

Pathways to College across Two Youth Cohorts

Carolina Milesi

This study compares the educational trajectories of students from two different cohorts, one that attended college mainly in the 1908's and another, more recent cohort that started attending college around 2000 and has continued doing so throughout the decade. Using data from the National Longitudinal Survey of Youth 1979 and the National Longitudinal Survey of Youth 1997, this project describes how the process of college enrollment, college persistence, and college completion have changed throughout the last three decades and assesses whether the pathways students follow in post-secondary education have altered socioeconomic disparities in rates of college access and college completion. It is crucial to compare the college trajectories of these two cohorts because throughout this period there have been substantive changes in the postsecondary landscape, including an increase in the proportion of youth attending college, a substantial rise in the cost of college, an expansion of two-year colleges, and an increase in alternative pathways to complete college - all of which may have affected students' pathways to college.

The motivation for this research stems from two important changes in the post-secondary educational system. First, there has been a divergence in trends regarding college attendance and college completion. In the last three decades, while college attendance has increased considerably, the proportion of subsequent cohorts completing college has changed very little. As a result, the college completion rate (the share of those with some college receiving a degree) has declined (Turner, 2004). Second, the “traditional” pathway to earn a bachelor’s degree – usually defined by entry into college immediately after the conferral of a high school diploma, full-time attendance at a four-year post-secondary institution, and continuous enrollment until graduation — has become the exception rather than the rule (Horn & Carroll, 1996). Students incur in “non-traditional” educational trajectories in different ways: completing high school by alternative routes such as the General Educational Development (GED) certification, delaying entry into college, interrupting college enrollment once or more, and attending post-secondary institutions with an “open door” admission policy (Hearn, 1992; Dougherty, 1994; Jacobs & King, 2002; Horn et al., 2002; Bradburn & Carroll, 2002; Smith, 2003; Bozick and DeLuca, 2005; Goldrick-Rab, 2006). Turner (2004) pointed out that, partly as a result of these “non-

traditional” trajectories, there has been a considerable increase in the total amount of time it takes students to complete their degrees, well beyond the four-year norm. In this context, she claimed that calculating college completion rates for individuals in their early twenties has become an increasingly truncated picture of educational attainment. She noted it is necessary to consider educational trajectories and to do so for students outside the early teens and early twenties. This study addresses these two changes in the post-secondary system, by examining the traditional and non-traditional trajectories that students pursue to enter college and while they are in college, and by assessing the extent to which these different trajectories influence students' likelihood of attaining a college degree.

Data and methods

This study uses publicly-available data from the National Longitudinal Survey of Youth 1979 (NLSY79) and from the National Longitudinal Survey of Youth 1997 (NLSY97). NLSY79 is a nationally representative sample of 12,686 men and women ages 14-21 as of December 31, 1978. This cohort was interviewed annually from 1979 to 1994, and biannually from 1994 to 2002. My analysis includes the 9,763 respondents eligible for all interviews, that is the main sample and the supplemental samples of blacks and Hispanics, but neither the supplemental military sample or the supplemental sample of economically disadvantaged nonblack/non-Hispanic youth, which were discontinued in 1984 and 1990, respectively. Throughout the 20 rounds of data collection, sample retention has been kept at 81 percent. In 2002 individuals were between 35 and 41 years old. This observation period captures a substantial part of individuals' educational trajectories.

NLSY97 is nationally representative sample of about 9,000 youth residing in the U.S. in 1997 who were born between 1980 and 1984. The majority of the oldest cohort members (age 16 as of December 31, 1996) were still in secondary school during the first survey round and the youngest respondents (age 12 as of December 31, 1996) had not yet entered the labor market. Similarly to the NLSY79, two independent samples comprised this dataset: a cross-sectional sample and a supplemental sample of Black non-Hispanic and Hispanic youth, which accounts for about a fourth of the total sample. Both samples have been interviewed annually since 1997. The last wave of data currently available corresponds to wave 10 (2006), when respondents were approximately ages 21 to 25. For the analysis regarding college access, I do not need to impose

any sample restrictions in my analysis. However, for the analysis regarding college completion, I select those who were 24 or more in the last wave. By doing this, I would allow respondents approximately six years after on-time high school graduation to finish college.

