# Have Adolescents Become Too Ambitious? High School Seniors' Educational and Occupational Plans, 1976 to 2000

JOHN REYNOLDS, Florida State University MICHAEL STEWART, Florida State University RYAN MACDONALD, Florida State University LACEY SISCHO, Florida State University

This article tracks changes in high school seniors' educational and occupational plans over a twenty-five year period and assesses whether these plans have become increasingly unrealistic. Comparisons of seniors' career plans with the contemporaneous achievements of high school graduates confirms that high school seniors' ambitions outpace what they are likely to achieve, a gap that is growing over time. Teenagers' increasingly expect that community college will serve as an avenue for higher degrees and professional jobs. Together with the declining influence of grades and curricular track on students' educational and occupational plans, this provides additional evidence that teenagers have become too ambitious. Finally, longitudinal analyses of three cohorts of high school seniors confirm that the positive association between educational plans and attainments is on the decline.

Over the past two decades, American teens have become increasingly ambitious regarding their educational and occupational plans after high school. But does this development serve them well? Our results cast doubt on the benefits not only to them but to society. While some youth clearly benefit, others find themselves in contexts where they are likely to fail. In this case, heightened ambition can lead to disappointment and discouragement rather than optimism and success. Our goal is to identify factors that have contributed to youth's increased ambition in the face of minimal odds for success and to address the implications of this development for U.S. society.

At face value, ambitious educational and occupational plans appear to be advantageous for teenagers as they prepare for the transition to adulthood because they may represent motivation and a willingness to work hard toward one's goals (Spenner and Featherman 1978). Expectations about one's ultimate achievements in schooling and work also reflect a social psychological orientation toward the future that helps "teenagers make sense of their lives" (Schneider and Stevenson 1999:4). Higher expectations are also frequently associated with greater educational and occupational success (Jencks et al. 1979; Shanahan 2000; Spenner and Featherman 1978). As summed up by Barbara Schneider and David Stevenson (1999), "decades of research demonstrate that one of the most important early predictors of social mobility is how much schooling an adolescent expects to obtain" (p. 4).

Co-authors contributed equally and their names are listed in random order. The authors thank Monica Kirkpatrick Johnson, Patricia Yancey Martin, Vincent Roscigno, and the anonymous *Social Problems* reviewers for their helpful feedback. An earlier version of this article was presented at the 2004 meetings of the Southern Sociological Society in Atlanta, Georgia. This work was supported by NSF Grant SES-0137050. Direct correspondence to: John Reynolds, Department of Sociology, Florida State University, Tallahassee, FL 32306-2270. E-mail: john.reynolds@fsu.edu.

Social Problems, Vol. 53, Issue 2, pp. 186–206, ISSN 0037-7791, electronic ISSN 1533-8533.

© 2006 by Society for the Study of Social Problems, Inc. All rights reserved. Please direct all requests for permission to photocopy or reproduce article content through the University of California Press's Rights and Permissions website, at http://www. ucpress.edu/journals/rights.htm.

Others caution, however, that adolescents' expectations may have limited significance for future achievements, especially among more recent cohorts. Educational plans may result from unrealistic self-appraisals, inaccurate information, or other factors unrelated to motivation (Alexander and Cook 1979; Alexander, Entwisle, and Bedinger 1994; Kerckhoff 1977; Rosenbaum 1980). Further, occupational plans are often based on little knowledge of job requirements, and they shift a great deal during the transition to adulthood (Jacobs, Karen, and McClelland 1991; McClelland 1990; Rindfuss, Cooksey, and Sutterlin 1999; Schneider and Stevenson 1999). In fact, scholars have recently expressed concern that today's teenagers are not only more ambitious than ever, they are also more unrealistic concerning their future accomplishments than were past generations of teenagers (Rosenbaum 1998, 2001; Schneider and Stevenson 1999). Left unchecked, teenagers' increasingly unrealistic plans for the future may depreciate the value of their expectations for future achievements by undermining motivation in secondary school, resulting in a lack of academic preparation and frustration down the road (Bohon, Macpherson, and Atiles 2005; Kirst and Venezia 2004; Rosenbaum 2001). Unrealistic expectations and unrealized plans also pose a problem of "lost talent," whereby adolescents and young adults pursue vocations that are misaligned with their actual abilities (Hanson 1994; McClelland 1990; Rindfuss et al. 1999). Unrealized plans and occupational mismatch may lead to other problems as well, such as lower lifetime earnings, risk of substance abuse, or other psychological disorders.

The meaning of trends in educational and occupational expectations, thus, remains unclear, and there has yet to be a thorough assessment of whether the rise in teenagers' ambitions across cohorts truly represents an increasingly unrealistic trajectory. For example, rising educational expectations are not necessarily unrealistic, given trends in higher education over the past 30 years. Intercohort increases in schooling and work expectations may be due, in part, to an opening of opportunity for those previously excluded (Hoffman 1987; Shu and Marini 1998). College enrollments have risen considerably among racial and ethnic minorities and women, reflecting greater opportunities for these groups after the Civil Rights Act and Title IX. From 1972 to 2001, the number of African American high school graduates who went on to college increased from 45 to 55 percent (NCES 2003:Table 185). In addition, young women's educational attainments, which lagged behind men's during the 1960s and 1970s, have been steadily on the rise. Young women currently surpass young men in college enrollment and in earned bachelor's and master's degrees (Jacobs 1996; Snyder and Hoffman 2003).

This article extends past research on expectations and attainments over the life course in four ways: (1) by examining yearly changes in the educational and occupational plans of high school seniors between 1976 and 2000, (2) by assessing trends in the likelihood of success associated with these plans, (3) by estimating how the correlates of future plans have changed during this period, and (4) by comparing the influence of plans on achievements in three classes of high school seniors. The analyses primarily draw from 25 years of comparable, national data to provide the most complete time series study of high school seniors' future plans. We find consistent evidence that high school seniors have become progressively more unrealistic about their future achievements: (1) they increasingly plan to use "high-risk" educational pathways, (2) the gap between their educational and occupational expectations and the concurrent achievements of young adults has grown over time, (3) their expectations are less strongly tied to institutional feedback mechanisms concerning academic ability, and (4) the link between educational plans and subsequent achievements has declined across the high school classes of 1972, 1980, and 1992.

### Background

#### Achievement Expectations: Developmental Resource vs. Unrealistic Ambition

Achievement expectations played an important causal role in earlier research on educational and occupational attainments (e.g., Duncan, Featherman, and Duncan 1972; Sewell and Hauser 1975; Spenner and Featherman 1978). Evidence from the status attainment research tradition consisted of regression analyses of educational or occupational attainments, in which high school students' expectations for the future both mediate the influence of background characteristics and have strong net associations with future attainments. The influence exceeded in size, or was comparable to, the associations for family socioeconomic status, cognitive ability, or parents' expectations. Researchers continue to study expectations to shed light on the life course and the social psychological processes that contribute to achievement and inequality in the United States (Cheng and Starks 2002; Goldsmith 2004; Powers and Wojtkiewicz 2004; Rindfuss et al. 1999).

For almost as long as the benefits of expectations have been reported, some scholars have questioned the meaning behind adolescents' reports of their future plans and have pondered when it is that these plans are likely to have a causal role in shaping future attainments. For example, Karl Alexander and Martha Cook (1979) demonstrated that while some teenagers have longstanding educational plans, others remain undecided about what they expect to achieve or have plans that change from year to year. Students with less concrete plans sometimes give perfunctory responses when asked about what they will ultimately accomplish. Students' responses to survey items asking about their plans tap into an array of cognitive processes. Educational plans could be "vague preferences, flights of fancy conjured up at the spur of the moment, merely reports of a foregone conclusion known practically since birth, or realistic appraisals of the likely course of events" (Alexander and Cook 1979: 202–3). As such, many students' answers could have little direct bearing on their levels of motivation or their future endeavors. Further evidence of variation in the meaning of students' expectations is discernible in the way the practicality and the post hoc accuracy of expectations vary across groups. One study of Baltimore students showed that short term educational expectations were most accurate among white students and students from higher income families (Alexander et al. 1994).

