The Evolution, Contributions, and Prospects of the Youth Development Study: An Investigation in Life Course Social Psychology

Jeylan T. Mortimer
Professor of Sociology at the University of Minnesota

Abstract

Grounded in social structure and personality, life course, and status attainment perspectives of social psychology, the Youth Development Study has followed a cohort of teenagers from the beginning of high school through their mid-thirties. Evidence for the effective exercise of agency derives from diverse adolescent work patterns leading to outcomes that are consistent with youth's earlier goals, motivations, and resources. Thus, the socioeconomic career begins well before the completion of formal education. The YDS has revealed multiple pathways of contemporary transition to adulthood, the circumstances surrounding parental residential and financial support to their transitioning children, and the cessation of deviant behavior as adult roles are acquired. Agentic pathways during this period are significant precursors of success during subsequent economic downturn. The new YDS Second Generation Study is well poised to address the impacts of parental trajectories on the adjustment and well-being of children.

Keywords

social structure and personality; life course social psychology; status attainment; agency; transition to adulthood

Drawing on several intellectual traditions in social psychology, including the social structure and personality paradigm, the life course perspective, and the status attainment school, the ongoing longitudinal Youth Development Study (YDS) was initiated in the late 1980's. Longitudinal data, collected from the same persons over time, is especially useful in understanding socialization and change, because the processes of reviewing signficant experiences on the basis of individual and social characteristics can be identified and controlled. The initial objective was to assess the psychological and behavioral consequences of youth employment during high school. Subsequently, the YDS examined the consequences of teenage work experiences for young adult mental health, educational attainment, and career establishment. Undertaking a study of the consequences of youth employment at this historical moment was propitious, as the high demand for adolescent labor at that time offered the opportunity to study teens' short and long-term responses to a wide variety of work conditions.

As the youth moved through the transition to adulthood, the YDS team capitalized again on the longitudinal character of the data to identify pathways of movement from school to work and pathways of acquisition of adult role markers. Our purview thus widened to include leaving home, changing relationships with parents, family formation, civic participation,

Direct correspondence to Jeylan T. Mortimer, Department of Sociology, 1014 Social Sciences Building, 267 19th Avenue South, University of Minnesota, Minneapolis, MN 55455; morti002@umn.edu.

deviance, and victimization. Extending this rich data archive, now encompassing more than two decades of life experience intergenerationally, the investigators are beginning to examine the impact of parental trajectories on their children's psychological and behavioral adaptations. This article describes the emergence, evolution, key contributions, and future prospects of the Youth Development Study.

The Emergence and Evolution of the Youth Development Study

The key questions that have animated the Youth Development Study emerged in the early 1980s, when a small group of scholars at the University of Minnesota, including Roberta Simmons, Candace Kruttschnitt, Willie Jasso, and myself, began planning a comprehensive study of adolescents.[1] Our study was to be lodged in central principles and debates within a subfield of sociological social psychology known as social structure and personality (House 1977, 1981; McLeod and Lively 2003), and subsequently elaborated in life course social psychology.

A rockbed concern of this branch of sociological social psychology is to understand how the person's structural location influences personality, or in Melvin Kohn's terminology, psychological functioning. Kohn and Schooler (Kohn 1969; Kohn and Schooler 1983) had documented the pervasive influence of social class on individual values, self-concepts, cognitive flexibility, and ways of viewing the world. They addressed House's (1977) components and proximity principles: to understand the influence of social location, it is imperative to identify the particular structural components and the formative experiences, arising from those component dimensions, which impinge directly on the person. Kohn and Schooler considered occupation and education the key components of social class. Within the occupational realm, the domain of central interest to them, they found that the structurally based conditions of work, particularly those related to self-direction, were of key significance for psychological orientation and functioning.

Whereas their pathbreaking research was both longitudinal and comparative, Kohn and Schooler were not primarily concerned with investigating variability through the life course in the influence of work on personality. At roughly the same time, however, Glen Elder was beginning to articulate an understanding of social structure and personality that placed age—not so much chronological age, but social age—at center stage (Elder 1975, 1980, 1985; Elder and Rockwell 1979). A person's location in social structures changes dramatically with life course stage, and age-graded social roles and transitions engender distinct proximal experiences. Furthermore, according to Elder's principle of timing, "The developmental antecedents and consequences of life transitions, events, and behavioral patterns vary according to their timing in a person's life" (Elder, Johnson, and Crosnoe 2003: 12). That is, major life experiences—like those associated with work—may be expected to have distinct consequences for persons of different age.

Still, by the mid 1980s, these two major strands of social psychology—social structure and personality and life course social psychology—had not yet come together in the study of work and individual development. In view of these critical streams of social psychology, I began to think about whether the key occupational conditions identified by Kohn and Schooler would have distinct consequences for self-concepts, values, and other psychological orientations, depending on the life stage of the person. The Department of Labor's longitudinal Quality of Employment Survey (1973–1977) enabled my colleagues and I (Lorence and Mortimer 1985; Mortimer 1988; Mortimer, Finch, and Maruyama 1988),

[1]While these scholars were not directly involved in the subsequent evolution of the Youth Development Study, these initial discussions provided many valuable ideas and direction of what was to follow.

to compare the influence of occupational experiences on work attitudes (e.g., work commitment and job satisfaction) for workers of different age. The findings were quite consistent with Duane Alwin's emphasis on the "impressionable years" as a highly formative period (Alwin and McCammon 2003) —attitudes are more responsive to new experiences close to the time of entry to new social roles. Once attitudes become crystallized, many self-maintaining and protective strategies contribute to their stability. Our analyses indicated that workers below the age of 30 were more responsive than older workers to autonomous work experiences.

This intriguing pattern of findings suggested that the features of work could be of critical importance for the youngest workers, those newest to the labor force whose work orientations would likely be the least strongly crystallized. But while employment was a very common adolescent experience, very little scholarly attention had been directed to it, in comparison to the vast literatures on family, school, and peer influences on adolescent development. An alternative hypothesis is also plausible; if work is a less salient role for teenagers than for adults, then one might expect that their occupational conditions would have relatively little impact. These two possibilities—either strong effects or no effects of early jobs on adolescent development—presented a theoretical puzzle with great practical significance. Should adolescent employment be encouraged or limited by law (Committee on the Health and Safety Implications of Child Labor 1998)?

While a central early objective of the study was to examine how working influenced adolescent mental health and behavioral adjustment during high school, as the youth grew older attention turned to longer-term consequences. This extension of the Youth Development Study built on another major program of social psychological research, the Wisconsin "status attainment" school. Sewell and Hauser (1975, 1976), Featherman (1980), and others (see Kerckhoff's 1994 review) had detailed how the family of origin's socioeconomic status influenced offspring's educational, occupational, and income attainments. They highlighted key social psychological processes, including significant others' influence and adolescents' occupational aspirations and plans, which, in turn, affected their subsequent educational attainments, first jobs, and work and income trajectories.

Whereas status attainment researchers designated the first job *after* leaving school as the entry to the socioeconomic career, my coinvestigators and I wondered whether jobs held *before* educational completion also mattered for adult socioeconomic attainments. Furthermore, we asked whether the focus on educational and occupational aspirations in the Wisconsin model should be widened to include other psychological orientations, including occupational values and self-efficacy.

In its evolving concern with diverse orientations toward the future and the youth's capacity to realize their personal goals, the YDS intersected with another focus of contemporary sociological social psychology: the phenomenon of agency (Emirbayer and Mische 1998). Are young people mainly the products of family, school, peer (and perhaps, work) influences, or do they have the capacity to choose and decide upon their own formative experiences? According to Elder's (Elder et al. 2003) principle of agency, "Individuals construct their own life course through the choices and actions they take within the opportunities and constraints of history and social circumstance" (11). The YDS team asked whether adolescent orientations toward work and the future serve to initiate agentic trajectories, including early work, which in turn affect future attainments and well-being.

Glen Elder, in his elaboration of life course social psychology, has emphasized the historical variability of life stage-specific social roles and processes. The YDS cohort was born in the

early 1970s, attended high school from 1987 to 1991, a time when teenage labor was in high demand, and experienced most of their transition to adulthood (age 18–30) during periods of economic growth. The YDS team has traced the movement of this cohort as it attempted to become established in work and acquire other markers of adulthood. We have also assessed how their trajectories during the transition to adulthood contributed to their capacity to endure the turbulent economic climate of the current Great Recession.

