlier grades.

Most of these employed American students were not only able to combine working and schooling, but they also engaged in most other “adolescent” activities, spending as much time doing homework, socializing with friends, participating in extracurricular activities, and doing household chores, as other, non-employed youth. Using YDS data and cluster analysis to identify groups of adolescents with common patterns of time use, Shanahan and Flaherty (2001) found that there was little trading of paid work time for time doing schoolwork. In their study, two clusters of young people emerged who were actively involved in diverse activities. Employment was the one mode of activity that separated these two ‘active’ clusters. In grades 9, 10 and 12, the two clusters did not differ in the amount of time they spent on schoolwork. However, in grade 11, the active workers spent *more* time on homework than active nonworkers. Indeed, in this context, employment is often just another component of a busy adolescent life.

Adolescent employment also takes on a quite different character depending on whether it is disconnected from school or formally linked to the school, for example, through institutionally-structured school-to-work transitions, as in some European countries (e.g., Germany, Austria, Switzerland) or school-work co-operative programs in the United States (Stern, Stone, Hopkins, & McMillion, 1990). When incorporated in school-supervised programs, adolescent employment can constitute essential preparation for the adult work career. Adolescent apprentices in Germany learn a craft or trade and obtain certification to enter the same field upon completion of a coordinated school and work sequence. In Australia, the existence of different tracks in secondary school necessitate that young people (and their families) consider their future fields of study as early as grades 8 and 9 (Fullarton, 2001). Therefore, in some countries, serious vocational exploration occurs much earlier, as teenagers consider their choice of apprenticeship or secondary school track when compared to the much less structured situation in North America (Mortimer and Krueger, 2000).

Adolescent employment continues to be centrally important in contemporary debates about the appropriate place of adolescents vis-à-vis adult society. Clearly, adolescents must be protected from exploitation and must not be diverted from schooling. But it has also been suggested that adolescents can be too strongly insulated in an “adolescent” society, cut off from adult-dominated organizations. Recently, Schneider and Stevenson (1998) have questioned

whether most contemporary U.S. adolescents' near exclusive concern about getting into university, and their lack of serious consideration of adult work, serves them well as they make choices about postsecondary education. Under these conditions, future jobs become "fantasy-like;" little attention is directed to educational or other forms of preparation needed to enter chosen fields. According to their studies in diverse communities across the United States, many young people find themselves in postsecondary courses of study that seem irrelevant, lacking clear connection to vocational or other objectives (see also Csikszentmihalyi & Schneider, 2000).

Many American parents believe that through working they acquired and their children will acquire a set of important traits, adaptive to adult life, that are unlikely to be obtained by attending school. Parents of YDS participants had exceedingly favorable recollections of their own teenage work experiences (Aronson, Mortimer, Zierman, & Hacker, 1996). More than 85% of both YDS mothers and fathers believed that early work experiences were beneficial. Parents noted few problems or difficulties. Responsibility, confidence, commitment to work, time management, interpersonal skills, feelings of self-worth, faith in abilities, and identification of work preferences and job-related skills were among the recalled benefits. Looking back, they also reported that work allowed them to identify jobs that they did not enjoy and to realize the importance of education in order to get out of dead-end jobs. Though teenage employment has changed over time (e.g., less in farming, more in the fast food industry), the functions and benefits of adolescent employment appear to be markedly similar for parents and children.

Contrary to the views of most parents, some academics and educators hold that adolescent employment in the contemporary North American context should be discouraged or limited because it distracts young people from what is most important to their futures, attending and achieving in school. A related concern is that employment encourages "premature affluence" and precocity (Bachman, 1983; Greenberger & Steinberg, 1986). This continuing debate as to whether employment is good or bad for contemporary adolescents indicates tension between two laudable objectives. The first is to protect the adolescent; adolescents are protected by attending schools and by participating in other institutions that have been constructed by adults to enhance their education and development. The second objective is to expose the adolescent to the world of adults so as to facilitate preparation for, and movement into, that very world. How can adolescents be incorporated, albeit to a limited extent, in the world of adults while not distracting them from school and their personal development? We summarize the evidence, drawn from empirical studies of adolescent work, about the qualities of adult and adolescent work contexts that influence functioning, to address this question. To better inform efforts to meet the needs of adolescents so that they can become fully functioning and healthy adults, we indicate promising theoretical directions to guide future research on work, identity, autonomy and vocational development.

Adolescent Work, Behavior and Development

As already noted, most American adolescents work part-time during high school. In the National Survey of Family and Households (Manning, 1990), initiated in the same year as the YDS, 61% of tenth graders and 90% of twelfth graders were employed at some time during the school year. In the YDS, the median number of hours worked per week was about 11 in grade 9, rising to 20 in grade 12 (Mortimer, 2003; for findings in national studies, see Committee, 1998).

The work context has the potential to influence vocational identity, personal goal-setting, and educational interests and commitment by providing opportunities for decision-making, exploration of interests, experiences that build confidence and competence in work skills, and

exposure to diverse employment settings. Working during adolescence brings adolescents into contact with adults other than their teachers and parents, providing opportunities for mentoring and alternative role models.