Research on the meaning of teenagers' plans and expectations for the future is critically important because unrealistic expectations are less likely to facilitate future attainments. Even so, the link between the "realism" and benefit of expectations is not often examined in the literature. Alexander and Cook (1979) report that among high school seniors, more recently formulated educational expectations are less influential for attainments (i.e., they have a smaller standardized regression coefficient) than longstanding educational plans. Schneider and Stevenson (1999) find that expectations have their greatest influence when adolescents form "aligned" expectations, meaning that they expect to attain the level of education required by their desired occupation. Or, as others have put it, adolescents' plans are most beneficial when they "accurately reflect their interests, values, and talents" (Shanahan, Hofer, and Miech 2003:196). Those with more concrete, informed educational and occupational plans tend to be more strategic in their choices and make better use of their resources (Clausen 1991; Shanahan et al. 2003).

Additional research suggests that adolescents' expectations have risen so rapidly that they have become increasingly unrealistic, compounding the need for further research on both the meaning of and the trends in teenagers' future plans. Schneider and Stevenson (1999), for instance, find that high school students in 1990 overwhelmingly expected to get a college degree and work in a professional occupation. Yet, in that same year, only 50.6 percent of adolescents who had recently completed high school actually enrolled in college (NCES 2003:Table 186), and professional occupations made up less than 15 percent of the workforce. Given high school students' optimistic appraisals relative to their likely accomplishments, Schneider and Stevenson conclude that youth in 1990 were very ambitious but also ill informed.

These studies demonstrate the seemingly unrealistic nature of many adolescents' plans for the future but also leave several questions unanswered. For one, the assessment of the degree of unrealistic plans is inconsistent across studies. Expectations have been evaluated in terms of their concordance with short term outcomes, in terms of the correspondence between goals for schooling and the schooling required for the successful attainment of their desired occupations, and in terms of the gap between expected attainments and the prevalence of those credentials and occupations in the broader population. Second, to date, no studies used comparable national studies over time to test whether teenagers' expectations are truly becoming increasingly unrealistic, as some have surmised. The best effort was by Schneider and Stevenson (1999) who traced expectations in four cohorts using very different data sources. Finally, no one has tested whether the power of expectations to predict future attainments has declined over time, a trend that would provide further evidence that adolescents' plans have become increasingly unrealistic and therefore less influential for what they achieve in school and the workplace.

#### Factors that Contribute to Adolescents' Unrealistic Expectations

If adolescents' occupational and educational expectations are unrealistic, what might account for the unwarranted rise in ambition across cohorts? Sociologists suggest that rising educational and occupational expectations may be due, in part, to broad changes in the educational system. First, changes within secondary schools may have led students' achievement plans to be increasingly detached from institutional signals that denote successful academic preparation in high school—namely, grades and curricular program (Rosenbaum 1998; Schneider and Stevenson 1999). Teachers and counselors today often feel they lack the authority to dissuade less qualified students from planning to attend college, even those students who make very poor grades (Rosenbaum, Miller, and Krei 1996). In the 1970s and 1980s secondary schools also moved away from overarching curricular tracks to more individualized courses such as Advanced Placement English (Lucas 1999). This development may have encouraged a broader pool of students to perceive themselves as sufficiently prepared for postsecondary education. Second, the growth of community colleges with lower admission standards may have encouraged unrealistic expectations and college-for-all norms among high school students (Rosenbaum 1998). Although other contextual factors surely contribute, this article focuses on two important sources of institutional change to help make sense of the dramatic rise in teenagers' expectations: the declining influences of curricular track placement and past grades on high school students' plans and the concomitant rise of community colleges.<sup>1</sup>

*Grades and Curricular Track.* Past research identified coursework grades and curricular track as two especially important predictors of teenagers' expectations about their future accomplishments in school (Alexander, Eckland, and Griffin 1975; Rosenbaum 1980; Spenner and Featherman 1978). Nonetheless, many students today form future educational expectations without realizing the importance of working hard and making good grades in high school. James Rosenbaum (1998) refers to these views as "no penalty beliefs" whereby students fail to see poor high school performance as a barrier to obtaining the educational degrees and jobs they desire. According to Rosenbaum (1998), "Many students see no penalty to their planned careers if they do not have high school diplomas, good grades, and work hard in school" (p. 61). If no penalty beliefs have become common, there should be a weak-

<sup>1.</sup> The broader economy also is likely to influence changes in the career plans of high school seniors, especially as it relates to changes in the costs and benefits of obtaining additional schooling, working, or doing both (Betts and McFarland 1994; Shanahan, Elder, and Miech 1997; Shanahan, Miech, and Elder 1998).

ening association between high school grades and students' plans for the future across cohorts of high school students.

Curricular tracking also shapes students' educational plans, though ability-grouping in schools changed considerably during and after the 1970s. Before these changes, secondary schools typically assigned students to college preparatory, general education, or vocational tracks. Students in college preparatory tracks expressed more ambitious educational plans, on average, than students in either general or vocational tracks, a difference that remained after accounting for academic ability and family background (Alexander and Cook 1982; Gamoran 1987, 1992; Natriello, Alexander, and Pallas 1989). However, schools today are more likely to provide college preparation and vocational training on a course-by-course basis instead of assigning students to curricular tracks (Hallinan 1994; Jones, Vanfossen, and Ensminger 1995; Lucas 1999). As a result, many students occupy discrepant locations within school stratification systems because of the opportunity to take courses at different academic levels (Lucas 1999). Therefore, another potential source of increasingly unrealistic expectations is the greater ambiguity or variability in curricular "status." As with grades, we anticipate that this would be reflected in a weakening association between high school curricular program and future plans across cohorts of high school students.

*The Growth of Community Colleges.* The rapid growth of community colleges since the 1970s may also contribute to the rise in educational and occupational expectations. From 1970 to 2000, the number of students enrolled in four-year colleges and universities increased by 50 percent (from 6.3 to 9.4 million) while enrollments at two-year degree granting institutions increased by 156 percent (2.3 to 5.9 million; NCES 2003:Table 175). Community colleges were originally designed to improve access to higher education and to take some of the enrollment burden off of existing four-year colleges. Community colleges have recently expanded their offerings in vocational programs, continuing adult education, and community development (Kane and Rouse 1999). Thus, community colleges have succeeded in expanding the choices available to high school students considering postsecondary education. This has led some to conclude that community colleges "democratize" access to higher education (Leigh and Gill 2003, 2004; Rouse 1995, 1998).

Yet some scholars hold a less sanguine view of the growth of the community college system, seeing it as one that "cools out" students' educational plans and diverts them from obtaining a bachelor's degree (Brint and Karabel 1989; Clark 1960; Dougherty 1987, 1992). Many community colleges have open admissions policies and offer remedial courses in an effort to reduce barriers to college, yet they are still characterized by high attrition rates. Rosenbaum (1998) argues that student's increased access to community college has led high school teachers and guidance counselors to encourage most students to attend college regardless of past academic performance. The consequence is what Schneider and Stevenson (1999) call an "ambition paradox"—a scenario in which students with high ambitions choose an educational route with low odds of success, such as community college.

Past research is clear on this last point: Attending community college as opposed to a four-year institution results in lower ambitions and lower average achievements in schooling and work. Although students entering both two-year and four-year colleges have high expectations of ultimately obtaining a bachelor's degree, community college students are between 20 and 31 percent more likely to cut back their educational plans by the end of the second year than are students at four-year colleges (Pascarella et al. 1998). Community college students are also much less likely to complete a four-year degree (Brint 2003; Rosenbaum 1998; Schneider and Stevenson 1999). The higher risk of failure is due to characteristics of students who attend community college (Christie and Hutcheson 2003) in addition to several institutional effects. These influences include low academic selectivity, difficulty transferring to a four-year college, difficulty in obtaining financial aid, a drop in grades, or problems assimilating to a four-year program (Dougherty 1987, 1992).