Of course by studying just a single panel over time it is not possible to assess cohort variation. Youth responses to work experiences might well vary in distinct historical periods, defined, for example, by expanding or contracting labor market conditions. The YDS, however, has been well situated to examine work experiences and early life course trajectories during a period of remarkable change in the social contexts of transition to adulthood. As Shanahan (2000) documents, the transition to adulthood has become more extended, precarious, and unpredictable in recent decades, with the expansion of higher education, delayed family formation, and longer youth dependency on their parents. The transition from school to work has also altered dramatically. The process of choosing and becoming established in a line of work has become more difficult, as a result of economic turbulence, the increasingly competitive and global character of the labor market, and the non-standard employment contracts that are typical among young workers (Johnson and Mortimer 2011; Kalleberg, Reskin, and Hudson 2000). Instead of a one-time, discrete transition at the time of finishing school, common at the middle of the last century, recent cohorts of youth move back and forth between school and work, pursue both simultaneously, or engage in neither, and take longer to settle into what might be thought of as longer-term "careers."

Thus situated in the social structure and personality, life course, and status attainment perspectives of social psychology, these general concerns have guided the Youth Development Study for the past 25 years: the developmental consequences of teenage work, the attainment process, the exercise of agency, and the achievement of successful transitions to adulthood in the current rapidly changing historical context. The YDS research team has learned much about the journey from adolescence to adulthood at the turn of the twenty-first century. The study has generated a vast data archive, increasingly available for public use, and has produced well over 100 publications that address a wide range of questions relevant to a life course social psychology (http://www.soc.umn.edu/assets/doc/YDScompletelist.pdf).

The Debate Surrounding Teenage Work

Controversies surrounding adolescent work framed much of the research during the early years of the study. Since the beginning of the last century, scholars had voiced concerns about whether teen employment engenders "precocious maturity" and disrupts the responsibility-free adolescent moratorium (Hall 1904; Kett 1971). Others pointed to potential benefits of employment in youth, which took the form of apprenticeships in Western Europe and Colonial America, arguing that formal schooling was less beneficial than "real work" as preparation for the adult work role (Aries 1962). In 1974, Glen Elder published his now-classic *Children of the Great Depression*, demonstrating that adolescents in economically deprived households in the Depression era contributed to the family economy by paid work or household labor. The more positive mental health and achievement of these youth were largely attributed to the self-confidence gained from helping the family at a time of crisis (Elder and Rockwell 1979). In the same year, The Panel on Youth of the President's Science Advisory Committee (Panel on Youth 1974), chaired by James Coleman, recommended that schools and employers come together to increase

youth's exposure to "real" work settings and adult mentors who could guide youngsters' vocational exploration.

A growing literature in the 1980s and 1990s continued the debate over whether youth should be "protected" from potential exploitation in the workplace, or incorporated in the adult world of work to obtain a valuable socialization experience (see Staff, Mortimer, and Uggen 2004; Staff, Messersmith, and Schulenberg 2009). Echoing the early critiques of youth work, Greenberger and Steinberg titled their 1986 monograph, *When Teenagers Work: The Psychological and Social Costs of Adolescent Employment*; this title well conveys their negative stance. Their research, based largely on cross-sectional comparisons, showed that teens who worked more hours had lower grades, were more disinterested in school, and exhibited more frequent problem behaviors. The critics saw teen work as placing adolescents at risk both contemporaneously and in the future (Steinberg and Dornbusch 1991; Steinberg and Cauffman 1995). Hazards and stressors in the workplace could jeopardize physical and mental health. Employment might encourage friendships with older coworkers who could introduce adolescents to adult-like ways of handling stress or spending leisure time—and provide them with the income necessary to support bad adult habits (like alcohol use and smoking). Moreover, if working disrupted family relationships, employed teens could miss out on valuable social support during a highly formative life stage. Most problematic from the perspective of the critics was the potential for work to reduce educational investment, as employment was thought to promote disengagement from school and lessen time spent on homework and extracurricular activities.

Despite these concerns, it is important to recognize that the work role is a major marker of transition to adulthood, the path to economic independence, and a key aspect of adolescents' future "possible selves" (Markus, Cross, and Wurf 1990). Exposure to the new, adult-like work environment could promote thinking about the self with respect to vocationally relevant interests and abilities, the identification of future occupational goals, and the crystallization of work values. In short, it could instill what Clausen (1991) called "planful competence." Part-time work in adolescence could signify progress in moving toward a critically important adult role, through knowledge that one is able to find a job, meet the work expectations of supervisors, get along with coworkers and customers, and accept responsibility for being on time and for completing work tasks. Most parents continued to believe that employment was good for their children, fostering responsibility, good work habits, time management skills, and independence (Phillips and Sandstrom 1990).

Another plausible position in this debate (the one most consistent with the findings of YDS research), is that the consequences of teen employment will vary, depending on its temporal patterning and quality. This third position is most compatible with Kohn and Schoolers' (1983) studies of adult work conditions and psychological functioning, as well as a long history of research on workplace experiences, health, and well-being (Blustein 2008; Mirowsky 2011).

Despite the vigor of this debate, prior to the Youth Development Study no research had followed a representative panel of teenagers over time that would allow systematic assessment of employment and its outcomes, both contemporaneously and in the long term. Existing data sets (e.g., the Youth in Transition Study or the NLSY) monitored the number of hours youth worked but contained limited information about the quality of their work experiences. To my knowledge the YDS is the only longitudinal study, starting in mid-adolescence, designed to monitor a wide range of occupational experiences and their potential psychological and behavioral consequences, and continuing through the transition to adulthood.

In the fall of 1987 Mike Finch and I drew a random sample of more than 1,000 ninth graders in the St. Paul Public Schools. The research team collected the first wave of data in the spring of 1988 when the teens were mostly 14 and 15 years old. The team followed the youth over a four-year period with annual in-school questionnaires. Their parents were also surveyed by mail to obtain accurate measures of family socioeconomic status, the parents' insights about how work experiences influenced their children, and their reflections on how their own teenage experiences in the workplace influenced their own development. The YDS team has continued to survey the youth cohort, initially annually, and more recently every other year. The nineteenth survey is currently underway, with the youth now in their late thirties (mostly 37 and 38 years old). Retention has hovered around 67 to 75 percent in recent waves. A variety of interview-based studies have been conducted along the way.

What has been learned from nearly a quarter century of YDS research?

The Nature and Prevalence of Teenage Work Experience

Our initial studies documented the ubiquity of employment among the YDS teenagers during their high school years (1988–1991). Given our interest in charting work histories from the very first jobs, a wide net was cast, including informal work like babysitting, lawn mowing, and snow shoveling, as well as formal employment. By this definition, the majority of youth reported that they held jobs at each survey administration. Youth increased their work hours as they grew older, from about 11 hours per week in the ninth grade, to 20 in the twelfth. Contrary to the widespread notion that teenagers are concentrated in "youth employment ghettoes," dead-end jobs involving few skills or advancement opportunities, the teens reported a wide range of work experiences. Restaurant work was the most prevalent in the tenth grade (encompassing almost half of employed tenth-grade boys and 40 percent of girls), but later jobs involved greater diversity in types of work, more training, task complexity, supervisory responsibility and opportunities for advancement than earlier jobs (Mortimer et al. 1994). On the face of it, teenagers' jobs would seem to be occasions for work-relevant skill-building and vocational exploration. At the same time, gender differences in youth work—including household as well as paid labor—presaged sex-typing in the adult labor force (Gager, Cooney, and Call 1999; Mortimer et al. 1990).

Given the prevalent concern that the time spent in paid employment would crowd out more valuable uses of time, especially extracurricular activities and homework, the YDS team gave considerable attention to the temporal investment in employment during high school. (Because the debates surrounding adolescent work focused on its potential to distract teenagers from their schoolwork, we did not include summer employment in the typology of adolescent work patterns.) The availability of continuous work histories enabled us to go beyond simple cross-sectional snapshots of employment to identify longer-term patterns. The youth clustered in four groups formed by cross-classifying two temporal dimensions of work across three years of high school (grades 10–12): duration in months and intensity, or hours of work when employed. These four groups were labeled: most invested, steady, occasional, and sporadic. Those high on both duration and intensity, the "most invested" workers, were employed on average during 22 of 24 months of observation, and their mean work hours, while employed, were 20 or more per week. A "steady" work pattern also involved employment during almost all months of observation, but the steady workers limited their work hours to 20 or fewer on average per week. "Occasional" workers were employed only about half the months of observation, and limited their employment to 20 or fewer hours per week. "Sporadic" workers were employed more than 20 hours while working, but they also had rather short cumulative work durations. Testifying to the ubiquity of the employment experience, only seven percent of the panel reported no paid work while classes were in session. Despite gender differences in the prevalence of these work patterns

(women were more likely to pursue steady work, and men, occasional, sporadic, and most invested work), there was little gender variation in their consequences, nor in the effects of key work quality dimensions.