Several outcomes of adolescent work intensity and experiences have been empirically examined: (a) work-related cognitions, including vocational self-efficacy, occupational values, work motivation, cynicism about work, and job satisfaction (e.g., Brooks, Cornelius, Greenfield, & Joseph, 1995; Creed & Patton, 2003; Mortimer, Dennehy, & Lee, 1991; Mortimer, Finch, Ryu, & Shanahan, 1996; Stern et al., 1990); (b) family-related outcomes, including interactions (mother's hostility, adolescent's hostility at home, sharing of advice, closeness to parents, frequency of joint activities such as dinners together, arguments with parents), autonomy (parental monitoring, chores at home, and independent decision-making regarding purchases, dating and curfew), and time with the family (e.g., Mortimer & Shanahan, 1994; Shanahan, Elder, Burchinal, & Conger, 1996; Steinberg & Dornbusch, 1991); (c) school-related outcomes, including grades, absences, time spent on homework, and class-cutting (e.g., Barling, Rogers, & Kelloway, 1995; Mael, Morath, & McLellan, 1997; Schoenhals, Tienda, & Schneider, 1998; Steinberg & Dornbusch, 1991); (d) time allocation, including extracurricular activities, dating, time spent reading and watching television (e.g., Bachman & Schulenberg, 1993; Schoenhals et al., 1998); (e) psychological functioning, including self-concept crystallization, mastery, depressive affect, satisfaction with life and leisure, dependability, self-esteem, and self-reliance (e.g., Bachman & Schulenberg, 1993; Barling et al., 1995; Brooks et al., 1995; Finch, Shanahan, Mortimer, & Ryu, 1991; Greenberger, 1988; Steinberg & Dornbusch, 1991); (f) problem behaviors, including substance use, delinquent acts such as cheating and trouble with police, and victimization (e.g., Bachman & Schulenberg, 1993; McMorris & Uggen, 2000; Steinberg & Dornbusch, 1991); (g) health behaviors, such as sleep, eating breakfast, and exercise (e.g., Bachman & Schulenberg, 1993); and (h) postsecondary educational attainments, job training, employment stability and earnings (e.g., Creed, Muller & Patton, 2003; Mael et al., 1997; Mortimer, Staff, & Oesterle, 2003; Stern & Nakata, 1991).

Although this is a long list, the bulk of research examines the links between the intensity of work (hours worked), on the one hand, and adolescent problem behaviors (e.g., alcohol use), mental health, and problematic or positive school-related outcomes (e.g., skipping school, grades), on the other (Bachman & Schulenberg, 1993; Fine, Mortimer, & Roberts, 1990; Mihalic & Elliott, 1997; Mortimer et al., 1996; Schoenhals et al., 1998; Steinberg & Dornbusch, 1991). We concentrate on the last two categories above by briefly summarizing studies of work and problem behaviors in this section, while work and education is the focus of the following section.

Associations between work intensity (especially over 20 hours per week) and problem behaviors (e.g., alcohol use) are quite robust (Bachman & Schulenberg, 1993; McMorris & Uggen, 2000; Mihalic & Elliot, 1997; Resnick et al., 1997; Schulenberg & Bachman, 1993; Steinberg & Dornbusch, 1991). McMorris and Uggen (2000), relying on YDS data, reported that adolescents who work long hours in high school use more alcohol and increase their use more rapidly over the years of high school. These behaviors seemed to be mediated by youths' perceptions of greater independence from parental controls. After high school, however, there was no longer an association between work hours and alcohol use. These findings must be considered along with Wright et al.'s (Wright, Cullen, & Williams, 1997) analysis of data from the 1988 National Survey of Family and Households. Findings suggest that certain adolescents are differentially vulnerable to the adverse effects of long work hours. Boys who were at high risk for delinquency engaged in more misconduct when they worked more than 20 hours per week, but working had no direct association with the problem behaviors of girls or low risk boys.

Researchers continue to be concerned with the possibility that differences between intensive workers, moderate workers, and non-workers are due to preexisting differences that influence selection into work. For example, relying on the National Longitudinal Study of Youth data, and mixed modelling to adjust for both observed and unobserved differences prior to work involvement, Paternoster and colleagues (Paternoster, Bushway, Brame, & Apel, 2003) reported that there was no relationship between high work intensity and antisocial behavior.

When examining the outcome of mental health, there is little evidence that working, or even the intensity of work, is associated (Bachman, Bare, & Frankie, 1986; Mortimer et al., 1996; Mortimer & Kirkpatrick Johnson, 1998). Instead, adolescents' distress may be associated with difficulties entering the labor market. Depressive affect and related psychological orientation (life dissatisfaction, a negative outlook, and boredom) predicted subsequent unemployment among Australia school-leavers (O'Brien & Feather, 1990; Winefield & Tiggemann, 1985).

Adolescent Work Intensity and Academics

More than 10 years ago, evidence of negative associations between work intensity (especially working more than 20 hours per week) and school performance / engagement began to emerge (Greenberger & Steinberg, 1986; Steinberg & Dornbusch, 1991). Curvilinear relationships between hours of work and academic achievement were also reported; for example, high school students who worked none or many hours tended to have lower academic achievement than adolescents who worked a moderate number of hours (about 10 hours; Greenberger & Steinberg, 1986; Mihalic & Elliott, 1997; Mortimer et al., 1996; Schill, McCartin, & Meyer, 1985; Steinberg & Cauffman, 1995). Yet, most associations were small in magnitude and were based on cross-sectional data. Hence, in most of these earlier studies, it was not possible to examine self-selection into work.