Community colleges, therefore, may present two opposing forces. The growth of twoyear degree programs with lower entrance requirements may elevate less-qualified high school students' expectations, by providing a potential (though higher risk) path to obtaining postsecondary degrees and prestigious work. However, once in community college, students' expectations may cool out and become more realistic relative to their academic preparation and economic resources. According to Steven Brint (2003), "the major contradiction remains that community college students desire higher-level attainments than the colleges are able to help them realize. Under such circumstances, the community college cannot help but play the midwife to humbler dreams" (p. 32). If adolescents' increasingly unrealistic expectations stem partly from the expansion of community college programs, then we would expect to see growth in the use of community colleges as a pathway for educational attainment over time.

### Summary of Research Goals and Expectations

Despite the evidence presented by Rosenbaum, Schneider, and Stevenson, and others, it is premature to conclude that high school seniors are more unrealistic than in the past, or even that having excessively high future plans is necessarily bad. Past studies have been based on a handful of cross-sectional studies that typically end with the high school class of 1992 (e.g., the National Educational Longitudinal Study, or NELS). No studies empirically test whether increasingly unrealistic plans devalue ambitions, that is, whether the link between plans and achievements has diminished over time. Using 25 years of comparable, national data on high school seniors, this study addresses the issues noted above. In particular, it examines whether students' expectations for schooling and work have become increasingly unrealistic, and to what extent the increase in expectations has resulted from greater use of community college as a "high risk" pathway to future attainments. We also test the extent to which teenagers' future plans have become decoupled from the historically strong influences of curricular track and grades. Finally, we examine evidence from three longitudinal studies of high school seniors-the 1972 National Longitudinal Study (NLS), the 1980 High School and Beyond study (HSB), and the 1992 NELS-to test whether the association between plans and future achievements has been on the decline, a finding that can corroborate the hypothesis that teenagers' future plans are increasingly unrealistic, thus less consequential, for the transition to adulthood.

#### **Data and Methods**

#### High School Seniors' Expectations, 1976 to 2000: Monitoring the Future

Longitudinal data on expectations come from the Monitoring the Future survey (MTF), a nationally representative cross-sectional survey of high school seniors that has been repeated annually since 1975 (Bachman, Johnston, and O'Malley 1997). The MTF is administered and collected by the University of Michigan's Institute for Social Research, which uses self-administered questionnaires to gather data from seniors at approximately 125 public and private high schools. Schools are selected through multistage sampling. First, one or more schools are selected from 74 geographic areas in the contiguous United States, and then up to 400 seniors are surveyed per school. Half of the sampled schools are replaced each year, so that schools. Response rates are around 78 to 80 percent, and the overall sample sizes range from 18,924 in 1978 to 13,285 in 2000 (the last year of data used here). All students answer a core set of questions primarily concerning drug and alcohol use; subsets of students respond to additional questions on special topics such as attitudes about race relations, gender roles, and future plans. Approximately two to three thousand students are administered each form in

any given year. The analyses in this article draw from both the core set of items and the questions on occupational expectations contained in Form 4. After excluding cases with missing data, the yearly samples for the analyses range from a high of 3,295 in 1978 to a low of 1,946 in 2000. We use cross-sectional sampling weights to adjust for the MTF's multistage stratified sampling design.

To measure *educational expectations*, the MTF asks high school seniors "How likely is it that you will do each of the following things after high school?" The future accomplishments and activities include three that pertain to postsecondary education: graduating from a two-year college program, graduating from college, and attending graduate or professional school after college. Valid responses to each are "definitely won't, probably won't, probably will, and definitely will." We dichotomized the three individual measures of educational plans such that seniors who think they probably or definitely won't are compared to those who think they probably or definitely won't are compared to those who think they probably or definitely education. (2) two-year degree only, (3) two-year degree leading to a bachelor's degree, (4) two-year degree leading to graduate degrees without two-year degree first. The composite measure allows us to contrast those who plan to pursue higher education via a two-year degree program against those who plan to go immediately to a four-year university, and facilitates an emphasis on planned educational pathways instead of simply looking at planned educational outcomes.

Questions about *occupational expectations* include "What kind of work do you think you will be doing when you are 30 years old?" and then offer examples of major types of occupations. The choices include laborer, service worker, operative or semi-skilled worker, sales clerk in a retail store, clerical or office worker, protective service, military service, craftsman or skilled worker, farm owner or farm manager, owner of a small business, sales representative, manager or administrator, professional without a doctoral degree, professional with a doctoral degree, fulltime homemaker or housewife, and don't know. We recoded occupational expectations into eight ordered categories that ranged in prestige and pay from laborers to professional jobs requiring an advanced degree (see Table 1).

Educational context is measured by type of school program and past academic achievement. *Curricular track* is captured with a single item asking, "Which of the following best describes your present high school program?" The response options include college preparatory, general studies, and vocational/technical (reference category). *Past academic achievement* is measured with an item asking students their "average grade so far in high school." We coded this item on a four-point scale ranging from 4.0 (A) to 0.5 (D or below).

# *Peers' Objective Achievements: Digest of Education and Current Population Surveys*

To establish a benchmark against which we may assess the realism of high school seniors' plans, some of the analyses turn to yearly survey data from the *Digest of Education Statistics* (NCES 2003) and the *Current Population Survey* (CPS; Hirsch, Macpherson, and Vroman 2001). For the years from 1976 to 2000, these data provide estimates of the percentage of young adults with a high school degree who attend college, complete a bachelor's degree, complete an advanced degree, or work in a professional occupation (see Figures 1 through 4, respectively). We acknowledge that these survey data do not perfectly match the MTF population—namely, the data from the Digest of Education and the CPS include high school dropouts who later passed

<sup>2.</sup> Approximately 10 percent are missing on the expectations questions in any given year, a rate that is comparable to the nonresponse rate for expectations questions asked of youth in other surveys. Since the MTF public release data do not differentiate between respondents who skipped the question versus said they "don't know," we have treated all instances of nonresponse as missing data. Nonresponse in the MTF is more common among boys, nonwhites, students in lower academic tracks, and students with lower grade point averages.

an equivalency exam. In recent years, GED recipients make up approximately 10 percent of young adults with high school credentials (Kaufman et al. 2000). This is important to the extent that GED recipients have lower achievements, on average. Various adjustments to the rates reported in Figures 1 through 4 narrowed the gaps reported in these figures somewhat, but they changed neither the tests of statistical significance nor our conclusions about temporal trends.

#### Longitudinal Studies of High School Seniors: NLS, HSB, and NELS

The National Longitudinal Study (NLS) is a nationally representative study of high school seniors. Participants completed an initial interview questionnaire in 1972 and provided follow up information in 1973, 1974, 1976, 1979, and 1986. Starting with a sampling frame of students in all public and private high schools in the United States, the NLS used a stratified, two-stage probability sample to select two schools from 600 strata. From each selected school, 18 seniors were randomly selected for a target population of approximately 23,000 students. Out of the target population, 16,683 students completed the base year in-school questionnaire, and 11,472 responded to the question on educational expectations. Of these, 10,416 successfully completed a follow up in 1979 and had valid data on educational attainment.

The High School and Beyond study (HSB) surveyed a nationally representative sample of high school seniors in 1980 and reinterviewed a subset of the respondents in 1982, 1984, and 1986. The HSB was designed to build directly on the 1972 NLS by replicating as many questions and test items as possible. Using a stratified, two-stage sampling procedure, 36 sophomores and 36 seniors were randomly selected from a representative sample of over 1,100 high schools. Overall 28,240 seniors were interviewed in 1980. Approximately 12,000 of the high school seniors participated in the final follow-up study, and 9,880 of these respondents have valid data on both educational plans in high school and educational attainment as of 1986.

The 1988 National Educational Longitudinal Study (NELS) is a nationally representative study of eighth grade students. The NELS used a two-stage stratified probability design to select a nationally representative sample of students and schools. Of the schools selected, 815 public and 237 private schools agreed to participate. From these schools, almost 25,000 eighth grade students participated in the base year of the study. Follow up interviews on a subset of the base year sample were conducted in 1990, 1992, 1994, and most recently, in 2000. The 2000 sample contains 12,144 respondents overall, and of these, 9,431 were high school seniors in 1992 and have valid data on senior-year educational plans and educational attainments as of 2000.