Although the "steady" and "sporadic" work patterns were found to have the most distinct precursors and outcomes, they yielded almost identical hours of work during high school (1,307 vs. 1,284, respectively, while the most invested workers had the most labor force involvement, 2,629 hours; see Staff and Mortimer 2007: Table 2, 1178). Clearly, the teenager's *pattern* of work investment over time is a more telling indicator of the orientations of adolescents and their achievement of "balance" between schooling and working than simply a count of their hours of work.

The YDS team has also examined the teens' assessments of the quality of their work. Those who worked longer hours (the most invested and sporadic workers) were more likely than the less invested to report learning and advancement opportunities in their jobs and higher psychological engagement in their work. In many ways, their work was more "adult-like" than that of the occasional and steady workers, with longer hours, higher earnings, and greater intrinsic and extrinsic rewards, as well as more work stressors.

We found that those ninth graders who would likely face greater obstacles in pursuing higher education invested more in paid work during high school. Lower grades and a lack of engagement in school were associated with higher intensity employment in the succeeding years (Mortimer 2003). Lower grades, strong peer orientation, and frequent problem behavior preceded a "sporadic" work pattern. In contrast, those ninth graders whose attitudes and resources suggested high potential for success in school restricted their labor force participation by pursuing "steady" and "occasional" work during high school. High academic performance and intrinsic motivation toward school led youth to avoid the "most invested" work pattern. Youth whose parents were more highly educated were more likely to become steady workers than most invested workers. Well-educated parents might well perceive highly intensive work as detrimental to their children's socioeconomic attainment.

The Contemporaneous Effects of Teenage Work Experience

Longitudinal researchers face considerable challenges in parsing out processes of social selection versus social causation. For example, might some teens choose to work longer hours, depending on their prior characteristics? Or might intensive work foster new orientations and behaviors? Because employment patterns—including both the temporal character and quality of work—are not randomly distributed, our models take into account known bases of selection to work. Controlling such selection factors, as well as lagged outcome variables (that is, the dependent variables measured in the ninth grade), we found no evidence that more intensive work reduced grade point average or educational aspirations and plans nor did it affect key indicators of mental health, such as depressed mood or self-esteem (Mortimer et al. 1996; Mortimer and Johnson 1998).

Shanahan and Flaherty (2001) also found that employment did not typically cramp adolescents' "well-rounded" life styles. In fact, the majority of working teens had a pattern of time use that was indistinguishable from other "active" teens who were not employed—spending as much time studying, socializing with friends, and engaging in extracurricular activities. And employment was associated with some positive contemporaneous outcomes. For example, youth who invested more in work during high school, the "steady" and "most invested" workers, developed more confidence in their capacities as workers (Cunnein, Martin, and Mortimer 2009; Mortimer 2003). Confirming other research (Staff and Uggen 2003), however, more intensive work predicted problem behaviors, such as alcohol use (McMorris and Uggen 2000).

The quality of adolescent work was found to be linked to a host of psychological orientations with strong implications for subsequent development and achievement. For example, those who had more learning opportunities in their jobs attached higher levels of importance to both intrinsic and extrinsic occupational rewards (Mortimer et al. 1996). The challenges that prompt learning could raise expectations about the quality of future work. Experiences of success in the workplace, which validated the teens' roles as workers, also enhanced their general sense of efficacy (Finch et al. 1991; Grabowski, Call, and Mortimer 2001). Opportunities for advancement were particularly important in building efficacy among those with limited educational ambitions (Finch et al. 1991). Moreover, support from work supervisors heightened adolescents' anticipated self-efficacy as adults in the domains of work, family, and health (Cunnein et al. 2009). In contrast, stressors at work (e.g., overload, role conflict, exposure to noxious conditions) heightened adolescents' depressed mood and jeopardized their self-concepts (Mortimer, Harley, and Staff 2002; Shanahan et al. 1991;).

The benefits of multiple roles in adulthood are well documented (Thoits 1983), as they provide access to social relationships, variety in activities, and opportunities to cope with challenges. Not having all of "one's eggs in the same basket" enables tradeoffs in psychological investment when difficulties are confronted in particular roles, mitigating threats to self-esteem. Consistently, Call and Mortimer (2001) found that adolescent work can function as an "arena of comfort" (Simmons 2001) when there are good relationships with supervisors, few stressors, and other positive conditions, alleviating distress when teens confront problems in other spheres.

Still, it must not be concluded that adolescent and adult workers are exactly alike in their responses to work conditions. Consistent with Elder's principle of timing, our research suggested one striking difference. Whereas self-directed work promotes many aspects of positive psychological functioning among adults (Kohn and Schooler 1983), for adolescents indicators of decision-making autonomy were associated with distress (Shanahan, et al. 1991). Given novice workers' lack of experience and skill, they seemed to need guidance and clarity of instruction rather than self-direction. Consistently, Staff and Uggen (2003) found that "adult-like" autonomous work was associated with increased twelfth grade deviance in school, alcohol use, and the likelihood of arrest. Work that was more stage-appropriate, that is, perceived to be more compatible with school and providing opportunities for learning, was associated with more limited deviant behavior.

Given the substantial evidence for positive consequences of "high quality" work experiences, it becomes important to know whether adolescents have high quality jobs. Most teens' evaluations of the quality of their jobs were highly positive. For example, only a minority of working adolescents (in the eleventh grade) felt that their jobs did not provide them with a chance to learn new things (15 percent) or challenges (19 percent), placed them under time pressure (31 percent), or subjected them to role conflict (22 percent).

The Longer-term Consequences of Teen Work for Socioeconomic Attainment

Relatively few studies have examined the impact beyond high school of teenage investment in work or the quality of work. This neglect is consistent with the common assumption that teen work is inconsequential in the long term because it is part-time, transient, and has little connection to adult careers. However, a basic tenet of life course social psychology is that experiences that influence human development are cumulative. According to Elder's principle of life span development, "human development and aging are lifelong processes"

(Elder et al. 2003:11). To understand developments and achievements in any given phase requires looking back to earlier experiences that paved their way.

Consistent with this principle, four years after high school, YDS youth who experienced stressors in their jobs as adolescents (time pressure, exposure to noxious work conditions, overload, lack of clarity in job tasks, and responsibility for things outside their control) were more resilient when faced with the same stressors than those who did not have these preparatory experiences (Mortimer and Staff 2004). The same work experiences that were experienced as distressing in adolescence appeared to produce stressful outcomes later, enhancing coping skills and increasing adaptive capacity in the longer term (Shanahan and Mortimer 1996).

Our analyses have focused on two important attainment outcomes of early work experience. The first is the highly coveted four-year college degree. By estimating a discrete time logit model of time to a BA degree, controlling many bases of selection to work and other variables likely to affect educational attainments, Jeremy Staff and I (2007) showed that youth who worked steadily during high school (the high duration/low intensity workers) had a clear advantage in attaining their degrees. These youth gravitated toward four-year colleges after high school and demonstrated a very similar combination of schooling and working as they pursued postsecondary education. It was as if their time management skills and early experiences as workers enabled them to be successful in enacting the same "juggling act" during their subsequent academic careers.

As noted above, youth who appeared to have the greatest educational promise in the ninth grade were more likely to become steady or occasional workers during the ensuing years of high school, and youth with lower educational promise had a greater propensity for the most invested or sporadic (low duration/high intensity) work pattern. Those youth with low academic promise who nonetheless managed to pursue the most favorable, steady work trajectory, however, were five times more likely to obtain BA degrees than their counterparts who followed a sporadic work pattern (Staff and Mortimer 2007: Table 5, 1184; see also Mortimer, Staff, and Oesterle 2003). Youth with low promise also benefitted from combining school and part-time work *after* high school. In fact, each additional year of school and part-time work following high school tripled their odds of bachelor's degree receipt.

Second, the YDS team investigated a subjective indicator of attainment: the respondents' own evaluations of their jobs as their "careers." Following a question about occupational goals, they were asked if their current jobs were unrelated to their career objectives, provided skills and knowledge that would increase the likelihood of attaining their careers, or whether they were already in jobs that matched their career goals. The most invested (high duration/high intensity) adolescent workers, having previously been exposed to more "adult like" work—more demanding, challenging, and engaging work that provided more learning opportunities, but also more stressful work—clearly had the advantage. They moved more quickly toward self-identified "career" jobs than those following the other patterns (Mortimer et al. 2008), typically after some postsecondary education in a community college or vocational institute.[2] Sporadic workers had the most negative long-term outcomes, being more likely to be idle—neither at work nor in school—during the years following high school.