Other studies find that associations between adolescent work and academic achievement can be spurious, with these associations accounted for by prior achievement orientation and behavior (Mortimer & Kirkpatrick Johnson, 1999). In a recent study of students at 9 high schools in Wisconsin and California (Steinberg & Avenevoli, 1998; Steinberg, Fegley, & Dornbusch, 1993), it was disengagement from school that predicted future hours of work rather than the converse. In the YDS, lower academic promise in grade 9, as indicated by grades, educational aspirations, perceived academic ability, and engagement in schoolwork, was associated with higher-intensity employment in the succeeding three years of high school (Mortimer, 2003; Mortimer & Kirkpatrick Johnson, 1999; Mortimer et al., 2003). Youth who lack the motivation or resources for university appear to adopt a strategy of human capital investment through work. Using growth curve analysis to examine patterns of working during high school and postsecondary educational attendance, Mortimer et al. (2003) found that youth who pursued low-intensity employment during high school, steady and occasional workers, initially obtain more months of postsecondary schooling when compared to high-intensity, high-duration high school workers. These analyses controlled for parent education, family income, and educational promise. Steady workers are particularly advantaged with respect to the receipt of a four-year university degree.

Adolescent Experiences on the Job, Behavior and Development

Types of adolescent jobs—While adolescents often work in the service sector (Mortimer & Shanahan, 1994; Ruscoe, Morgan, & Peebles, 1996; Steinberg & Cauffman, 1995), they report a variety of work experiences and are engaged in different kinds of tasks. In the aggregate, adolescents obtain jobs of higher quality as they go through high school (Mortimer, Finch, Dennehy, Lee, & Beebe, 1994). In the first two years of high school, informal work (such as babysitting), restaurant jobs and retail work are prevalent among American adolescents (Committee, 1998). By the last two years of high school, young people have a

broader range of jobs. Most of the working YDS participants reported that they spend the most time on the job “dealing with people” and “working with their hands” (Mortimer, 2003). About 25% of employed boys and 15% of employed girls in grade 12 had some supervisory responsibilities.

Given the variable nature of adolescent work, it is surprising that there has been little focus on what adolescents do while working, the range of positive and negative qualities of the adolescent work environment, and young peoples’ perceptions of the diverse aspects of their work (Committee, 1998). Further, there has been very limited study of how dimensions of adolescent work might promote or undermine concurrent and future adolescent and adult functioning, including vocational development (Barling et al., 1995; Mael et al., 1997; Stone & Mortimer, 1998).

There is reason to think that the positive and negative qualities of work matter. Studies of adults document the importance of key work dimensions, such as the routinization of job tasks, the substantive complexity of work, and the closeness of supervision (Kohn & Schooler, 1978; Mortimer, Lorence, & Kumka, 1986; O’Brien & Feather, 1990; Schooler, 1999). Only recently have researchers begun to examine the influence of objective qualities and subjective perceptions of adolescents’ work environments on their development and functioning. Such studies are necessary to elucidate the job types and characteristics that promote positive adolescent development, and those that may obstruct or interfere with such development. The next section summarizes research on the links between the qualities of adolescent work and development.

Adolescent work qualities, behavior and development—Shanahan and colleagues (Shanahan et al., 1996) moved beyond the predominant emphasis on the intensity of work to consider earnings. They report that adolescent earnings have more positive consequences for family relationships in the more collectivistic rural settings than in more individualistic urban settings. In addition to hours worked, Mael et al. (1997) addressed supervisory work, skill variety, task identity, task significance, autonomy, and job feedback as potentially correlated with adolescents’ grades in school, participation in extracurricular activities, post-secondary education, and employment training outcomes. In this study, a large group of mostly male military cadets and another large group of mostly male high school seniors who qualified for ROTC the next year were sampled. Those who worked previously had higher levels of work orientation as they started post-secondary education and they were rated as better performers on non-academic criteria, such as positive leadership, abilities to work in groups and other interpersonal skills. Yet, during high school, associations of supervisory work and quality of work with school performance, time spent on homework and involvements in extracurricular activities (student government and varsity sports) were usually small in magnitude.

The impact of work intensity on adolescent educational and social functioning seems to be dependent on the quality of the work. Barling and colleagues (Barling et al., 1995) measured adolescent work quality in terms of autonomy, role clarity, skill variety, and school-work conflict. They hypothesized that these work qualities would moderate relations between work intensity and adolescent outcomes. Adolescent outcomes of interest were class cutting, homework and grades in school. Participants were 563 high school students (average age 16 years) with 41% employed at the time of the study. Intensity of work was only associated with class cutting; adolescents who worked more hours were also cutting class more often. There were many more instances of work quality, especially role clarity and skill variety, moderating associations between work intensity and outcomes. In 5 out of 8 regression models, work intensity was predictive of reduced functioning at school and in other domains when work quality was low, but work intensity had little association with functioning when work quality was moderate or high. In a separate study, Stern and colleagues (Stern, et al., 1990) developed

a series of questions to measure cognitive complexity, physical challenge, motivation, cynicism, opportunities to develop social competence, and stress in the workplace. In this study of 339 (62% employed) from a random sample of 830 students selected from 4 high schools, qualities of work, such as opportunities to learn new things and physical challenge, were positively associated with students' work orientation (measured as motivation to do good work – commitment to high work standards and little desire to avoid work duties).