Each longitudinal survey includes measures of seniors' educational and occupational expectations with subsequent follow up interviews six to eight years later. We focus on high school seniors' educational expectations and their subsequent educational achievements (for analyses of high school seniors' ability to realize their occupational plans, see McClelland 1990 and Rindfuss et al. 1999). To achieve comparability across the three surveys, both educational expectations and attainments are measured as "high school or less," "some post-secondary education," "bachelor's degree," or "advanced degree," and converted to *z*-scores. Furthermore, we limited the time span of achievements to six years after high school, the longest span possible across all three surveys: educational attainment by 1978 for the NLS, by 1986 for the HSB, and by 1998 for the NELS. Control measures in the longitudinal analyses include race or ethnicity, gender, family context (socioeconomic status, structure, and size), high school program, and past grades (the latter two are based on transcript data).<sup>3</sup>

Comparisons of senior year educational plans between those for whom follow up was obtained and those for whom it was not, indicated that attrition was more common among

<sup>3.</sup> Additional controls for coursework and test scores did not change the overall conclusions regarding a declining effect of educational plans but were omitted due to considerable rates of nonresponse on these sets of measures.

high school seniors with less ambitious plans. Thus, the loss of respondents over time may bias the estimated relationship between seniors' plans and their educational attainments six years later. The analyses therefore adjust for attrition of lower achieving students using longitudinal weights created by the National Center for Education Statistics (NCES) (Curtin et al. 2002; Riccobono et al. 1981; Spencer, Sebring, and Campbell 1987).<sup>4</sup> Green et al. (1995: Appendix C) provide additional information on the measures, designs, and comparative findings of the three surveys.

#### Analytic Strategy

The data analyses proceed as follows. First, we examine general trends in educational and occupational plans from 1976 to 2000 using the Monitoring the Future data and compare them to the achievements of contemporaneous young adults and workers to examine the degree to which high school seniors' future plans have become increasingly unrealistic. Second, we use ordered probit regression models to estimate changes in the effects of past grades and school program type to determine if grades or program type is less predictive of plans across cohorts. That is, are intentions to attend university and work in a professional job today more, less, or equally associated with past academic achievement and program type compared to the 1970s? We argue that a weakening link between school-based feedback on academic competence and occupational and educational plans would provide evidence of increasingly unrealistic expectations among high school students and reflect institutional changes since the 1970s.

It is important to keep in mind that the dependent variables in these analyses do not directly tap the extent to which seniors are unrealistic about their future accomplishments. The dependent variables are simply expectations and "high" or "low" values on these measures are not inherently more or less realistic. Instead, our analyses attempt to tap into the realism of adolescents' expectations in a variety of ways. Three forms of evidence employ the MTF data. First, we note the rise in educational pathways that have low odds of success. Then, we compare teens' expectations to the achievements of young adults and workers in the same time period. Finally, we test whether the influence of institutional feedback regarding student competence has diminished over time.

The final piece of evidence related to increasingly unrealistic plans comes from basic analyses of the NLS, HSB, and NELS. Here we explore the extent to which high school seniors' occupational and educational plans have become less predictive of their future attainments in three national longitudinal studies of youth. Ordinary least squares regression analyses assess the strength of the link between expectations and achievements in each of the three cohorts, controlling for academic credentials in high school and family background characteristics.

#### Results

#### Trends in High School Seniors' Educational Plans

High school seniors' educational plans dramatically increased from 1976 to 2000 (see Table 1), and these plans increasingly relied upon high-risk pathways through community college. The ability to identify pathways is important for understanding the role community colleges play in students' rising educational expectations and stands in contrast to past research, which has been limited to studying the highest amount of education students plan to obtain. The MTF data allow us to document the level of ambition and the degree to which

4. For example, the NLS longitudinal weight (W22) is for analyses of the base-year and 4th follow-up panels and adjusts for differential nonresponse by race, sex, high school program, grade point average, and parents' education.

Categories	A 1976 (%)	B 2000 (%)	B <b>–</b> A	B/A Ratio
Educational pathway	n = 2,479	n = 1,441		
1. Stop after high school	33.6	8.8	-24.9	0.3
2. Two-year degree only	16.1	12.9	-3.2	0.8
3. Two-year + bachelor's	8.9	11.2	2.3	1.3
4. Two-year + bachelor's + graduate	5.5	11.2	5.7	2.0
5. Bachelor's only	14.8	16.7	1.9	1.1
6. Bachelor's + graduate/professional school	21.1	39.2	18.2	1.9
7. Bachelor's or more $(3+4+5+6)$	50.3	78.3	28.0	1.6
8. Graduate/professional school (4+6)	26.6	50.5	23.9	1.9
Occupation by age 30	n = 2,173	n = 1,303		
1. Laborer, farmer, homemaker	9.9	1.9	-8.1	0.2
2. Service, sales, clerical	17.8	5.7	-12.1	0.3
3. Operative, crafts	14.7	7.7	-7.0	0.5
4. Military, protective services	6.8	6.6	-0.2	1.0
5. Entrepreneur	3.7	7.3	3.6	2.0
6. Administrator, manager	5.8	7.5	1.7	1.3
7. Professional, no advanced degree	29.3	43.1	13.8	1.5
8. Professional w/advanced degree	12.0	20.3	8.3	1.7

 Table 1
 Educational and Occupational Plans of High School Seniors, 1976 and 2000

Source: Monitoring the Future study (Bachman, Johnston, and O'Malley 1997).

Notes: Proportions adjusted for sampling probabilities. Differences in educational and occupational plans by year are significant at p < .001.

high school seniors planned educational pathways with relatively low odds of success. In Table 1, six discrete educational pathways are presented in Rows 1 through 6; Rows 7 and 8 combine pathways that result in a bachelor's degree or beyond. The first row shows that very few high school seniors in 2000 plan to stop their education at a high school degree—only nine percent. The low rate is a big decline compared to 25 years earlier when one out of three seniors planned on no additional education beyond high school.

What pathways are taking the place of a high school degree only? The intended educational pathway with the greatest growth in popularity during this time period is to obtain a bachelor's degree and an advanced degree Row 6. The percentage of seniors reporting this as their anticipated pathway grew from 21 percent in 1976 to 39 percent in 2000, making it, by far, the most commonly reported. Seniors are approximately twice as likely in 2000 as in 1976 to expect to earn a bachelor's and then an advanced degree. A related pathway that also grew rapidly was to get a two-year degree then a bachelor's followed by an advanced degree. Row 4 shows the percentage of seniors reporting an intention to obtain a two-year degree before ultimately securing an advanced degree doubled from 1976 to 2000. The sum of the values in Rows 3 and 4 indicates that in 2000, overall, around 22 percent of seniors envisioned community college as a way station en route to additional postsecondary education.

By 2000, high school seniors were extremely ambitious, which is best captured in rows 7 and 8. The overall rates and the increases in the percentages of students planning to get at least a bachelor's degree are striking. In 2000, more than three-quarters of high school seniors expected to complete a bachelor's degree in the future. Equally remarkable is the percentage of seniors who hoped to attend graduate or professional school. That number doubled from 1976 to 2000. By the end of the study period, fully one-half of high school seniors looked forward to earning an advanced degree.

#### Trends in High School Seniors' Occupational Plans

High school seniors' occupational expectations also rose considerably between 1976 and 2000. Table 1 presents similar statistics for students' plans to work in different occupations by age 30. Occupations are listed in approximate order by pay and prestige. The biggest increases from 1976 to 2000 were for plans to work in lower- or upper-level professional jobs. Seniors predicting that they would be employed in a lower-level professional job at age 30 grew by 14 points, while those projecting upper-level positions by age 30 rose by 8 points. By 2000, more than 20 percent of high school seniors planned to work in a professional job requiring an advanced degree, such as, lawyer, doctor, or college professor, and twice that many plan to work in other professions, such as accounting or engineering. Taken together, these add up to almost two-thirds of high school seniors who expect to work in professional jobs. In addition, Table 1 shows that the percentage of seniors who wanted to own their own businesses nearly doubled, from 3.7 to 7.5 percent. Concurrent declines took place at the other end of the occupational distribution, among students expecting to work in skilled blue collar jobs, lower level service occupations, and as unpaid homemakers. Altogether, the shift in plans toward more prestigious and rewarding occupations indicates greater ambition, but not quite as strongly as do the rising educational expectations.