---

[2]Distinct pathways of educational attainment and career establishment were also identified during the transition from school to work, using multi-level latent class analysis. Of greatest relevance here, steady workers during high school were more likely than sporadic workers to avoid floundering and to achieve self-identified careers, even after controlling socio-economic background, academic promise, economic orientations, and other relevant predictors.

Our findings suggest that neither the wholesale condemnation of teen employment, nor the uncritical celebration of youth work, is in order. Youth employment is diverse in its quality and temporal patterning over time and its consequences depend on this variation. Based on the linkages between early work patterns, educational attainment and career establishment, it is apparent that the socioeconomic career starts well before the first job after leaving school (Sewell and Hauser 1975, 1976; Spenner and Featherman 1978). Moreover, the quality of teen work is found to have significant effects on youth's values and self-concepts.

The Exercise of Agency during the Transition to Adulthood

Commentators continually proclaim that the transition to adulthood has become increasingly diversified, uncertain, and precarious, and that contemporary societies are replete with risks of all kinds (Beck 1992). Manifold changes in the world of work—increasingly rapid technological change, non-standard employment contracts, and the virtual disappearance of predictable, long-term careers—would seemingly undermine the effective exercise of agency (Heinz 2003). Unlike other societies with stronger institutional bridges from school to work (Hansen, Mortimer, and Kruger 2001; Mortimer and Kruger 2000; Mortimer, Oesterle, and Kruger 2005;), youth in the United States navigate this transition with relatively meager societal support and considerable floundering. All of this might lead to the expectation of little connection between early achievement orientations and behaviors and subsequent educational and occupational attainments among contemporary young people.

Our findings indicate, to the contrary, that adolescents, in pursuing their high school work trajectories, do indeed act agentically. We catch a glimpse of these agentic processes by examining the reasons youth gave for seeking employment (Mortimer 2003). For example, steady workers were especially likely to report that they sought employment to save for their future educations. Thus, youth who see themselves as developing their human capital through education, seek employment like their less ambitious peers, but they restrict their work hours. They also continue to combine part-time work with schooling after high school, a combination which fosters four-year degree attainment as well as hourly wage growth (Staff and Mortimer, forthcoming).

In contrast, those teenagers who lacked the interest and resources to pursue higher education sought to enhance their human capital, that is, prepare themselves for gainful work, through the jobs they held during high school. The "most invested" workers were most likely to say they sought their early jobs to learn new skills. Accordingly, the "most invested" work pattern precedes a more rapid departure from school and movement into self-identified "careers." Consistent with an agentic interpretation, diverse high school work patterns appear to constitute strategic movement toward outcomes that are consistent with youth's earlier goals, resources, and motivations. Most problematic are the youth who do not acquire human capital either through employment or educational investment.

Other patterns indicated that adolescents' plans, articulated in the senior year of high school, regarding coresidence with parents, expected age at marriage, and educational goals, were significantly predictive of post high school experiences (Pimentel 1996). In fact, without aspiration to graduate from college, the youth had virtually no chance of achieving this lofty goal—only 1 of 167 seniors who did not plan to graduate from college did so by the age of 26–27; among those who did plan to get a college degree, 43 percent were successful (Uno et al. 2010).

Monica Johnson and I (2011) have found that occupational values expressed at age 21 and 22 predicted intrinsic and extrinsic work experiences a decade later. Interestingly, the most positive outcomes accrued to those who were intrinsically, rather than extrinsically, oriented to the rewards of work. Intrinsic values fostered greater self-direction and more intrinsic

rewards, higher occupational status, and job security. Those who were more extrinsically oriented in their early twenties not only achieved fewer intrinsic rewards, but also fewer extrinsic rewards. They managed to obtain higher biweekly earnings only by increasing their hours of work, not via higher wage rates. These findings extend the status attainment model social psychologically, as they show that early judgments about the qualities of work matter for long-term socioeconomic success.

Hitlin and Elder (2007) emphasize that the effective exercise of agency requires optimism about one's life chances. The high school students who believed, optimistically, that they would be able to acquire jobs that paid well, jobs that they enjoyed, and that they would be able to own their own homes were more likely to be taking steps to go to college, such as writing for applications, taking the necessary examinations, talking to counselors, and submitting applications (Grabowski et al. 2001). This finding further affirms the importance of teenage work experiences that heighten the youth's sense of competence in the economic realm (Cunnein et al. 2009; Finch et al. 1991). These optimistic beliefs, conceptualized as domain-specific economic efficacy, turned out to be key psychological precursors to successful transitions to adulthood, including educational and income attainments, financial independence from parents, and the avoidance of early child-bearing (Lee and Mortimer 2009; see also Mortimer, Staff and Lee 2005). Shanahan and Bauer (2004) further demonstrate the benefits of an early agentic orientation; adolescent mastery reduced the likelihood of negative life events (e.g., serious financial problems, a serious personal injury or illness, etc.) after high school.

Guided by the premises of life course social psychology, the YDS team has assessed the importance of timing in agentic action. The considerable openness of the American educational system, coupled with the still-prevalent "contest" ideology (Turner 1960) of continuous opportunities for "late bloomers," lead many young people (and their elders) to think that occupational decision-making, as well as other domains of agentic planning, have no great urgency. Youth are encouraged to take their time so as to avoid premature selection and attendant opportunity costs. Even those who graduate from college may have little inkling about what kind of employment they would like to pursue. One of our college-graduate interviewees told us she had at least ruled out the possibility of becoming an astronaut (Mortimer 2003). Nonetheless, our analyses indicate the virtues of agentic thinking and goal setting. Through a process of vocational exploration, young people can move toward jobs that represent increasingly good "fits" to their goals, interests, and abilities. Our findings indicate substantial benefit to those who "settled" on a career choice within the first six years after high school, by age 23 or 24. These "timely deciders," whose vocational choices had crystallized early on, were more likely to obtain college degrees and showed greater commitment to work (Zimmer-Gembeck, and Mortimer 2007) than those who were still undecided in their mid-twenties, wavering between quite different vocational endeavors.

Economic Losses during the Great Recession

Currently, in collaboration with the international investigative network, Youth in the Great Recession Initiative, led by Glen Elder, John Bynner, and Walter Heinz, the YDS team has begun to examine the precursors and consequences of employment problems. Almost one in five (18.9 percent) of YDS panel members suffered unemployment during the recent "Great Recession" from 2007 to 2009. Our research indicates that agentic orientations and behaviors earlier in life have affected the young adults' success in weathering the present economic downturn. Again building on Hitlin and Elder's conceptualization of agency, Mike Vuolo, Jeremy Staff, and I (forthcoming) identified three agentic pathways of transition to adulthood, based on multilevel latent class modeling of educational aspirations, the certainty of occupational goals, and job search strategies from age 18 to 30. The first

group, representing the most agentic youth, had consistently high educational aspirations (a BA or more education), they were highly certain about their occupational goals, and they engaged in active, multimethod job search strategies before moving into the "not searching" state (having obtained employment). The second category constituted the least agentic who showed declining educational aspirations and decreasing certainty over career goals; they also exhibited fewer job search activities later in the transition. A third group exhibited "flexible agency": aspirations for a BA degree diminished and aspirations for an associates or vocational/technical degree increased over time, while relatively high certainty about career goals was maintained. This group most quickly moved into the "not searching" state as they acquired their careers.

Of greatest interest from the perspective of life course social psychology, these long-term agentic orientations and behaviors during the transition to adulthood (from age 18 to30) predicted the youth's capacity to "weather" the Great Recession when they reached their midthirties As might be expected, those who followed the most agentic pathway were highly successful in avoiding unemployment and wage loss: they were less likely to be unemployed in 2009, suffered fewer months of unemployment from 2007 to 2009, and had higher wages in 2009 than those who followed the least agentic pathway. But those who showed increasing propensity toward intermediate educational credentials, while maintaining strong crystallization of career goals, also exhibited resiliency through the economic downturn; in fact, they were not significantly different from the most agentic in their likelihood of unemployment and wage rates. What is most telling is that these agentic pathways retained their predictive power even when educational attainment and career establishment, measured just before the recession, were controlled. These patterns show strong parallels with Glen Elder's (1974) findings during the Great Depression that highlighted the crystallization of career goals as important in fostering economic success in the face of economic loss. Clearly, psychological and behavioral manifestations of agency, measurable during the transition to adulthood, have strong implications for adaptation to difficult economic times.

The YDS is also documenting the perennial costs of economic problems. Precisely because labor market prospects are closely tied to earlier agentic psychological orientations and behavior, it is difficult to disentangle the reciprocal interrelations of occupational success and agentic attitudes. Our fixed effects hierarchical modeling strategy, however, provides strong evidence that the sense of efficacy is vulnerable to spells of unemployment during the transition to adulthood (Mortimer, Kim, and Swartz 2010). The impact of the recent "Great Recession" apparently also extends to work values, as those afflicted by economic loss "lower their sights." Consistent with social psychological theories of dissonance, Johnson, Sage, and Mortimer (2011) show that youth placed less value on job rewards in short supply. For example, with more time unemployed, they placed less importance on the extrinsic rewards of work.