Data from the YDS and other sources suggest that positive experiences in the work setting, indicating that young novice workers are able to succeed in this sphere, are associated with salutary outcomes. Adolescents who report higher quality work experiences seek more advice from their parents and have more positive emotional ties with parents (Shanahan et al., 1996); have higher vocational self-efficacy (Brooks et al., 1995); have more pronounced intrinsic and extrinsic occupational values (Mortimer et al., 1991); experience more control over their lives (Finch et al., 1991); and have greater success in the job market following high school (Stern & Nakata, 1991). Data from the YDS also indicate that adolescent experiences of work stress are associated with diminished self-esteem, lower self-efficacy and higher levels of depressed mood during high school (Mortimer & Staff, 2004). In addition, boys' feelings of mastery increased over one year of high school when they reported opportunities for advancement in their jobs, when they perceived little conflict between school and work, and when they were free of close supervision (Call, Mortimer, & Shanahan, 1995; Finch et al., 1991). Girls' efficacy was higher when they reported that they were being paid well and when they were able to help people on the job. In contrast, characteristics of jobs indicating low quality, such as the lack of opportunity to use skills or work schedules that conflict with school, have been linked to greater cynicism toward work (Stern et al., 1990). In the YDS, girls' self-efficacy was found to be diminished and depression was heightened when they thought they were being held responsible at work for things that they could not control, and when they did not feel free to express disagreement with their supervisors (Call et al., 1995; Finch et al., 1991; Shanahan, Finch, Mortimer, & Ryu, 1991). Further, stressors at work heightened boys' depressive mood over time, while acquiring useful skills on the job lessened their depressive mood (Shanahan et al., 1991).

Adolescent compared to adult work—The adolescent work qualities under scrutiny parallel those that have long been the focus of research in adult populations. Some researchers do acknowledge that adolescents may have unique needs on the job. Hence, some qualities of work may be more important to adolescents than adults, such as opportunities to develop social competence and job features that reduce conflicts between school and work. For example, there is evidence that adolescent autonomy at work is less promotive of positive outcomes than is the case for adults. Shanahan and colleagues (Shanahan et al., 1991) report that decision-making ability in the workplace is associated with increased distress among adolescents. As novices to the employment setting, they may be seeking structure and clear direction, rather than autonomy, in carrying out their relatively new tasks and responsibilities.

It should be noted that because the workplace is a relatively novel environment for the adolescent, frames of reference in evaluating this work experience might differ between adolescents and adults. For example, adolescents may find opportunity for skill development as they learn to deal with supervisors, handle money, follow directions, and carry out tasks, all of which become increasingly routinized as more work experience is acquired. Simply having a job may build time management skills as adolescents juggle school, work, household chores, social activities with friends and time with family. Thus, what might be considered rather undesirable, “dead-end” jobs from the perspective of the adult may be perceived as challenging, rewarding and skill-enhancing from the perspective of the adolescent.

Adolescent Work, Identity, Autonomy and Vocational Development

To fully understand the consequences of adolescent work for development, not only must the historical period be considered, but we must also place it within the context of this particular life stage. The work environment is potentially a context where adolescents explore their self-definitions, societal roles and interests, as well as develop their social and problem-solving abilities (Mortimer, Zimmer-Gembeck, Holmes & Shanahan, 2002; Youniss, McLellan, Su, & Yates, 1999). Employment also gives adolescents, whether university-bound or not, opportunities to acquire social capital – to build relationships and networks that can provide access to information, social support, and diverse other resources when needed. Adolescents can gather information about the self and others by working. Current definitions of career exploration focus on "...activities, directed toward enhancing knowledge of the self and the external environment, that an individual engages in to foster progress in career development" (Blustein, 1992, p. 175). The work environment of adolescents has rarely been examined, however, in studies of adolescent identity exploration and development. In a recent study of the subjective process of vocational development, some young people, especially in late adolescence, reported that work during high school did assist them in the formulation of their future goals--both what they hoped to accomplish and what they hoped to avoid (Mortimer et al., 2002; Zimmer-Gembeck & Mortimer, 2004). These work experiences were found to accumulate and set the stage for identity formation, goal setting and goal pursuit both concurrently and later in life.

Two developmental tasks of adolescence and the transition to adulthood may be relevant to work experience and vocational development: identity formation and the development of an autonomous self. Though pertinent throughout the life span, these tasks become especially salient during adolescence and young adulthood (Baltes & Silverberg, 1994; Erikson, 1968; Grotevant & Cooper, 1998; Zimmer-Gembeck & Collins, 2003). It is during adolescence that the development of identity and autonomy typically accelerate because of rapid physical and cognitive changes, expanding social relationships, and new rights and responsibilities. Self-reliance and personal decision-making increase, the self and identity are gradually consolidated, and affect, behavior, and cognition are increasingly self-regulated. Failures in these tasks mark a variety of widely recognized problem behaviors (Allen, Hauser, Bell, & O'Connor, 1994; Chen & Dornbusch, 1998; Nurmi, 1997; Ryan, Deci, & Grolnick, 1995).

