

THE UNREALISTIC EDUCATIONAL EXPECTATIONS OF HIGH SCHOOL PUPILS: Is America Exceptional?

John Jerrim*

University of London

There is growing concern that many American teenagers hold unrealistic educational plans. This may indicate a detachment from reality, which could be detrimental to well-being in later life. But is this problem specific to certain countries like the United States, or is it common among young people from across the developed world? This article uses data from the Trends in Mathematics and Science Study (TIMSS) and Programme for International Student Assessment (PISA) to investigate this issue. It shows how expected and actual college graduation rates differ across a number of countries but also that this gap is particularly large in the United States. Additional analysis suggests that this is being driven, at least in part, by the large proportion of low-achieving American children who believe they will go on to obtain a bachelor's degree. The implications of these findings are discussed in reference to educational policy and contemporary sociological debates.

INTRODUCTION

American teenagers tend to hold very ambitious educational goals (Schneider and Stevenson 1999). In fact, the expectations of many young people are now so high that they are often deemed to be unrealistic (Reynolds et al. 2006). But is such ambitiousness apparent among young people from across the developed world or is the United States exceptional in this respect? In this article, I show that children from several (but by no means all) countries tend to overestimate their chances of completing college, but also that this problem is particularly pronounced in the United States. This is being driven, at least in part, by the large number of American children who expect to complete college when they are ill-equipped to do so. I thus argue that raising the academic skills of disadvantaged young people and providing more information on alternative educational pathways should be considered policy priorities in the United States.

The motivation for this article stems from the long and illustrious history of young people's educational expectations in sociological research. Much of the early work in this area stressed the important role that aspirations and expectations play in young people's motivation at school (Wigfield 1994), and their eventual educational and occupational attainment (Sewell, Haller, and Ohlendorf 1970; Duncan, Featherman, and Duncan 1972; Sewell and Hauser 1975). Jacob and Linkow (2011) provide an overview of how the link between educational intentions and later attainment works.

*Direct all correspondence to John Jerrim, Department of Quantitative Social Science, Institute of Education, University of London, 20 Bedford Way London, WC1H 0AL, UK; e-mail: j.jerrim@ioe.ac.uk

It is hypothesized that if a young person expects to complete college, then s/he will be more likely to take the steps needed to reach this ambitious goal. These include taking advanced college preparation programs in high school, completing a college entrance exam (e.g., SAT), and applying for financial aid. Taking these steps in turn increases the prospects of an individual graduating from college and reaping the associated labor market rewards. Although firmly establishing causality in this process has proven tricky (Morgan 2005), empirical research from a variety of disciplines has shown that a strong link between expectations and later educational and occupational attainment does indeed exist (Thomas 1979; Reynolds and Pemberton 2001; Morgan 2004, 2005; Khoo and Ainley 2005; Schoon 2010; Brown, Ortiz-Nunez, and Taylor 2011; Cowan 2011). Hence, many now believe that high educational ambition during adolescence is a prerequisite for future success.

Yet there has been growing concern, at least in the United States, that teenagers' educational and occupational plans have become detached from reality; that high school pupils' ambitions are now unrealistic (Schneider and Stevenson 1999; Reynolds et al. 2006). Thus, rather than being an advantageous platform upon which to build, unrealistically high expectations have become seen by some to be detrimental to chances in later life. Rosenbaum (2001) argues that the "college for all" ethos in the United States may cause some young people to believe that they can postpone exerting effort until after high school. A follow-up article (Rosenbaum 2011) argues that this may result in demoralized students, and that encouraging ambitious plans (e.g., to enter college) without also providing information may lead some groups to undertake inappropriate educational pathways. Reynolds et al. (2006) also discuss the problem of unrealistic expectations leading to "lost talent," where teenagers follow educational and occupational pathways that are misaligned with their actual abilities. Schneider and Stevenson (1999) describe how such misaligned ambitions, and the decision to undertake an inappropriate educational course, may have negative labor market consequences. Other work has hypothesized that unrealized expectations could lead to stress and anxiety (Wrosch et al. 2007), long-term mental health problems (Reynolds and Baird 2010), lower lifetime earnings (Kerckhoff 2003), and an increased risk of substance abuse (Reynolds et al. 2006).

It is therefore clear that excessive or misaligned ambitions could be a serious problem in the United States. But are American teenagers really that detached from reality? One might argue that ambitious educational plans are simply a reflection of the enthusiasm and exuberance of youth, which is not an "American problem" per se, but rather something common among young people from across the developed world. Put in such a comparative context, the college expectation–attainment gap in the United States may not be such a concern, with there being little obvious scope and perhaps need for policymakers to intervene. On the other hand, given the "college for all" ethos that has emerged in the United States, unrealistic educational expectations may be more apparent in this country than elsewhere. This should cause academics and policymakers much more unease, as it would imply that the potential negative consequences of unmet ambitions are likely to be particularly prevalent within American society.

Generating a better understanding of this issue is thus of great importance from an American perspective. For instance, if the “college for all” ethos has led to lower school motivation, then, by comparing the expectations of American youth with those of their peers elsewhere in the world, one may develop a better understanding of why recent educational outcomes have been rather disappointing for the United States (e.g., the comparatively low position in the Organisation for Economic Co-operation and Development Programme for International Student Assessment [OECD PISA] rankings of school children’s achievement). Similarly, if American children are particularly unrealistic, and if this does indeed lead to inappropriate educational choices, then this may explain why certain issues (e.g., high college dropout rates) are more prevalent in this country than elsewhere.