#### Are High School Seniors' Future Plans Increasingly Unrealistic?

Students are attending colleges and universities more than ever before, and upward mobility is a central cultural theme in the United States. Thus, the fact that high school seniors overall became much more ambitious between 1976 and 2000 should be no surprise. Yet has the rise in teenagers' ambitions also outpaced what is realistic? Since we lack a litmus test of realism, we chose three separate strategies to determine whether high school seniors' plans for the future are becoming increasingly unrealistic as well as increasingly ambitious. First, we look at the extent to which community college plays a larger role as a stepping stone to higher degrees in teenagers' academic plans. Second, we track trends in the gap between students' subjective achievement plans and objective measures of likely success. Finally, we examine whether the link between high school feedback on students' abilities (grades, curricular track) and students' plans for the future has eroded over time, suggesting seniors form expectations that are less reflective of their measured abilities and high school experiences.

Together, the results provide strong evidence that today's high school seniors are more unrealistic than seniors in the 1970s. First of all, as seen in Table 1, seniors are twice as likely in 2000 to anticipate getting a bachelor's or advanced degree in addition to obtaining a twoyear degree. Unfortunately, the prospects for succeeding on this path are very poor. Students who begin in two-year colleges have a much lower chance of earning a four-year degree (much less an advanced degree) than students who start off at a four-year institution (Brint 2003; Rosenbaum 1998; Schneider and Stevenson 1999).

Second, comparing students' plans to the actual achievements of recent high school graduates shows a growing gap between students' expectations and what is likely to occur. We present four figures comparing trends in seniors' plans and the contemporaneous accomplishments of high school graduates to illustrate this. Figure 1 plots the percentage of high school seniors who expected to obtain a two-year degree or more on top and the percentage of recent high school graduates currently enrolled in colleges and universities on bottom.<sup>5</sup> The shaded area between the two lines provides a visual approximation of the gap between expected and realistic accomplishments. The disparity between what is expected and what is likely increased slowly from a difference of 19 percentage points in 1976 to 30 percentage points in 2000.

The top line in Figure 2 plots the percentage of high school seniors expecting to complete at least a four-year degree, while the bottom line shows the percentage of 25 to 34-year-old

5. Recent high school graduates are "individuals age 16 to 24 who graduated from high school or completed a GED during the preceding 12 months" (NCES 2003).



Figure 1 • Expected vs. Realistic Rates of Attending University



Figure 2 • Expected vs. Realistic Rates of Earning Bachelor's Degree



Figure 3 • Expected vs. Realistic Rates of Earning Advanced Degree



<sup>b</sup>Data from Current Population Survey, 1976–2000 (Hirsch, Macpherson, and Vroman 2001). Standard error, 0.2–0.4%.

Figure 4 • Expected vs. Realistic Rates of Working in a Profession

	Educational Plans n = 54,974		Occupational Plans n = 49,074	
Year $(1976 = 0; 2000 = 24)$	0.049 (0.004)*	0.041 (0.001)*	0.028 (0.004)*	0.031 (0.001)*
Past grades	0.658 (0.016)*		0.458 (0.015)*	
Year $ imes$ past grades	-0.005 (0.001)*		-0.001 (0.001)	
College preparatory program Year $\times$ college		1.330 (0.021)*		1.041 (0.022)*
preparatory program		-0.017 (0.002)*		-0.014 (0.002)*

 
 Table 2 • Trend in Association between Past Grades/College Preparatory Curriculum and Achievement Plans, 1976–2000

Source: Monitoring the Future study (Bachman, Johnston, and O'Malley 1997).

Notes: Ordered probit regression coefficients with standard errors. Analyses weighted to adjust for sampling design. \* p < .001.

high school graduates who have earned a bachelor's degree or more. In 1976 there was almost no difference. By the 1990s the gap had grown to approximately 20 percentage points, before tapering off, somewhat, to 15 percentage points in 2000.

A similar trend exists for plans to obtain an advanced degree beyond the bachelor's. Figure 3 shows the percentage of high school seniors who expect to attend graduate or professional school, and compares them to the percentage of 25- to 34-year-old high school graduates in that year who had advanced degrees. Here, the gap between what high school seniors expect and what is realistic (by our definition) grew from 22 percentage points in 1976 to 41 percentage points in 2000.

The top line in Figure 4 indicates the percentage of seniors who expect to work in a professional occupation, while the bottom shows the percentage of employed high school graduates who actually worked in a professional occupation. Again, occupational plans rose more quickly than the actual accomplishments of contemporary workers. In numeric terms, the gap grew from 32 percentage points in 1976 to 51 points in 2000. All four comparisons point to an increasing divide between high school seniors' plans and the objective probability of achieving them. Auxiliary tests for the change from 1976 to 2000 confirm that these changes are statistically significant (the tests for Figures 1 through 4 yielded *z*-scores of 4.5, 7.0, 12.1, and 11.2, respectively).<sup>6</sup>

The third form of evidence pointing to teenagers' increasingly unrealistic plans comes from examining trends in the influence of grades and curricular track on teenagers' achievement expectations. Table 2 presents the results of an ordered probit analysis of educational and occupational plans as predicted by time, past grades, college-preparatory curricular track, and product terms capturing the interactions between time and grade or curricular track.

The results demonstrate that high school seniors' future plans are shaped less and less by signaling devices in high school, especially in the case of plans for postsecondary education. The positive effects of past grades and enrollment in a college preparatory track on students' educational plans significantly declined over the study period. For example, the coefficient for college preparatory track decreased by about 30 percent, from 1.33 in 1976 (when the measure of year equals 0) to 0.922 in 2000 ( $1.330 + -0.017 \times 24$ ). The positive influence of college preparatory track on occupational plans declined as well. In contrast, the association between past grades and occupational plans did not diminish in a systematic fashion from 1976 to 2000. Yet three out of four interactions in Table 2 confirm that high schools' role in shaping adolescents' future plans through grades and curricular programs weakened—which we argue serves as another sign that contemporary teenagers formulate less realistic occupational plans.

6. The significance tests are based on the formula for the difference between two sample proportions, which has a standard error equal to:  $\sqrt{\sigma_{n1}^2 + \sigma_{n2}^2}$ . The calculations are available upon request from the authors.

	NLS 1972 (n = 10,416)	$HSB \ 1980 \ (n = 9,880)$	NELS 1992 (n = 9,431)
Educational plans as of senior year			
of high school	0.384 (0.011)***	0.218 (0.016)***	0.182 (0.009)***
Family socioeconomic status	0.147 (0.017)***	0.174 (0.021)***	0.255 (0.012)***
Two biological parents <sup>a</sup>	0.045 (0.031)	0.104 (0.028)***	0.116 (0.018)***
Number of siblings	-0.014 (0.005)**	-0.014 (0.005)**	-0.019 (0.004)***
College preparatory track <sup>b</sup>	0.421 (0.025)***	0.317 (0.035)***	0.473 (0.027)***
General academic track <sup>b</sup>	0.079 (0.022)***	0.046 (0.026)	0.224 (0.021)***
Past grades	0.114 (0.007)***	0.124 (0.010)***	0.195 (0.006)***
Female	-0.087 (0.017)***	0.015 (0.026)	0.075 (0.017)***
Race			
Black <sup>c</sup>	0.083 (0.035)*	-0.070 (0.029)*	0.025 (0.032)
Hispanic <sup>c</sup>	-0.054(0.048)	-0.041 (0.029)	-0.102 (0.023)***
Other <sup>c</sup>	-0.036 (0.056)	0.036 (0.060)	-0.114 (0.068)
Constant	-0.876	0.280	-1.168
$R^2$	0.447	0.244	0.372

 

 Table 3
 Educational Attainment Six Years after High School Regressed on Students' Educational Plans and Selected Variables

Notes: Regression coefficients with standard errors. Weighted to adjust for sampling design. NLS = National Longitudinal Study (Riccobono et al. 1981). HSB = High School and Beyond Study (Spencer et al. 1987). NELS = National Educational Longitudinal Study (Curtin et al. 2002).