Of most relevance here, Erikson (1968) believed that vocational exploration and the testing of vocational roles were central to identity development, especially in modern technologically-based societies. Exploration is defined as a process of gathering information about oneself and the environment in order to make vocational choices (Blustein, 1997; Grotevant, 1992). Indicators of vocational commitment include the number of occupational interests or choices under consideration, career plans, and the strength of commitment to occupational choices (Blustein, Pauling, DeMania, & Faye, 1994; Vondracek & Skorikov, 1997). According to Erikson (1968), the inability to explore and commit to an occupational identity during adolescence is a source of significant disturbance among young people. The classic works of Erikson (1968) and Marcia (1966) claimed that optimum psychological health and well-being are outcomes of a process of exploration followed by commitment, or identity achievement.

The adult work role can be a highly positive "possible self" (Markus & Nurius, 1986) for adolescents--a desirable goal that adolescents contemplate and look forward to. Experiences in the workplace may affirm or erode adolescents' developing confidence about their capacity to function in a domain that will be central to their adaptation and social standing as adults. Adolescents and their parents may be especially attentive to dimensions of work experience that give them cues as to whether they are successfully moving toward their future possible selves as adult workers (Mortimer, 2003).

Few studies have directly addressed the links between adolescent work and career development. In one of the only longitudinal studies (Skorikov & Vondracek, 1997) other than the YDS (Mortimer, 2003) and a study by Steinberg et al. (Steinberg, Greenberger, Garduque, Ruggiero, & Vaux, 1982), 483 American high school students completed measures of work preferences, work values, and career indecision. There was evidence that part-time work enhances work values. The authors suggest that changes in work value may account for the positive links between adolescent work and early adult employability and career advancement (Kablaoui & Pautler, 1991; Stern & Nakata, 1989). Yet, decisions to work in high school were not associated with career concerns, and part-time work in high school did not reduce career indecision. Similarly, a large cross-sectional study of Australian students in grades 9–12 found that young people who work in high school had more positive career development attitudes (e.g., knowledge of resources and orientation toward career planning) than other students, but the effects of paid work in high school were more limited when knowledge of the world-of-work and the use of career decision-making strategies were examined (Creed & Patton, 2003). The latter findings might be explained by the minimal convergence between the types of jobs available to adolescents and the types of careers they are dreaming about or planning. The importance of adolescent work for vocational development may also depend on the cultural and social climate. For example, adolescent work may have greater influence on career development in times of significant employment concerns (Meeus, Dekovi, & Iedema, 1997).

Exploration and commitment continue to be prominent themes in the literature on identity and vocational development. Typologies of identity status and the empirical research that has followed have been criticized, however, for giving little attention to cognitive and social mechanisms, and to processes that occur over time and culminate in choices, beliefs, attitudes, commitments and goals (Cote & Levine, 1988; Kerpelman, Pittman & Lamke, 1997). Adams (1997) notes growing interest in social psychological or social-cognitive perspectives on identity development, with emphasis on the social context and dynamic models of person-environment transactions that accumulate to form an individual's identity (Grotevant, 1997; Kerpelman et al., 1997; Lerner, Freund, DeStefanis, & Habermas, 2001; Vondracek, 1994).

Conceptualizations of career choice and vocational development seem to have followed similar pathways. Theories of identity development, social learning and social-cognitive models, self-determination theory, and dynamic developmental-contextual models have been proposed as guides for investigations of vocational identity, career exploration, career decision-making, and commitment to vocational choices (Blustein, 1997; Hackett & Lent, 1992; Holland, 1985; Lent, Brown, & Hackett, 1994; Super, 1990; Vondracek, Lerner, & Schulenberg, 1986). Space limitations preclude adequate discussion of this rich theoretical literature (see Swanson & Gore, 2000 for a review). Instead, we focus on two prominent themes that require further consideration if we hope to modify or enhance educational, adolescent work and other settings to optimize adolescent self and vocational development: (1) childhood and early adolescent experiences as providing the foundation for optimum vocational identity formation and career trajectories in later adolescence and early adulthood, and (2) important features of the social context.

Middle/Late Childhood and Early Adolescence

Little attention has been directed to the childhood precursors of career interests and trajectories of vocational development. However, theoretical and empirical advances in other domains of study illustrate the benefits of studying children and early adolescents, and the potential for optimizing educational, identity and vocational development by providing an early foundation of skills (Bynner, 1997). Theory and research on achievement motivation, procedural and performance orientations to tasks, self-efficacy and attributions for success and failure, and the roles of parents and peers in supporting interests, choices, and the pursuit of goals in childhood

increasingly inform the study of adolescent vocational identity development (Arbona, 2000; Lerner et al., 2001; Vondracek, 1994). The social context, activities, and the support of agentic behaviors and interests in childhood may foster the knowledge and skills necessary to make and pursue goals, confront challenges and cope with failures, and to interact with the environment in ways that help young people to explore in adolescence and reach their educational and occupational goals in adulthood (Blustein et al., 2000; Bynner, 1997, 1998; Mortimer et al., 2002; Vondracek, 1994; Vondracek, Silbereisen, Reitzle, & Wiesner, 1999). For example, Schmitt-Rodermund & Vondracek (1999) report that childhood creative, cultural and technical activities are associated with adolescent vocational exploration indicated by leisure activities and school subjects. Breadth of childhood exploration (engagement in technical and cultural activities) mediated the relationship between parenting behaviors and adolescent exploration, achievement orientation, and future goals. In other words, children's active engagement in activities was directly predictive of adolescent exploration, but it was parenting behaviors that predicted children's active engagement in activities. Similarly, Hyson (forthcoming) has linked industry in middle childhood to early adult vocational adaptation. Mediators of this relationship may be opportunities for work that are available to the adolescent, and the competence and agency of the adolescent to find, select and discard work environments to optimize opportunities to explore interests and gain desired competencies.