Dataset	Year of birth	Age at first wave	Age at last available wave	Period of data collection	Sampling	Year of expected on-time high school completion (end of academic year)
NLSY79	1957-1964	Ages 14-22 in Wave 1	Ages 41-49 in Wave 22	1979-2006	Household-based sample	1975-1982
NLSY97	1980-1984	Ages 12-16 in Wave 1	Ages 21-25 in Wave 10	1997-2006	Household-based sample	1998-2002

The NLSY79 and NLSY97 data have two unique strengths. First, the datasets are precisely designed to provide a portrayal of how the transition to adulthood, including educational attainment and labor market participation, has changed over time. The sampling and the measures used are strictly comparable across the two datasets. For the purposes of my analysis, the second advantage of these datasets is that they are uniquely well-suited for an event history analysis of schooling trajectories. In each wave, respondents provided information on the educational credentials they had attained, as well as the dates (month and year) at which they occurred. Respondents also reported on their status of school enrollment (whether they were enrolled or not) for all the months that elapsed between the last interview and the current interview. I combine this information with respondents' reports on different spells of college enrollment, including dates of the beginning and end of each spell, the type of college they attended (two- or four-year college), and whether the school they attended considered them a full- or part-time student. I only consider as college enrollment that occurred after high school completion. I constructed a person-month file where I record the "educational state" in which each individual was at every month since January 1979 and January 1997, respectively (e.g. whether in that month the student was enrolled in college and the type of college she/he was enrolled in that moment), as well as the values of time-constant and time-varying covariates corresponding to that month. Standard errors are properly adjusted for the clustering of records within individuals.

Results

Findings show that the trajectories students follow to access college and to complete a post-secondary degree have become increasingly complex across different socioeconomic, racial

and ethnic groups. Educational trajectories are relevant for inequality of educational attainment for two reasons. First, results showed an association between students' characteristics and educational trajectories, in that students who are disadvantaged in their socioeconomic background and cognitive skills are disproportionately more likely to deviate from a "traditional" trajectory. Second, "non-traditional" educational trajectories were associated with lower educational attainment. Thus, "non-traditional" educational trajectories constituted a pathway through which inequality in educational attainment takes place.

In terms of the effect of socioeconomic background (SES) on educational trajectories, evidence revealed that SES effects tended to be stronger in the educational trajectory associated with four-year colleges (entry in a four-year college and attainment of a bachelor's degree) than in the educational trajectory associated with two-year colleges (entry in a two-year college and attainment of an associate's degree).

Finally, findings showed that cognitive skills and high school academic preparation were positively associated with post-secondary enrollment and with the attainment of a bachelor's degree. Cognitive skills were only marginally associated with the attainment of an associate's degree. Non-cognitive attributes and cumulative health were associated with post-secondary enrollment, but not with post-secondary degree attainment. Once the model took into account cognitive skills, non-cognitive skills, and educational trajectories, the effect of SES decreased but was not fully accounted for. The impact of cognitive and non-cognitive factors on educational transitions was not trivial, but it did not mediate the impact of SES on the risk of making these transitions.

Conclusion

In the introduction to her edited book "College Choices" Caroline Hoxby states that "it is not about *attending* college anymore [...] The action is not in *whether* a student attends, but *which college* he attends (in-state or out-of-state, two-year or four-year, more or less selective) and *how* he attends (continuously or sporadically, full-time or part-time, immediately after high school graduation or delayed). Simply put, it is not college attendance that is interesting, but college choices" (2004: 1-2, emphasis in original). This research aims to go beyond the question of whether students attends college and examines the trajectories students follow in their post-secondary schooling. This study is particularly important in a time when the issue at hand is not

only access, but persistence in post-secondary education. Researchers and policymakers can benefit from this research documenting the increasingly fluid and complex pathways that students follow throughout their careers when trying to understand the persistent socioeconomic gaps in rates of college completion.

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