<sup>a</sup> Compared to all other family types.

<sup>b</sup> Compared to vocational track.

<sup>c</sup> Compared to non-Hispanic whites.

\* p < .05 \*\* p < .01 \*\*\* p < .001; two-tailed tests.

# *Diminishing Influence of Educational Plans: Evidence from Three National Surveys*

As a final piece of evidence documenting changes in the meaning of high school seniors' expectations, we present evidence that the power of expectations to predict future attainments has declined over time. The decline in the net association between plans and achievements, we argue, provides further evidence of increasingly unrealistic future plans and a devaluation of occupational and educational expectations among teenagers. This evidence comes from examining the educational expectations and subsequent attainments of three cohorts of high school seniors from 1972, 1980, and 1992. The results are provided in Table 3.

Although high school seniors reported increasingly ambitious educational plans across cohorts, the strength of the association between educational plans and attainments declined at the same time. For example, the percentage of respondents with an expressed desire to get a graduate degree increased from 3 to 21 to 36 percent across the three cohorts. In contrast, the coefficient for educational plans declined from 0.38 in the 1972 cohort, to 0.22 in the 1980 cohort, to 0.18 in the 1992 cohort. Recall that these associations are based on the same metric, and they adjust for differences due to family context (socioeconomic status, size, and structure), high school curricular track, past grades, race, ethnicity, and gender. The fact that the benefits of educational plans dropped by more than half between the 1970s and the 1990s suggests that the increasingly unrealistic plans of high school seniors is a social trend with real life course consequences.

#### **Summary and Discussion**

In this article, we have assessed the magnitude and attempted to uncover the meaning of trends in high school seniors' educational and occupational plans from 1976 to 2000. In short, we asked if teenagers are increasingly unrealistic about their educational and occupational goals, given the typical achievements of concurrent high school graduates and the elevated risks of some educational pathways. According to life course scholars, the formulation of realistic plans is a key aspect of adolescent development with consequences for future experiences in the transition to adulthood. As Michael Shanahan, Scott Hofer, and Richard Miech (2003) note, "more planful adolescents make better choices (i.e., choices that more accurately reflect their interests, values, and talents with opportunities afforded by the social context) than less planful adolescents, and these better choices establish relationships and institutional commitments that endure into adulthood and provide the context for achievement and satisfaction" (p. 196).

Analyses of 25 years of high school senior classes provide strong evidence that today's teenagers are both highly ambitious and increasingly unrealistic. First, high school seniors' plans for schooling and work have become dramatically more ambitious since 1976, such that 50 percent of seniors in 2000 plan to get an advanced degree and 63 percent plan to work in a professional job. Second, seniors today are more likely to plan to use a two-year degree as an educational stepping stone between high school and more advanced degrees, a pathway with very low odds of success. Third, seniors' expectations are out of alignment with the achievements of recent high school graduates, and the gap between students' plans and what is probable has grown from 1976 to 2000. The rise in unrealistic expectations is also reflected in the declining influence of high school curricular program and past grades on plans for schooling and work. Thus, it seems students are relying less on institutional feedback (grades and curriculum program) in determining their career plans than they did in the past. We attribute this change in the relationship between school experience and plans for the future to the changing nature of tracking in schools as well as to other institutional trends in the education system such as grade inflation and college-for-all norms.

What are the social implications of these trends? We could argue that high expectations for future achievements are beneficial and indicate a motivation to achieve. Instead, we suggest that unrealistic expectations result in "ambition inflation" and undercut the long-observed benefits of early educational and occupational plans. Longitudinal analyses of three cohorts of high school seniors confirm that the link between the educational plans of high school seniors and what they achieve in the following six years has become weaker since the 1970s.<sup>7</sup> Thus, not only are high school seniors more unrealistic today than in the recent past, but they will also experience greater disappointments on average in terms of realizing their achievement plans. Seeing others fail to achieve their expectations could lead to motivational problems for future classes of high school students, as Stephanie Bohon, Heather Macpherson, and Jorge Atiles (2005) observed among Latino immigrants. Additional research is needed to determine if frustration from unrealized plans leads to life course disorder and other undesirable outcomes, such as, occupational mismatch, lower lifetime earnings, or risk for substance abuse or psychological disorders.

Logically, plans that do not match eventual outcomes might lead to anxiety and distress both during and after the transition to adulthood. Unrealistic plans may also lead to a misuse of human potential and economic resources. For example, planning to become a medical doctor while making poor grades in secondary school means that preparation for other, more probable, vocations is likely to be postponed. Grossly put, more time spent pursuing high-risk pathways in schooling and work means less time spent getting a start on other means of employment.

7. Some but not all of this decline may be due to the length of time it takes to achieve the highest ambitions. For example, it normally takes more than six years beyond high school to get a Ph.D. or M.D.

Unrealistic occupational expectations may also have implications for labor markets. For example, across the country there is a shortage of skilled blue collar workers such as electricians (Bureau of Labor Statistics 2005). According to industry experts and government statistics on employment trends, this shortage is due to low numbers in training programs combined with escalating retirement rates and increasing demand (Norberg-Johnson 2005; Wirtz 2005). In lieu of strong institutional linkages between employers and educators, it is all the more important for high school students to make informed and effective plans and choices concerning training and employment (Kerckhoff 2003; Rosenbaum et al. 1999).

It should be noted that these analyses apply only to high school seniors and not to an entire age cohort. Seniors' plans do not fully represent all adolescents' plans, as dropouts logically would have more modest expectations about schooling and work. The absence of dropouts also may yield trajectories of change in expectations that do not parallel the changes in expectations for all adolescents. Since the primary objective of this article is to determine if adolescents' plans are increasingly unrealistic across cohorts, its contribution would be weakened if the data represent an increasingly selective population of high school seniors, for example if there was a growing tendency for students with lower ambitions to dropout before the senior year.<sup>8</sup>

The analyses and interpretations have focused on the potential role of schools in perpetuating and exacerbating excessively ambitious plans among students. Equally important in this regard are broader economic opportunities and the unstructured linkages between educators and employers in the United States (Elder 1998; George 1993; Mortimer et al. 2002). Regardless of how realistic it is that they will finish, when job opportunities seem poor and job security scarce, students or young workers may try to "weather the storm" by staying in school longer to avoid poor labor markets and to bolster their credentials (Betts and McFarland 1994; Shanahan, Elder, and Miech 1997; Shanahan, Miech, and Elder 1998).

The job prospects for high school and college educated workers changed substantially from the 1970s to the 1990s. Census data document the growing earnings benefit associated with completing a college degree compared to completing a high school degree alone (U.S. Census Bureau 2003). These data show that, after adjusting for inflation, the average earnings of high school educated workers grew 206 percent from 1976 to 2000, and in raw numbers earnings rose from \$8,393 to \$25,692. Meanwhile, the average earnings of workers with a bachelor's degree grew from \$13,033 to \$49,595, representing a real increase of 280 percent. Put another way, workers with a bachelor's degree earned 1.55 times as much as high school educated workers, on average in 1976, versus 1.93 times as much in 2000. Thus, the economic rewards for completing a college degree rather than stopping after high school are large and growing over time. High school students are aware of the substantial economic penalty for skipping a college degree (Dominitz and Manski 1996). They are also convinced that success in the labor market is dependent on obtaining educational credentials (Schneider and Stevenson 1999). As such, an obvious direction for future research regarding longterm trends in adolescents' plans is to turn to the structure of economic opportunity.