A Context-Rich Approach to Vocational Development

The salience of context has been increasingly emphasized in recent theory and empirical work (e.g., see Phinney & Goossens, 1996). This is not a new phenomenon, as Erikson (1968) proposed that the key to resolving the crisis of identity during adolescence is social interaction with others. Classic vocational developmental theorists have also stressed the importance of contextual features including social relationships (e.g., Krumboltz & Thorenson, 1964; Super, 1963; Vroom, 1964). Until fairly recently, however, these ideas have had little attention in empirical research. The study of progress in vocational identity development has focused on the individual with less recognition of environmental affordances and limitations (e.g., adolescent work and the school-to-work interface). Nevertheless, the continued usefulness of the identity construct and classic vocational theories is partly due to their original conceptualizations of the person's development as a process of exploration and commitment that involves active interpersonal engagement.

Recognition of the social embeddedness of identity and vocational development has resulted in important advances. The distinction between open and closed domains of identity reflects how exploration and commitment processes depend upon the capacity to select activities or goals (Meeus, Iedema, Helson, & Vollebergh, 1999) given the degree of choice allowed by society (e.g., tight or loose societies, Triandis, 1989; broad or narrow socialization, Arnett, 1995). Other advances include the study of socialization practices and experiences in diverse contexts--within families, when engaged in activities, and when working in part-time jobs (Adams & Marshall, 1996; Eccles & Barber, 1999; Grotevant & Cooper, 1986; Larson, 1994; Skorikov & Vondracek, 1997); the assessment of links between environmental opportunity structures and vocational identity (Grotevant & Cooper, 1998); and identification of the many levels of environmental influence on development, including socio-geographic, cultural-organizational, relational, and personal (Jackson, 1995). In sum, environmental affordances and limitations must be considered when studying vocational and educational development, including the formation of interests and educational/vocational choices; career-related motivations and goal pursuits; exploratory activities to select, adapt, and construct career trajectories; beliefs about careers and goals; and responses to failures and successes in the vocational domain. Cross-national or cross-cultural comparisons (Mortimer and Krueger, 2000) reveal great discrepancies in contexts of vocational development, and the consequences of these differences.

Future Directions for Research and Policy

This review reveals several other gaps that deserve scholarly attention. Future studies should address (a) the measurement of both objective and subjective features of adolescent work and adolescent outcomes; (b) the character of relationships with co-workers, supervisors and others when examining workplace settings; and (c) the intersections of work and other ecological systems (Bronfenbrenner, 1979) as interacting and mutually influential contexts of adolescent development.

Features of Adolescent Work and Outcomes

To further understanding of work and adolescent development, the conceptualization and measurement of the work environment must be considered (e.g., see Friedman & Wachs, 1999, especially the chapter by Schooler, 1999). To date, a variety of measures have been used to assess adolescent work quality with little replication across studies. There is little theoretical guidance, however, as to the particular aspects of the adolescent work experience that promote specific outcomes, and the extent to which these hold for some or all adolescents. (There is evidence, for example, that steady work has especially salutary educational outcomes for youth with low educational promise, see Mortimer, 2003). Future theoretical models might propose links between particular qualities of adolescent work and adolescent outcomes (or sets of outcomes); indirect pathways, mechanisms and processes; and conditional relations. Theoretical models detailing how certain work experiences prompt changes in adolescent functioning in many domains (e.g., both positive and negative cognitions, perceptions, attitudes, social relationships, and behaviors) are needed in order to assist in the development of a comprehensive model of the work environment and adolescent functioning.

The following positive dimensions of work may be especially salient: opportunities to use and develop work-related skills; to develop interpersonal competencies and overcome social anxiety; to take on new responsibilities managing money, customers, supervisees, or time; practice juggling multiple tasks and problem solving; to access others with information about work and career opportunities; and to rule out future jobs based on knowledge gained through employment about one's competencies, preferences and interests. Negative qualities might include failures at tasks; punitive and authoritarian supervisors, co-workers and customers; lack of opportunities to learn skills; and dirty, stressful, tiring work.

As suggested earlier, adequate theoretical models will need to attend to the possibility that there are aspects of work that are uniquely important to young people at certain ages or at various stages of their work lives. For example, adolescents may benefit from certain work experiences in their initial jobs that are no longer as important in their subsequent work experiences. There may be work qualities that are important to adolescents that are not as critical in adulthood, such as opportunities for the exploration of career options, and more structured and consistent support and guidance from supervisors. Furthermore, characteristics of work environments that matter most to adolescent development may differ depending on the gender, race/ethnicity, background, socioeconomic status, and future plans for work or university (Finch et al., 1991; Fine et al., 1990; Steel, 1991).

Relationships at Work

The work environment may provide adolescents with opportunities to interact with important adults other than their parents and teachers (Finch et al., 1991). These extrafamilial relationships have the potential to provide adolescents with role models and mentors in the adult worker role, encouraging young people to consider alternative social roles, develop identities and imagine possible selves by providing additional sources of information about occupational options and other aspects of adulthood (Mortimer, Finch, Shanahan, & Ryu,

1992). Although the adolescent work environment may provide exposure to adults, Greenberger and Steinberg (1981, 1986; Greenberger, 1988) note that adolescent jobs are usually too time-limited to provide opportunities to develop meaningful relationships. Based on their observations of the adolescent work environment, they concluded that teen work settings reinforce peer culture and deviance by fostering interactions with peer co-workers and supervisors who are not far from adolescence themselves. Apart from these observations, it is difficult to find much additional study of the nature of adolescents' relationships with their co-workers, supervisors or others in the work environment (see Newman, 1999 for an exception), and even less investigation of how these relationships may provide benefits or additional challenges to adolescents or impact adolescent psychological or social development.