Whereas most concern during times of recession focuses on the plight of those who lose their jobs, job quality may also deteriorate among those who maintain their employment. As work staffs diminish, those left behind may have to do more work, assume responsibility for tasks for which they are unprepared, and increasingly fear job loss themselves. In the aggregate, YDS youth's job security declined between 2005 and 2009 (Johnson et al. 2011) and those who faced increasing job insecurity and declining earnings also placed less emphasis on extrinsic rewards.

Thus, our long-term study, from middle adolescence onwards, has demonstrated the persistent interrelations of work experience, psychological orientations, and achievement. Adolescents' decisions regarding how much to invest in employment and in selecting particular work contexts influence the further course of their development, their

socioeconomic attainments, and their prospects for future well-being. Long term agentic trajectories through the transition to adulthood also are linked to their capacity to weather difficult economic times.

Extension of the YDS to Multiple Facets of Transition to Adulthood

In recent years the YDS has expanded its long-term interest in work and achievement to other domains. Using multilevel latent class modeling techniques (Macmillan and Eliason 2003; Oesterle, et al. 2010) the YDS team has examined the structure of the transition to adulthood. Whereas sociologists and demographers often analyze key transition markers singly, such as leaving home, marriage, and educational completion, this multilevel approach enables identification of configurations of multiple roles at particular times, and pathways between such configurations over time. Five transitional pathways, with distinct timing and sequencing of adult role markers, are linked to youth's subjective identity as an adult as well as the perceived "on time," "early," or "late" timing of transitions (Eliason et al. 2007). The increasing individualization of transitional patterns during this phase of life might be expected to erode normative timetables (Neugarten, Moore, and Lowe 1965; Settersten 2003). Our findings, however, suggest that such norms are indeed alive and well. Moreover, contrary to claims (Arnett 2000) that demographic markers play no role in acquiring an adult identity, feeling like an adult goes hand-in-hand with family formation, especially parenthood (Shanahan et al. 2005).

Whereas adult identities and role transitions are undoubtedly reciprocally intertwined, role acquisition often precedes recognition of oneself as an adult. YDS interviews highlight many youths' beliefs that the accumulation of "adult" roles and responsibilities, including parenthood, work, and financial independence, made them feel more like adults (Hartmann and Swartz 2007; Aronson 2008). Johnson (2005) reports that the assumption of family roles engendered shifts in work values as well. Those who became fathers and single mothers, whose employment was critical for meeting the material needs of their families, accentuated the importance of pay, job security, and advancement opportunities.

Uggen and his collaborators reveal integral connections between the acquisition of behavioral markers of adulthood, adult identity, and the cessation of deviance. The more youth take on adult-like prosocial behaviors, such as volunteering (Uggen and Janikula 1999), or acquire adult career-like (vs. "survival") jobs (Huiras, Uggen, and McMorris 2000), the less likely they will be to commit deviant acts or be arrested. Massoglia and Uggen (2010) argue that the cessation of deviant acts and adolescent-like behaviors, such as excessive partying and drunk driving, is a critical dimension of the transition to adulthood. The relinquishment of such behaviors is closely tied to the demographic markers of adulthood, as well as to the acquisition of a subjective adult identity.

As the transition to adulthood has lengthened, contemporary youth have become more dependent on their parents. Popular media accounts conjure up images of "helicopter parents" hovering over their children, preventing them from becoming adults. But some social scientists counter that the bridge from adolescence to adulthood has become harder to cross, with many more obstacles along the way. In the absence of strong social safety nets, parents step in with financial, residential, and other forms of aid. Swartz and her colleagues (2011) have recently utilized YDS longitudinal data to adjudicate between these perspectives. Their fixed effects multi-level growth modeling strategy showed that parental residential and financial aids are, in fact, closely tied to youth's needs, particularly when they are in school, when they are unemployed or have full-time work disruptions, and when they experience other negative life events. However, parents pull back when children leave school, increase their earnings, and form their own families. In short, parents give support to

their children when the situation threatens the children's capacity to cope by themselves. Parents do so in the interest of promoting their human capital development through education ("scaffolding") and to help them overcome the challenges of negative life events (acting as "safety nets"). At the same time, however, such parental assistance may jeopardize the youth's sense of identity as an adult and erode a sense of competence (Mortimer et al. 2010).

Of course, patterns of transition to adulthood are not randomly distributed; despite the prominent heralding of a new positive stage of "emerging adulthood," our analyses suggest quite divergent patterns of transition dependent on unequal social origins. More privileged youth attend college, where they enhance their human capital and are integrated with their communities through volunteering (Oesterle, Johnson, and Mortimer 2004). In transitioning from school to work, more advantaged youth experience focused exploration and progressive movements from job to job, whereas the less advantaged are prone to "floundering" (Staff 2007; Staff and Mortimer 2008; Vuolo, Mortimer, and Staff 2008).

With respect to family formation, youth from single parent families move out of the parental home earlier than those from intact families, as girls escape from onerous household chores (Cooney and Mortimer 1999). Women from lower class origins more often experience early parenthood and rear their children alone or with partners whose contributions to family work do not meet their expectations (Aronson 1999). Pathways involving early parenthood are particularly disadvantageous with respect to young adult mental health (Baiocchi et al. 2010; Falci, Mortimer, and Noel 2010; Hernandez et al. 2007).

Young adults are also differentially subject, depending on their social class and gender, to work-related problems and interactions, including work-family conflict. Kelly and Ammons (2008) find that young people with lower educational attainments experience more family-to-work interference, given their early family formation and poor working conditions (e.g., limited control over work hours). Somewhat ironically, "family friendly" work policies and benefits are more available to higher income young workers who need them less. Financially vulnerable women and men also experience more sexual harassment in the workplace (Uggen and Blackstone 2004), which has long-term consequences for depressed mood for both males and females (Houle et al. 2011). The most disadvantaged youth in the YDS panel have experienced arrest, incarceration, and welfare dependency, with long-term negative consequences for their civic participation (Swartz et al. 2009; Uggen and Manza 2002).

These extensions of the YDS into new domains illustrate the strong potential of this unique longitudinal data archive to address a wide range of questions of interest to life course social psychologists.

The Future of the YDS: The Second Generation Study

The YDS team has recently embarked on a study of the second generation: the children of the cohort that has been followed for almost 25 years. Our purpose is to understand how the experiences of the parents—with respect to education and work, interpersonal relationships and family formation, prosocial behavior and deviance—influence the attitudes and behaviors of their children. Many studies have examined the influences of parental orientations and parenting practices on child development; few have considered the implications of parental experiences and trajectories, starting when the parents were about the same age as the child subjects. In doing so, life course social psychology is extended to "linked lives" of intergenerational influence (Elder et al. 2003). Since this research began in 2009, targeting children age 11–20, and the first waves of data have only recently become available, there are few findings to report.

Hussemann, Mortimer, and Zhang (2011) have examined bases of selection into the second generation child sample. Given the long-term involvement of the parents in the YDS, we had expected that the recruitment of their children into the Second Generation study would be easy. After two more years of intensive recruitment, we have obtained consent from almost 60 percent of the parents whose children were eligible for participation, yielding a bigenerational panel of 227 consenting parents and 349 child participants.[3] Although this is quite good for studies that require active parental consent, we had hoped to do better.

Unlike the usual situation in which little or no information is available about parents who do not provide consent, the YDS data archive for these parents includes a wide range of demographic and behavioral indicators. The male participants were much less likely to allow their children to participate than the female participants. Parents who consented during the first two years of recruitment were also more highly educated, more likely to be married or cohabiting than single, more altruistically oriented, more civically engaged, and less deviant in their behaviors. This general pattern points to a worrisome message for social scientists studying child and adolescent development. Investigations may miss the very families that are of greatest interest and in most need of help through research-based interventions—those who have more problems and poorer adaptations.

The YDS team has also begun to compare the first and second generation's experiences during adolescence, initially focusing on work. The second generation is much less likely to be employed than their parents were as teenagers, but somewhat more likely to be doing volunteer work. We are currently examining how parental attainments and economic setbacks during the Great Recession, as well as during the transition to adulthood, affect the achievement-related attitudes and behaviors and the mental health of their children.