The research presented here speaks to the changing nature of the transition to adulthood in the United States. Jeffrey Arnett (1998) argues on the basis of much more limited evidence that adolescents have recently been opting out of more traditional paths to adulthood by extending educational attainment and delaying age at first marriage, leading to an elongation of the transition to adulthood. Our results, based on 25 years of comparable national data,

<sup>8.</sup> While there is no way to "recover" information about dropouts from the high schools in the MTF's sampling frame, other national data suggest that their omission is not dramatically affecting our estimates of the trends in adolescents' expectations, although our yearly estimates of expectations are likely to be higher than those that would be obtained if the MTF included dropouts. Specifically, comparisons of high school seniors and dropouts in the High School and Beyond survey and the National Education Longitudinal Study suggest that the absence of high school dropouts from the analyses does not create substantial differences in our findings (results available upon request).

support his argument by showing that high school seniors are increasingly likely to expect to earn advanced academic credentials and work in professional jobs over other vocational pathways, plans that substantially delay the expected date by which young adults will be done with school and become financially independent.<sup>9</sup> As the notion of obtaining an advanced degree or working in a high status profession becomes more normative, adolescents extend the transition to adulthood and plan to remain longer and longer in a stage Arnett refers to as "emerging adulthood" (Arnett 1998; see also Fussell and Furstenberg 2004). Alternatively, changes in high school seniors' expectations may reflect a greater awareness that they may experience multiple careers across the life course, as opposed to pursuing a singular and unchanging career track (Moen 2003).

Surely, part of what underlies these trends are broad cultural themes in the United States valuing social and economic mobility and an educational ideology that emphasizes open competition and "keeping everyone in the running until the final stages" (Turner 1960:863). Past research has tended to accept, as given, the fact that teenagers in the United States have high, and perhaps unrealistic, ambitions. Yet it has failed to rigorously test whether cohorts of youth are increasingly unrealistic or to assess whether the benefits of achievement expectations have eroded over time. We are the first to show with comparable, national level data how dramatically high school seniors' plans have risen since the 1970s, how these expectations are increasingly out of synch with the achievements of their peers, and how there is a corresponding decline in the positive effect of students' expectations on their future accomplishments in school. These results add to the growing concern over a college-for-all norm among high school students in an educational system that has weak linkages to actual jobs (Kerckhoff 2003; Rosenbaum 2001). On average, uninformed and unrealistic students waste their time and resources pursuing educational and occupational pathways with very low odds of success.

## References

- Alexander, Karl and Martha Cook. 1979. "Motivational Relevance of Educational Plans: Questioning the Conventional Wisdom." *Social Psychology* 42:202–13.
- Alexander, Karl, Bruce Eckland, and Larry Griffin. 1975. "The Wisconsin Model of Socioeconomic Achievement: A Replication." *American Journal of Sociology* 81:324–42.

Alexander, Karl, Doris Entwisle, and Samuel Bedinger. 1994. "When Expectations Work: Race and Socioeconomic Differences in School Performance." *Social Psychology Quarterly* 57:283–99.

Arnett, Jeffrey J. 1998. "Learning to Stand Alone: The Contemporary American Transition to Adulthood in Cultural and Historical Context." *Human Development* 41:295–315.

 $(0 \times .336) + (2 \times .161) + (4 \times .089) + (8 \times .055) + (4 \times .148) + (8 \times .211) = 3.4$  years.

By 2000, the mean expected duration increased to

 $(0 \times .088) + (2 \times .129) + (4 \times .112) + (8 \times .112) + (4 \times .167) + (8 \times .392) = 5.4$  years.

Thus, in 2000, high school seniors expected to spend an additional two years, on average, in post-secondary schooling, compared to seniors in 1976. This estimate is conservative, given that the average number of years it takes to complete a bachelor's degree has increased during the same time period.

<sup>9.</sup> The mean expected duration of postsecondary schooling can be calculated from the results in Table 1 by weighting the expected years of schooling beyond high school by the proportion of seniors who expect that level of schooling (AA = 2 years, BA/BS = 4 years, etc.). For example, in 1976 the mean expected duration of postsecondary schooling was

- Bachman, Jerald G., Lloyd D. Johnston, and Patrick M. O'Malley. 1997. *Monitoring the Future: Questionnaire Responses from the Nation's High School Seniors*. Ann Arbor: University of Michigan, Institute for Social Research.
- Betts, Julian and Laurel McFarland. 1994. "Safe Port in a Storm: The Impact of Labor Market Conditions on Community College Enrollments." *Journal of Human Resources* 30:741–65.
- Bohon, Stephanie A., Heather Macpherson, and Jorge H. Atiles. 2005. "Educational Barriers for New Latinos in Georgia." *Journal of Latinos and Education* 4:43–58.
- Brint, Steven. 2003. "Few Remaining Dreams: Community Colleges Since 1985." Annals of the American Academy of Political and Social Science 586:16–37.
- Brint, Steven and Jerome Karabel. 1989. The Diverted Dream: Community Colleges and the Promise of Educational Opportunity in America, 1900–1985. New York: Oxford University Press.
- Bureau of Labor Statistics. 2005. *Career Guide to Industries, 2004–05 Edition,* Construction. Retrieved August 29, 2005, from http://www.bls.gov/oco/cg/cgs003.htm.
- Cheng, Simon and Brian Starks. 2002. "Racial Differences in the Effects of Significant Others on Students' Educational Expectations." *Sociology of Education* 75:306–27.
- Christie, Raymond and Philo Hutcheson. 2003. "Net Effects of Institutional Type on Baccalaureate Degree Attainment of 'Traditional' Students." *Community College Review* 31:1–15.
- Clark, Burton, R. 1960. "The 'Cooling-Out' Function in Higher Education." American Journal of Sociology 65:569–76.
- Clausen, John S. 1991. "Adolescent Competence and the Shaping of the Life Course." American Journal of Sociology 96:805–42.
- Curtin, Thomas R., Steven J. Ingels, Shiyung Wu, and Ruth Heuer. 2002. *National Education Longitudinal Study of 1988: Base-Year to Fourth Follow-up Data File User's Manual*. NCES 2002-323. Washington, DC: U.S. Department of Education, National Center for Education Statistics.
- Dominitz, Jeff and Charles F. Manski. 1996. "Eliciting Student Expectations of the Returns to Schooling." *Journal of Human Resources* 31:1–26.
- Dougherty, Kevin. 1987. "The Effects of Community Colleges: Aid or Hindrance to Socioeconomic Attainment?" *Sociology of Education* 60:86–103.
  - ——. 1992. "Community Colleges and Baccalaureate Attainment." Journal of Higher Education 63:188– 214.
- Duncan, O. D., David Featherman, and Beverly Duncan. 1972. *Socioeconomic Background and Achievement*. New York: Academic Press.
- Elder, Glen H. 1998. "The Life Course as Developmental Theory." Child Development 69:1-12.
- Fussell, Elizabeth and Frank F. Furstenberg, Jr. 2004. "Race, Nativity, and Gender Differences in the Transition to Adulthood in the 20th Century." Pp. 29–75 in *On the Frontier of Adulthood: Theory, Research, and Public Policy*, edited by R. A. Settersten, F. F. Furstenberg, Jr., and R. Rumbaut. Chicago: University of Chicago Press.
- Gamoran, Adam. 1987. "The Stratification of High School Learning Opportunities." *Sociology of Education* 60:135–55.
  - . 1992. "The Variable Effects of High School Tracking." American Sociological Review 57:812–28.

George, Linda K. 1993. "Sociological Perspectives on Life Transitions." Annual Review of Sociology 19:353–73.
 Goldsmith, Pat. 2004. "Schools' Racial Mix, Students' Optimism, And The Black–White And Latino–White Achievement Gaps." Sociology of Education 77:121–47.

- Green, Patricia, Bernard L. Dugoni, Steven J. Engels, Peggy Quinn, and Jeffrey Owings. 1995. Trends Among High School Seniors, 1972–1992. NCES 1995-380. Washington, DC: U.S. Department of Education, National Center for Education Statistics.
- Hallinan, Maureen. 1994. "Tracking: From Theory to Practice." Sociology of Education 67:79-84.
- Hanson, Sandra L. 1994. "Lost Talent: Unrealized Educational Aspirations and Expectations among United States Youths." *Sociology of Education* 67:159–83.
- Hirsch, Barry T., David A. Macpherson, and Wayne G. Vroman. 2001. "Estimates of Union Density by State." *Monthly Labor Review* 124(7):51–55.
- Hoffman, Emily P. 1987. "Determinants of Youths' Educational and Occupational Goals: Sex and Race Differences." *Economics of Education Review* 6:41–48.
- Jacobs, Jerry A. 1996. "Gender Inequality and Higher Education." Annual Review of Sociology 22:153-85.
- Jacobs, Jerry, David Karen, and Katherine McClelland. 1991. "The Dynamics of Young Men's Career Aspirations." *Sociological Forum* 6:609–39.
- Jencks, Christopher, Susan Bartlett, Mary Corcoran, James Crouse, David Eaglesfield, Gregory Jackson,

Kent McClelland, Peter Mueser, Michael Olneck, Joseph Schwartz, Sherry Ward, and Jill Williams. 1979. *Who Gets Ahead: The Determinants of Economic Success in America*. New York: Basic Books.