Given the crucial influence of the quality of parent-adolescent, peer, and teacher-student relationships on child and adolescent development (Barber & Olsen, 1997; Baumrind, 1991; Eccles, Early, Frasier, Belansky, & McCarthy, 1997; Furrer & Skinner, 2003; Gray & Steinberg, 1999; Grotevant & Cooper, 1986; Skinner, Zimmer-Gembeck & Connell, 1998), this is a potentially productive area. Within parent-adolescent and teacher-student relationships, the support of autonomy (e.g., decision-making, personal goal selection), warmth and support, and interactions that promote feelings of competence (e.g., praise, awards and other recognition) foster adolescent engagement, competence and self-regulation (Eccles et al., 1997; Gray & Steinberg, 1999; Skinner et al., 1998). These relationship qualities might also be beneficial when experienced in the workplace. Conversely, experiences with authoritarian supervisors at work may undermine adolescent motivation and perceptions of competence. In sum, the workplace can be a place of relatedness and interdependence, but may also be a source of conflict, failure and coercion (Flum, 2001).

It is likely that some adolescents do maintain connections to work environments for sufficient periods of time to establish relationships with co-workers and others. Future research should examine the timing and duration of adolescent connections to work environments, and determine when and how characteristics of relationships with others within these environments impact adolescent development.

The Intersections of Work and Other Ecological Environments

Young people spend substantial amounts of time in multiple microsystems, including the family, school, peer group, and work environment. The joint or interacting influence of these environments for child development has been demonstrated primarily in studies of the family, school and peer environments (e.g., Parke & Ladd, 1992, study family and peer linkages). Apart from assessments of the effect of the intensity or quality of adolescent work on parent-adolescent interactions and relationships (e.g., Mortimer & Shanahan, 1994; Shanahan et al., 1996; Steinberg & Dornbusch, 1991), and school functioning (e.g., Mael et al., 1997; Mortimer et al., 1996; Mortimer and Johnson, 1998; Schoenhals et al., 1998), the joint influences of the work environment and other microsystems have been fairly neglected. Many questions remain to be answered. For example, when adolescents spend more hours working, they tend to report less monitoring and time with parents (Greenberger & Steinberg, 1986; Steinberg & Dornbusch, 1991). Involvement in work, especially intense involvement, may be indicative of adolescents' desires to make early transitions out of the family and into other adultlike behaviors ('pseudomaturity' or precocity; Bachman & Schulenberg, 1993). These desires are achieved partly by seeking greater independence from parents and engaging in a range of adultlike behaviors, including more work, substance use, and romantic and/or sexual involvement. However, parents may not object to the reduction of their parenting commitments and welcome evidence that their children are making strides toward independence, especially if they perceive that their children are performing well in school and at work (Aronson, et al, 1996; Phillips & Sandstrom, 1990). Few studies have examined parents' roles in the initiation

and continuation of adolescent work and the joint effect on adolescent development of family functioning, parents' attitudes and desires for their children, the quality and intensity of adolescent work, and the behavior of adolescents on the job.

Several conclusions can be drawn from the literature on the school-to-work (STW) transition. First, when leaving secondary school early or when bound for work after secondary school, youth who develop competencies, both in basic skills and in more applied domains, enhance their effectiveness in negotiating the STW transition (Bynner, 1997, 1998; Pinquart, Juang, & Silbereisen, 2003). Second, an array of psychological factors, including self-initiative, flexibility, purposefulness, and agency, have been associated with favorable outcomes (Blustein, Phillips, Jobin-Davis, Finkelberg, & Roarke, 1997; Bynner, Ferri, & Shepherd, 1997; Pinquart et al., 2003). Third, supportive relationships with others, including the family of origin, supportive and engaged peers, teachers, counselors, coworkers and supervisors, assist youth in making a successful STW transition (Blustein et al., 1997; Bynner et al., 1997; Feij, Whitely, Peiro, & Taris, 1995; Kenny, Blustein, Chaves, Grossman, & Gallagher, 2003). Finally, the STW transition can be facilitated by an educational environment that offers clear and meaningful connection to the world of work and fosters decision-making competencies (Solberg, Howard, Blustein, & Close, 2002; Stern, Finkelstein, Urquiola, & Cagampang, 1997, 1997).

Longitudinal studies have shown that the American STW transition is often unstructured and can remain unstable until the mid-20s or beyond (Mortimer & Krüger, 2000; Rindfuss, Cooksey, & Setterlin, 1999). Although young people usually start working in high school, or before, few of these jobs are connected to their studies or to their career aspirations. Linking school and work in the classroom may be beneficial. Schools that feature programs that connect youth to employed adults, such as job-shadowing and internships, have been linked with higher rates of enrollment in postsecondary education (Steinberg, 1997). Most schools have youth employment programs for special needs populations or as drop-out prevention programs. Strengthening linkages between work and school would increase the likelihood that young people would perceive their work as an extension of school, perhaps heightening the salience of both spheres (see also, Marsh, 1991). Schools could become more involved in the job selection process (Stone & Mortimer, 1998). Although it is widely accepted that education prepares young people for adult occupational roles, the educational arena is not the only domain in which young people prepare themselves for work. Economists emphasize that both education and work experiences are important for human capital formation (Becker, 1993).