Conclusion

Building on the social structure and personality, life course, and status attainment perspectives in social psychology, the Youth Development Study has tried to understand the character of teenage work experience and its contemporaneous effects; the consequences of early work, well before the completion of schooling, for the future socioeconomic career; and the diversity of pathways from school to work and in the demographic transitions from adolescence to adulthood. The analyses reveal that employment both reflects adolescents' prior orientations and influences their development over time. Based on the linkages between temporal patterns of adolescent employment, BA receipt, and "career" acquisition, we conclude that adolescent jobs are an integral element of the socioeconomic career. The salutary consequences of agentic action are demonstrated despite dramatic change in the transition to adulthood and in the labor force. The findings suggest that agentic trajectories over a relatively long period of time have significant consequences for the capacity to adapt to declining labor markets, even net of educational attainments.

Like most longitudinal researchers, we would like to continue to follow our panels of adults and children to enable continued study of the effects of earlier life events on subsequent trajectories in work, family, and community. While this depends on continued funding, it is clear that the data will be available to researchers in perpetuity. The first 12 (of 18) waves of data (from age 14 to 26) from the YDS cohort have been uploaded onto the ICPSR archive, and that series will be extended to the next three waves shortly. The second generation child data will similarly be publically available in due time. I invite other scholars to join us in the analyses of this vast data archive.

---

[3]After adding a monetary incentive in the third year of recruitment, the consent rate among eligible parents increased to 67 percent (277/415), and 95 more children have been added (yielding a total sample of 444 children to date).

The YDS contains a wealth of information about many aspects of adolescents' and young adults' lives—including school and work, economic well-being, family relationships, civic involvements, deviance and victimization, self-concepts, mental and physical health, goals for the future, and many other attitudinal and behavioral indicators.[4] By working together, researchers will continue to illuminate key questions in life course social psychology concerning the consequences of early work and other adolescent experiences for the school-to-work transition, socioeconomic attainment, and other important life outcomes; the structure of the transition to adulthood and its consequences for youth identity and behavior; agentic trajectories that extend across life stages as well as intergenerationally; and the shifting interplay of individual agency and life outcomes in changing historical contexts.

Acknowledgments

References

Alwin, Duane F.; McCammon, Ryan J. Generations, Cohorts, and Social Change. In: Mortimer, JT.; Shanahan, MJ., editors. Handbook of the Life Course. New York: Kluwer Academic/Plenum Publishers; 2003. p. 23-49.

Aries, Philippe. Centuries of Childhood: A Social History of Family Life. Baldick, Robert, translator. New York: Knopf; 1962.

Arnett, Jeffrey J. Emerging Adulthood: A Theory of Development from the Late Teens through the Twenties. American Psychologist. 2000; 55:469–80. [PubMed: 10842426]

Aronson, Pamela. The Balancing Act: Young Women's Expectations and Experiences of Work and Family. Research in the Sociology of Work. 1999; 7:55–83.

Aronson, Pamela. The Markers and Meanings of Growing Up: Contemporary Young Women's Transition from Adolescence to Adulthood. Gender and Society. 2008; 22:56–82. [PubMed: 18418470]

Baiocchi, Arturo; Duke, Naomi; Kim, Minzee; Mortimer, Jeylan T. Socioeconomic Health Disparities and the Transition to Adulthood. Presented at the annual meeting of the American Sociological Association; Atlanta. August 14–17; 2010.

Beck, Ulrich. Risk Society. Newbury Park, CA: Sage; 1992.

Blustein, David L. The Role of Work in Psychological Health and Well-being: A Conceptual, Historical, and Policy Perspective. American Psychologist. 2008; 63:228–40. [PubMed: 18473608]

Call, Kathleen Thiede; Mortimer, Jeylan T. Arenas of Comfort in Adolescence: A Study of Adjustment in Context. Mahwah, NJ: Lawrence Erlbaum; 2001.

Clausen, John S. Adolescent Competence and the Shaping of the Life Course. American Journal of Sociology. 1991; 96:805–42.

Committee on the Health and Safety Implications of Child Labor. Protecting Youth at Work: Health, Safety, and Development of Working Children and Adolescents in the United States. Washington, D.C: National Academy Press; 1998.

Cooney, Teresa M.; Mortimer, Jeylan T. Family Structure Differences in the Timing of Leaving Home: Exploring Mediating Factors. Journal of Research on Adolescence. 1999; 9:367–93.

---

[4]I invite those who would like to explore the use of YDS data to address their own research questions to examine our e-codebook. Organized by domain (e.g., family, work, etc.), this resource lists each variable, its waves of inclusion, exact question wordings and response options (http://www.soc.umn.edu/research/yds/YDScrosswaveCodebook.html).

Cunnein, Keith A.; Rogers, Nicole Martin; Mortimer, Jeylan T. Adolescent Work Experience and Self-Efficacy. International Journal of Sociology and Social Policy. 2009; 29:164–75. [PubMed: 19750144]

Elder, Glen H, Jr. Children of the Great Depression. Chicago: University of Chicago Press; 1974.

Elder, Glen H, Jr. Age Differentiation and the Life Course. Annual Review of Sociology. 1975; 1:165–90.

Elder, Glen H, Jr. Social Structure and Personality: A Life Course Perspective. In: Graff, H.; Monaco, P., editors. Quantification and Psychology: A New History. Washington, D.C: University Press of America; 1980. p. 108-90.

Elder, Glen H, Jr. Perspectives on the Life Course. In: Elder, GH., Jr, editor. Life Course Dynamics: Trajectories and Transitions, 1968–1980. Ithaca, NY: Cornell University Press; 1985. p. 22-49.

Elder, Glen H., Jr; Johnson, Monica K.; Crosnoe, Robert. The Emergence and Development of Life Course Theory. In: Mortimer, JT.; Shanahan, MJ., editors. Handbook of the Life Course. New York: Kluwer Academic/Plenum Publishers; 2003. p. 3-19.

Elder, Glen H., Jr; Rockwell, Richard C. The Life Course and Human Development: An Ecological Perspective. International Journal of Behavioral Development. 1979; 2:1–21.

Eliason, Scott R.; Mortimer, Jeylan T.; Vuolo, Michael; Tranby, Eric. A Sense of Timing: The Relationship between Life Course Structures in Pathways to Adulthood and Subjective Perceptions. Presented at the annual meeting of the American Sociological Association; New York City. August 11–14; 2007.

Emirbayer, Mustafa; Mische, Ann. What Is Agency? American Journal of Sociology. 1998; 103:962–1023.

Falci, Christina; Mortimer, Jeylan T.; Noel, HarmoniJoie. Parental Timing and Depressive Symptoms in Adulthood: Gender, Stressors, and Resources. Advances in Life Course Research. 2010; 15:1–10. [PubMed: 21197392]

Featherman, David L. Schooling and Occupational Careers: Constancy and Change in Worldly Success. In: Brim, OG., Jr; Kagan, J., editors. Constancy and Change in Human Development. Cambridge: Harvard University Press; 1980. p. 675-738.

Finch, Michael D.; Shanahan, Michael J.; Mortimer, Jeylan T.; Ryu, Seongryeol. Work Experience and Control Orientation in Adolescence. American Sociological Review. 1991; 56:597–611.

Gager, Constance T.; Cooney, Teresa M.; Call, Kathleen T. The Effects of Family Characteristics and Time Use on Teenagers' Household Labor. Journal of Marriage and the Family. 1999; 61:982–94.

Grabowski, Lorie S.; Call, Kathleen T.; Mortimer, Jeylan T. Global and Economic Self-Efficacy in the Educational Attainment Process. Social Psychology Quarterly. 2001; 64:164–79.

Greenberger, Ellen; Steinberg, Laurence. When Teenagers Work: The Psychological and Social Costs of Adolescent Employment. New York: Basic Books; 1986.

Hall, G Stanley. Adolescence: Its Psychology and its Relations to Physiology, Anthropology, Sociology, Sex, Crime, Religion, and Education. Vol. 1. New York: D. Appleton; 1904.

Hansen, David M.; Mortimer, Jeylan T.; Kruger, Helga. Adolescent Part-Time Employment in the United States and Germany: Diverse Outcomes, Contexts, and Pathways. In: Pole, C.; Mizen, P.; Bolton, A., editors. Hidden Hands: International Perspectives on Children's Work and Labour. London: Routledge Falmer Press; 2001. p. 121-38.

Hartmann, Douglas; Swartz, Teresa T. The New Adulthood? The Transition to Adulthood from the Perspective of Transitioning Young Adults. Advances in Life Course Research. 2007; 11:253–86.

Heinz, Walter R. From Work Trajectories to Negotiated Careers: The Contingent Work Life Course. In: Mortimer, JT.; Shanahan, MJ., editors. Handbook of the Life Course. New York: Kluwer Academic/Plenum Publishers; 2003. p. 185-204.