- Jones, James, Beth Vanfossen, and Margaret Ensminger. 1995. "Individual and Organizational Predictors of High School Track Placement." Sociology of Education 68:287–300.
- Kane, Thomas J. and Cecilia Elena Rouse. 1999. "The Community College: Educating Students at the Margin between College and Work." *Journal of Economic Perspectives* 13:63–84.
- Kaufman, Phillip, Jin Y. Kwon, Steve Klein, and Christopher D. Chapman. 2000. Dropout Rates in the United States: 1999. NCES 2001-022. Washington, DC: U.S. Department of Education, National Center for Education Statistics.
- Kerckhoff, Alan. 1977. "The Realism of Educational Ambitions in England and the United States." American Sociological Review 42:563–71.
- ——. 2003. "From Student to Worker." Pp. 251–67 in *Handbook of the Life Course*, edited by J. Mortimer and M. Shanahan. New York: Kluwer Academic/Plenum.
- Kirst, Michael W. and Andrea Venezia, eds. 2004. From High School to College: Improving Opportunities for Success in Postsecondary Education. San Francisco: Jossey-Bass.
- Leigh, Duane E. and Andrew M. Gill. 2003. "Do Community Colleges Really Divert Students from Earning Bachelor's Degrees?" *Economics of Education Review* 22:23–30.
- ———. 2004. "The Effect of Community Colleges on Changing Students' Educational Aspirations." Economics of Education Review 23:95–102.
- Lucas, Samuel R. 1999. *Tracking Inequality: Stratification and Mobility in American High Schools*. New York: Teachers College Press.
- McClelland, Katherine. 1990. "Cumulative Disadvantage among the Highly Ambitious." Sociology of Education 63:102–21.
- Moen, Phyllis. 2003. "Midcourse: Navigating Retirement and a New Life Stage." Pp. 269–91 in *Handbook* of the Life Course, edited by J. Mortimer and M. Shanahan. New York: Kluwer Academic/Plenum.
- Mortimer, Jeylan T, Melanie J. Zimmer-Gembeck, Mikki Holmes, and Michael J. Shanahan. 2002. "The Process of Occupational Decision Making: Patterns during the Transition to Adulthood." *Journal of Vocational Behavior* 61:439–65.
- National Center for Education Statistics (NCES). 2003. *Digest of Education Statistics, 2003*. Retrieved April 22, 2004, from http://www.nces.ed.gov/pubs2005/2005025.pdf.
- Natriello, Gary, Karl Alexander, and Aaron Pallas. 1989. "On the Right Track? Curriculum and Academic Achievement." *Sociology of Education* 62:109–18.
- Norberg-Johnson, Denise. 2005, July. "Finding Your Future Workforce." *Electrical Contractor*. Retrieved August 29, 2005, from http://www.ecmag.com/editorial\_detail.aspx?id=1796.
- Pascarella Ernest T., Marcia Edison, Amaury Nora, Linda S. Hagedorn, and Patrick T. Terenzini. 1998. "Does Community College Versus Four-Year College Attendance Influence Students' Educational Plans?" *Journal of College Student Development* 39:179–93.
- Powers, Rebecca S. and Roger A. Wojtkiewicz. 2004. "Occupational Aspirations, Gender, and Educational Attainment." *Sociological Spectrum* 24:601–22.
- Riccobono, John, Louise B. Henderson, Graham J. Burkheimer, Carol Place, and Jay R. Levinsohn. 1981. National Longitudinal Study: Base Year (1972) Through Fourth Follow-Up (1979) Data File User's Manual. Washington, DC: U.S. Department of Education, National Center for Education Statistics.
- Rindfuss, Ronald R., Elizabeth C. Cooksey, and Rebecca L. Sutterlin. 1999. "Young Adult Occupational Achievement: Early Expectations Versus Behavioral Reality." *Work and Occupations* 26:220–63.
- Rosenbaum, James. 1980. "Track Misperceptions and Frustrated College Plans: An Analysis of the Effects of Tracks and Track Perceptions in the National Longitudinal Survey." *Sociology of Education* 53:74–88.
- ——. 1998. "College-For-All: Do Students Understand What College Demands?" Social Psychology of Education 2:55–80.
- ——. 2001. Beyond College For All. New York: Russell Sage.
- Rosenbaum, James E., Stefanie DeLuca, Shazia R. Miller, and Kevin Roy. 1999. "Pathways into Work: Short- and Long-Term Effects of Personal and Institutional Ties." *Sociology of Education* 72:179–96.
- Rosenbaum, James, Shazia Miller, and Melinda Krei. 1996. "Gatekeeping in an Era of More Open Gates: High School Counselors' Views of Their Influence on Students' College Plans." American Journal of Education 104:257–79.
- Rouse, Cecilia Elena. 1995. "Democratization or Diversion? The Effect of Community Colleges on Educational Attainment." *Journal of Business and Economic Statistics* 13:217–24.

#### 206 REYNOLDS ET AL.

- ———. 1998. "Do Two-Year Colleges Increase Overall Educational Attainment? Evidence from the States." Journal of Policy Analysis and Management 17:596–620.
- Schneider, Barbara and David Stevenson. 1999. *The Ambitious Generation: America's Teenagers, Motivated but Directionless*. New Haven, CT: Yale University Press.
- Sewell, William H. and Robert M. Hauser. 1975. *Education, Occupation, and Earnings*. New York: Academic Press.
- Shanahan, Michael J. 2000. "Pathways to Adulthood in Changing Societies: Variability and Mechanisms in Life Course Perspective." *Annual Review of Sociology* 26:667–92.
- Shanahan, Michael J., Glen H. Elder, and Richard A. Miech. 1997. "History and Agency in Men's Lives: Pathways to Achievement in Cohort Perspective." *Sociology of Education* 70:54–67.
- Shanahan, Michael J., Scott M. Hofer, and Richard A. Miech. 2003. "Planful Competence, the Life Course, and Aging: Retrospect and Prospect." Pp. 189–211 in *Personal Control in Social and Life Course Contexts*, edited by S. Zarit, L. Pearlin, and K. Schaie. New York: Springer.
- Shanahan, Michael J., Richard A. Miech, and Glen H. Elder. 1998. "Changing Pathways to Attainment in Men's Lives: Historical Patterns of School, Work, and Social Class." *Social Forces* 77:231–56.
- Shu, Xiaoling, and Margaret Mooney Marini. 1998. "Gender-Related Change in Occupational Aspirations." *Sociology of Education* 71:44–68.
- Snyder, Thomas and Charlene Hoffman. 2003. *Digest of Education Statistics, 2002.* NCES 2003-060. Washington, DC: U.S. Department of Education, National Center for Education Statistics.
- Spencer, Bruce D., Penny Sebring, and Barbara Campbell. 1987. *High School and Beyond: Third Follow-Up* (1986) Sample Design Report. NCES 88403. Washington, DC: U.S. Department of Educaton, National Center for Education Statistics.
- Spenner, Kenneth I. and David L. Featherman. 1978. "Achievement Ambitions." Annual Review of Sociology 4:373–420.
- Turner, Ralph. 1960. "Sponsored Mobility and Contest Mobility and the School System." American Sociological Review 25:855–67.
- U.S. Census Bureau. 2003. "Mean Earnings of Workers 18 Years Old and Over, by Educational Attainment, Race, Hispanic Origin, and Sex: 1975 to 2001." Retrieved April 22, 2004, from http://www. census.gov/population/socdemo/education/tabA-3.pdf.
- Wirtz, Ronald A. 2005, January. "The Hard-Hat Blues." *Fedgazette*. Retrieved August 29, 2005, from http://minneapolisfed.org/pubs/fedgaz/05-01/blues.cfm.