Toward Better Integration of Contexts of Development

Stone and Mortimer (1998) and Hamilton (1990) have proposed a Youth Development Framework as essential "to ensure that the workplace indeed becomes a complement to school, and serves to enhance, not detract from, youth development and human capital investment" (Stone & Mortimer, 1998; p. 210). By forging stronger links between the contexts of work, school and family, it may be possible to reduce any potential negative influences of work on educational achievement, family relationships, and long-term attainment, and to promote the positive potentials of employment. Cooperative education programs (co-op) facilitate student opportunities to work as part of their education (Barton, 1996). Co-ops are most often part of vocational or technical tracks in high school and usually include monitoring of work by teachers and the participation of work supervisors in assigning grades for student work.

In a longitudinal study comparing co-op participants to students in work not supervised by the school, Stern et al. (1997) reported that students who opted for co-op learning were systematically different than students doing work independent of the school and they earned

higher wages three years after high school. However, these differences and higher earnings were not necessarily a result of participation in the co-op but reflected adolescents' differing orientations towards either future employment or educational pursuits. Still, some young people may gain from co-op programs as well as other means of incorporating adolescent work experiences into the school curriculum. For example, students might be encouraged to reflect on, and to write about, their experiences at work. Class discussions could heighten youth's awareness of what their fellow students are doing in their jobs, and thus help them make more informed decisions about what jobs to take. The school could help adolescents identify work competencies and interests through discussions of work activities, and assist adolescents in conceptualizing work as a competency-building experience. As a result, greater school involvement in the job selection process could lead young people to acquire higher quality jobs and enhance work-based skill development. Such discussions might also involve sharing of information about how to manage the work challenges that can arise in adolescents' jobs, including how to make school and work compatible, what to do when workplace regulations are being violated, or how to handle instances of harassment (Stone & Mortimer, 1998).

Larson (2000) and Allen and colleagues (Allen, Kuperminc, Philliber, & Herre, 1994) discuss how youth organizations and programs increase autonomous and socially adaptive functioning by developing adolescents' initiative within a context of support from peers and adults. Their suggestions, some of which may be applicable to the workplace, include encouraging engagement in the environment, personal projects, and goals. Strategies include participation in volunteer work or in structured activities apart from schoolwork, such as hobbies, artwork, or sports, and gaining access to a greater variety of adult role models who are excited about their interests and careers.

Concluding Comments

This review has considered the changing socio-cultural contexts in which adolescents work; theories of identity, autonomy, and vocational development; empirical findings regarding work and adolescent outcomes; the various contexts and dimensions of work experience that have potential impacts on the developing adolescent; and fruitful directions for research so as to inform the evaluation of adolescent workplaces, enhance adolescent work experiences, and inform social policy. We also recognize that the adolescent is not simply a passive recipient of workplace and other experiences. Instead, adolescents exercise agency in seeking jobs, in deciding how many hours to work, and in selecting the conditions of their employment. Our recommendations regarding the integration of school and workplace experiences are designed to enhance the adolescent's goals, intentions and motivations.

Given considerable demand for adolescent workers in many places in the United States, especially in the more prosperous suburban and some urban areas (but certainly not all, see Newman, 1999), adolescents may exercise considerable discretion about their working hours and in the types of jobs they are eager, or even willing, to take. Employers must often accommodate to their adolescent workers' interests in special school projects, sports, and other extracurricular activities. Indeed, studies of adolescent time use show that most employed adolescents spend substantial amounts of time in various activities, extending across several domains, including school work, family chores, time with friends, and in extracurricular activities (Shanahan & Flaherty, 2001). Those who limit the time they spend at work, engaging in low-intensity employment, are more able to sustain such multifaceted patterns of time use.

Furthermore, there is substantial longitudinal evidence that adolescents' time use--including work and other activities--is not distributed randomly. Instead, based on their family backgrounds and resources, prior goals, and attachments to school, adolescents construct patterns of employment that are compatible with their interest and investment in school

(Mortimer, 2003). Multifaceted patterns of time use in adolescence, often accompanied by moderate (time-limited) work, are fostered by early educational engagement. These time use patterns appear to be most beneficial for the subsequent educational achievement and delayed family formation that enhance human capital investment. While some maximize investment in educational pursuits and pursue a richly diverse pattern of activities, others engage in higher intensity work that precedes earlier movement into the full-time labor force and is associated with early economic gains. While clearly youth who pursue these diverse objectives have varying, and unequal, future socio-economic trajectories, work experience during adolescence may enhance the vocational maturation and career development of both. It is necessary for adolescent researchers to consider the diversity in youth background and goals, as well as the varying affordances and opportunities of work contexts in adolescence.

Adolescence is a time of exploration and identity construction. Understanding work and adolescent development more fully will help to identify the features of work experience, the characteristics of adolescents, and the specific combinations of contextual affordances and individual characteristics that enhance identity achievement, autonomy, and the more beneficial and satisfying work and life course trajectories.

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