Hernandez, Elaine M.; Eliason, Scott; Lee, Jennifer C.; Tranby, Eric; Staff, Jeremy; Mortimer, Jeylan T. Latent Life Pathways of Transition to Adulthood and Mental Health. Presented at the annual meeting of the American Sociological Association; New York City. August 11–14; 2007.

Hitlin, Steven; Elder, Glen H, Jr. Agency: An Empirical Model of an Abstract Concept. Advances in Life Course Research. 2007; 11:33–67.

Houle, Jason N.; Staff, Jeremy; Mortimer, Jeylan T.; Uggen, Christopher; Blackstone, Amy. The Impact of Sexual Harassment on Depressive Symptoms during the Early Occupational Career. Society and Mental Health. 2011; 2:89–105. [PubMed: 22140650]

House, James S. The Three Faces of Social Psychology. Sociometry. 1977; 40:161–77.

House, James S. Social Structure and Personality. In: Rosenberg, M.; Turner, RH., editors. Social Psychology: Sociological Perspectives. Boston, MA: Allyn and Bacon; 1981. p. 525-61.

Huiras, Jessica; Uggen, Christopher; McMorris, Barbara. Career Jobs, Survival Jobs, and Employee Deviance: A Social Investment Model of Workplace Misconduct. Sociological Quarterly. 2000; 41:245–63.

Hussemann, Jeanette M.; Mortimer, Jeylan T.; Zhang, Lei. Exploring the Correlates of Parental Consent for Child Survey Participation: An Intergenerational Longitudinal Study. Presented at the annual meeting of the American Sociological Association; Las Vegas. August 20–23; 2011.

Johnson, Monica Kirkpatrick. Family Roles and Work Values: Processes of Selection and Change with Age. Journal of Marriage and Family. 2005; 67:352–69.

Johnson, Monica Kirkpatrick; Mortimer, Jeylan T. Origins and Outcomes of Judgments about Work. Social Forces. 2011; 89:1239–60.

Johnson, Monica Kirkpatrick; Sage, Rayna. Work Value Change and the U.S. Economic Recession. Presented at the annual meeting of the American Sociological Association; Las Vegas. August 20–23; 2011.

Kalleberg, Arne L.; Reskin, Barbara F.; Hudson, Ken. Bad Jobs in America: Standard and Nonstandard Relations and Job Quality in the United States. American Sociological Review. 2000; 65:256–78.

Kelly, Erin L.; Ammons, Samantha K. Social Class and the Experience of Work-Family Conflict during the Transition to Adulthood. New Directions for Child and Adolescent Development. 2008; 119:71–84. [PubMed: 18330915]

Kerckhoff, Alan C. Social Stratification and Mobility Processes: The Interaction between Individuals and Social Structures. In: Cook, K.; Fine, GA.; House, JS., editors. Sociological Perspectives on Social Psychology. New York: Allyn and Bacon; 1994. p. 476-96.

Kett, Joseph F. Adolescence and Youth in Ninetenth-Century America. Journal of Interdisciplinary History. 1971; 2:283–98. [PubMed: 11632272]

Kohn, Melvin L. Class and Conformity: A Study in Values. Homewood, IL: Dorsey; 1969.

Kohn, Melvin L.; Schooler, Carmi. Work and Personality: An Inquiry into the Impact of Social Stratification. Norwood, NJ: Ablex; 1983.

Lee, Jennifer C.; Mortimer, Jeylan T. Family Socialization, Economic Self-Efficacy, and the Attainment of Financial Independence in Early Adulthood. Longitudinal and Life Course Studies Journal. 2009; 1:45–62.

Lorence, Jon; Mortimer, Jeylan T. Job Involvement through the Life Course: A Panel Study of Three Age Groups. American Sociological Review. 1985; 50:618–38.

Macmillan, Ross; Eliason, Scott R. Characterizing the Life Course as Role Configurations and Pathways: A Latent Structure Approach. In: Mortimer, JT.; Shanahan, MJ., editors. Handbook of the Life Course. New York: Kluwer Academic/Plenum; 2003. p. 529-54.

Markus, Hazel; Cross, Susan; Wurf, Elissa. The Role of the Self-system in Competence. In: Sternberg, RJ.; Kolligan, J., Jr, editors. Competence Considered. New Haven: Yale University Press; 1990. p. 205-26.

Massoglia, Michael; Uggen, Christopher. Settling Down and Aging Out: Toward an Interactionist Theory of Desistance and the Transition to Adulthood. American Journal of Sociology. 2010; 116:543–82.

Mirowsky, John. Wage Work or Creative Work? Society and Mental Health. 2011; 2:73–88.

McLeod, Jane D.; Lively, Kathryn J. Social Structure and Personality. In: Delamater, J., editor. Handbook of Social Psychology. New York: Kluwer Academic/Plenum Publishers; 2003. p. 77-102.

McMorris, Barbara; Uggen, Christopher. Alcohol and Employment in the Transition to Adulthood. Journal of Health and Social Behavior. 2000; 41:276–94. [PubMed: 11011505]

Mortimer, Jeylan T. Work Exerience and Psychological Change throughout the Life Course. In: Riley, M.; Huber, B.; Hess, BB., editors. Social Structure and Human Lives. Beverly Hills: Sage; 1988. p. 178-90.

Mortimer, Jeylan T. Working and Growing Up in America. Cambridge: Harvard University Press; 2003.

Mortimer, Jeylan T.; Finch, Michael D.; Dennehy, Katherine; Lee, Chaimun; Beebe, Timothy. Work Experience in Adolescence. Journal of Vocational Education Research. 1994; 19:39–70.

Mortimer, Jeylan T.; Finch, Michael D.; Maruyama, Geoffrey. Work Experience and Job Satisfaction: Variation by Age and Gender. In: Mortimer, JT.; Borman, K., editors. Work Experience and Psychological Development through the Life Span. Boulder, CO: Westview Press; 1988. p. 109-55.

Mortimer, Jeylan T.; Finch, Michael D.; Owens, Timothy J.; Shanahan, Michael J. Gender and Work in Adolescence. Youth and Society. 1990; 22:201–24.

Mortimer, Jeylan T.; Finch, Michael D.; Ryu, Seongryeol; Shanahan, Michael J.; Call, Kathleen Thiede. The Effects of Work Intensity on Adolescent Mental Health, Achievement, and Behavioral Adjustment: New Evidence from a Prospective Study. Child Development. 1996; 67:1243–61. [PubMed: 8706520]

Mortimer, Jeylan T.; Harley, Carolyn; Staff, Jeremy. The Quality of Work and Youth Mental Health. Work and Occupations. 2002; 29:166–97.

Mortimer, Jeylan T.; Kim, Minzee; Swartz, Teresa Toguchi. Unemployment, Parental Help, and Self-Efficacy during the Transition to Adulthood. IUSSP Seminar on Intergenerational Ties and Transitions to Adulthood; November 8–9, 2010; Milan: Bocconi University; 2010.

Mortimer, Jeylan T.; Kruger, Helga. Pathways from School to Work in Germany and the United States. In: Hallinan, Maureen, editor. Handbook of the Sociology of Education. New York: Kluwer Academic/Plenum Publishers; 2000. p. 475-97.

Mortimer, Jeylan T.; Johnson, Monica Kirkpatrick. Adolescent Part-time Work and Educational Achievement. In: Borman, K.; Schneider, B., editors. The Adolescent Years: Social Influences and Educational Challenges. Chicago: National Society for the Study of Education, University of Illinois; 1998. p. 183-206.

Mortimer, Jeylan T.; Oesterle, Sabrina; Kruger, Helga. Age Norms, Institutional Structures, and the Timing of Markers of Transition to Adulthood. In: Macmillan, Ross, editor. The Structure of the Life Course: Standardized? Individualized? Differentiated? Advances in Life Course Research. Vol. 9. Greenwich, CT: JAI, Elsevier Science Ltd; 2005. p. 175-203.

Mortimer, Jeylan T.; Pimentel, Ellen Efron; Ryu, Seongryeol; Nash, Katherine; Lee, Chaimun. Part-time Work and Occupational Value Formation in Adolescence. Social Forces. 1996; 74:1405–18.

Mortimer, Jeylan T.; Staff, Jeremy. Early Work as a Source of Developmental Discontinuity during the Transition to Adulthood. Development and Psychopathology. 2004; 16:1047–70. [PubMed: 15704827]

Mortimer, Jeylan T.; Staff, Jeremy; Lee, Jennifer C. Agency and Structure in Educational Attainment and the Transition to Adulthood. Advances in Life Course Research. 2005; 10:131–53.

Mortimer, Jeylan T.; Staff, Jeremy; Oesterle, Sabrina. Adolescent Work and the Early Socioeconomic Career. In: Mortimer, Jeylan T.; Shanahan, Michael J., editors. Handbook of the Life Course. New York: Kluwer Penum Publishers; 2003. p. 437-59.

Mortimer, Jeylan T.; Vuolo, Michael; Staff, Jeremy; Wakefield, Sara; Xie, Wanling. Tracing the Timing of 'Career' Acquisition in a Contemporary Youth Cohort. Work and Occupations. 2008; 35:44–84. [PubMed: 18542713]

Neugarten, Bernice L.; Moore, Joan W.; Lowe, John C. Age Norms, Age Constraints, and Adult Socialization. American Journal of Sociology. 1965; 70:710–17.

Oesterle, Sabrina J.; Hawkins, David; Hill, Karl G.; Bailey, Jennifer A. Men's and Women's Pathways to Adulthood and their Adolescent Precursors. Journal of Marriage and Family. 2010; 72:1436–53. [PubMed: 21113316]

Oesterle, Sabrina; Johnson, Monica Kirkpatrick; Mortimer, Jeylan T. Volunteerism during the Transition to Adulthood: A Life Course Perspective. Social Forces. 2004; 82:1123–49.

Panel on Youth of the President's Science Advisory Committee. Youth: Transition to Adulthood. Chicago: University of Chicago Press; 1974.

Phillips, Sarah; Sandstrom, Kent. Parental Attitudes toward 'Youthwork.'. Youth and Society. 1990; 22:160–83.

Pimentel, Ellen E. Effects of Adolescent Achievement and Family Goals on the Early Adult Transition. In: Mortimer, Jeylan T.; Finch, Michael D., editors. Adolescents, Work, and Family: An Intergenerational Developmental Analysis. Newbury Park, CA: Sage Publications; 1996. p. 191-220.

Settersten, Richard A, Jr. Age Structuring and the Rhythm of the Life Course. In: Mortimer, JT.; Shanahan, MJ., editors. Handbook of the Life Course. New York: Kluwer Academic/Plenum Publishers; 2003. p. 81-98.

Sewell, William; Hauser, Robert. Education, Occupation, and Earnings: Achievement in the Early Career. New York: Academic Press; 1975.

Sewell, William; Hauser, Robert. Causes and Consequences of Higher Education: Models of the Status Attainment Process. In: Sewell, WH.; Hauser, RM.; Featherman, DL., editors. Schooling and Achievement in American Society. New York: Academic Press; 1976. p. 9-27.

Shanahan, Michael J. Pathways to Adulthood in Changing Societies: Variability and Mechanisms in Life Course Perspective. Annual Review of Sociology. 2000; 26:667–92.

Shanahan, Michael J.; Bauer, Daniel J. Developmental Properties of Transactional Models: The Case of Life Events and Mastery from Adolescence to Young Adulthood. Development and Psychopathology. 2004; 16:1095–117. [PubMed: 15704829]

Shanahan, Michael J.; Finch, Michael D.; Mortimer, Jeylan T.; Ryu, Seongryeol. Adolescent Work Experience and Depressive Affect. Social Psychology Quarterly. 1991; 54:299–317.

Shanahan, Michael J.; Flaherty, Brian. Dynamic Patterns of Time Use in Adolescence. Child Development. 2001; 72:385–401. [PubMed: 11333073]

Shanahan, Michael J.; Mortimer, Jeylan T. Understanding the Positive Consequences of Psychosocial Stress. In: Markovsky, B.; Lovaglia, M.; Simon, R., editors. Advances in Group Research. Vol. 13. Greenwich, CT: JAI Press; 1996. p. 189-209.

Shanahan, Michael J.; Porfeli, Erik J.; Mortimer, Jeylan T.; Erickson, Lance. Subjective Age Identity and the Transition to Adulthood: When Does One Become an Adult?. In: Settersten, Richard A., Jr; Furstenberg, Frank F., Jr; Rumbaut, Ruben G., editors. On the Frontier of Adulthood: Theory, Research, and Public Policy. Chicago: University of Chicago Press; 2005. p. 225-55.

Simmons, Roberta G. Comfort with the Self. In: Owens, Timothy; Stryker, Sheldon; Goodman, Norman, editors. Extending Self-Esteem Theory and Research. New York: Cambridge University Press; 2001. p. 198-222.

Spenner, Kenneth I.; Featherman, David L. Achievement Ambitions. Annual Review of Sociology. 1978; 4:373–420.

Staff, Jeremy. Emerging Adulthood and Wage Attainments: Role Exploration versus Floundering during the Transition to Adulthood. Presented at the third conference on Emerging Adulthood; Tucson, Arizona. February 15–16; 2007.

Staff, Jeremy; Messersmith, Emily E.; Schulenberg, John E. Adolescents and the World of Work. In: Lerner, Richard; Steinberg, Laurence, editors. Handbook of Adolescent Psychology. 3. New York: John Wiley and Sons; 2009. p. 270-313.

Staff, Jeremy; Mortimer, Jeylan T. Educational and Work Strategies from Adolescence to Early Adulthood: Consequences for Educational Attainment. Social Forces. 2007; 85:1169–94.

Staff, Jeremy; Mortimer, Jeylan T. Social Class Background and the School-to-Work Transition. New Directions for Child and Adolescent Development. 2008; 119:55–69. [PubMed: 18330914]

Staff, Jeremy; Mortimer, Jeylan T. Explaining the Motherhood Wage Penalty. Demography. Forthcoming.

Staff, Jeremy; Mortimer, Jeylan T.; Uggen, Christopher. Work and Leisure in Adolescence. In: Steinberg, Laurence; Lerner, Richard, editors. Handbook of Adolescent Psychology. 2. New York: John Wiley and Sons; 2004. p. 429-50.

Staff, Jeremy; Uggen, Christopher. The Fruits of Good Work: Early Work Experiences and Adolescent Deviance. Journal of Research in Crime and Delinquency. 2003; 40:263–90.

Steinberg, Laurence; Cauffman, Elizabeth. The Impact of Employment on Adolescent Development. Annals of Child Development. 1995; 11:131–66.

Steinberg, Laurence; Dornbusch, Sanford M. Negative Correlates of Part-Time Employment during Adolescence: Replication and Elaboration. Developmental Psychology. 1991; 27:304–13.

Swartz, Teresa Toguchi; Blackstone, Amy; Uggen, Christopher; McLaughlin, Heather. Welfare and Citizenship: The Effects of Government Assistance on Young Adults' Civic Participation. Sociological Quarterly. 2009; 50:633–65. [PubMed: 19888350]

Swartz, Teresa Toguchi; Kim, Minzee; Uno, Mayumi; Mortimer, Jeylan T.; O'Brien, Kirsten Bengtson. Safety Nets and Scaffolds: Parental Support in the Transition to Adulthood. Journal of Marriage and Family. 2011; 73:414–29. [PubMed: 21660216]

Thoits, Peggy A. Multiple Identities and Psychological Well-being: A Reformulation and Test of the Social Isolation Hypothesis. American Sociological Review. 1983; 48:174–87. [PubMed: 6859677]

Turner, Ralph H. Sponsored and Contest Mobility and the School System. American Sociological Review. 1960; 25:855–66.

Uggen, Christopher; Blackstone, Amy. Sexual Harassment as a Gendered Expression of Power. American Sociological Review. 2004; 69:64–92.

Uggen, Christopher; Janikula, Jennifer. Volunteerism and Arrest in the Transition to Adulthood. Social Forces. 1999; 78:331–62.

Uggen, Christopher; Manza, Jeff. Democratic Contraction? The Political Consequences of Felon Disenfranchisement in the United States. American Sociological Review. 2002; 67:777–803.

Uno, Mayumi; Mortimer, Jeylan T.; Kim, Minzee; Vuolo, Michael C. 'Holding On' or 'Coming to Terms' with Educational Underachievement: A Longitudinal Study of Ambition and Attainment. New Directions for Child and Adolescent Development. 2010; 130:41–56. [PubMed: 21154830]

Vuolo, Michael C.; Mortimer, Jeylan T.; Staff, Jeremy. Floundering during the School-to-Work Transition: A Latent Life Path Approach. Presented at the annual meeting of the American Sociological Association; Boston. August 1–4; 2008.

Vuolo, Michael C.; Staff, Jeremy; Mortimer, Jeylan T. Weathering the Great Recession: Psychological and Behavioral Trajectories in the Transition from School to Work. Developmental Psychology. Forthcoming.

Zimmer-Gembeck, Melanie; Mortimer, Jeylan T. Selection Processes and Vocational Development; A Multi-Method Approach. Advances in Life Course Research. 2007; 11:121–48.