Comparative studies of this type also hold important lessons for international readers. A significant proportion of the empirical work exploring the link between expectations and attainment has been based upon American-led theories developed in reference to American society. Yet academics and government officials from other countries have drawn upon such studies to guide their own public policy and research. For instance, Schneider and Stevenson (1999) developed the concept of misaligned expectations in reference to American school children. They then tested this concept empirically using U.S. data. Yet, this idea has since spread to other parts of the developed world (Gutman and Akerman 2008; Sabates, Harris, and Staff 2011). For instance, in England, concern over misaligned expectations has led the government to increase provision of information, advice, and guidance to young people who are choosing their educational pathways and possible future careers. But is such misalignment really a problem in other developed countries or is this actually something quite specific to the United States? Evidence I shall present below in this article suggests that, despite the concerns of British policymakers, children in the United Kingdom (UK) actually hold quite realistic educational expectations that are reasonably well aligned with their actual academic abilities, particularly in comparison with their American peers.

Despite the importance of these issues, no other research, to my knowledge, has considered whether American teenagers are less realistic about their prospects of completing college than young people in other parts of the developed world. This article draws upon two cross-nationally comparable data sources, containing information on the educational expectations of young people from up to 25 countries to make this important contribution to the existing literature.

THEORETICAL PERSPECTIVE AND RESEARCH QUESTIONS

Why might young people in the United States hold particularly unrealistic or misaligned goals? In this section, I discuss one possible explanation based upon social reproduction theory and the work of French sociologist Pierre Bourdieu. I then set out three research questions.

Social Reproduction Theory and the Mismatched Expectations of American Youth

For many, education has the potential to equalize opportunities between socioeconomic groups. Most assume that the schooling system is designed to provide opportunities for all and helps to promote social mobility. This view is flatly rejected in the seminal works of Pierre Bourdieu (1974, 1977). Rather than enabling the brightest pupils from all backgrounds to succeed, Bourdieu (1974:32) suggests that education “is in fact one of the most effective means of perpetuating the existing social pattern, as it both provides an apparent justification for social inequalities and gives recognition to the cultural heritage, that is, to a *social* gift treated as a *natural* one.” In other words, Bourdieu believes that the schooling system is dominated by “elites” who have the “power to impose meanings and to impose them as legitimate” (Van Krieken et al. 2000:207). These meanings are then taught to children in schools, with those from affluent backgrounds having a hidden, implicit advantage because of their habitus and cultural capital.¹ They are thus much more likely to succeed in exams than their disadvantaged peers, increasing the likelihood that only children from the dominant class enter college and obtain high-status, professional jobs. The education system therefore plays a vital role in the intergenerational transmission of social status.

Central and eastern European countries (e.g., Germany, Austria, the Netherlands, Hungary, the Czech Republic) perhaps provide the most obvious examples of how the schooling system entrenches social advantage, as Bourdieu claims. In these countries, children are tested at a young age (e.g., at age 10 in Germany) and segregated (tracked) into different types of secondary schools. From a social reproduction theory perspective, the tests used are likely to favor those from affluent backgrounds, resulting in school tracks that are very different in terms of social composition (Jenkins, Micklewright, and Schnepf 2008). Children from affluent backgrounds typically enter academic schools that provide entry to college and well-paid professional jobs (Dustmann 2004). On the other hand, those from less privileged homes are typically assigned to vocational tracks leading directly to the labor market (Jenkins et al. 2008). Young people are likely to adapt their educational expectations to such institutional possibilities (Turner 1960; Buchmann and Dalton 2002) and understand from a young age the educational and occupational paths that are open to them. Children in these countries therefore have clearly defined futures, which should ensure that their educational and occupational expectations remain realistic and well aligned.

In contrast, the United States is often considered to be the land of opportunity, where humble social origins do not stop a person from becoming rich and successful. Many believe this is what makes the United States different from other countries, and that this remains one of the key foundations upon which American society is built. Thus, rather than being a mechanism that entrenches social advantage, education and the schooling system are typically seen as facilitating social mobility and the “American Dream” (Haveman and Smeeding 2006; Blanden, Gregg, and Macmillan 2007). Yet, in reality, access to a good education in the United States is extremely unequal (Reardon, Yun, and Kurlaender 2006). Geographic dispersion of schools leads to widespread

segregation of advantaged and disadvantaged pupils (Reardon and Bischoff 2011). Educational institutions serving disadvantaged communities are often poorly resourced (Biddle and Berliner 2002; OECD 2011a). Even where schools are socially mixed, the use of between-class tracking means that advantaged and disadvantaged pupils receive very different types of education (Betts 2011; Chmielewski, Dumont, and Trautwein, forthcoming). Hence, despite the still widely held belief that the United States is the “land of opportunity,” there are actually vast socioeconomic differences in the quantity and quality of education children receive. Indeed, cross-country research has recently shown that the United States is one of the most socially unequal nations in the developed world, both in terms of educational achievement (Jerrim 2012) and in terms of economic measures of social mobility (Blanden 2013).

Social reproduction is just as big and perhaps even a bigger problem in the United States compared with other countries. But, whereas young people elsewhere in the developed world typically understand that not everyone will have the opportunity to complete college (e.g., most German teenagers on a vocational track understand their chances of entering college are slim), the same is not true in the United States. Because of the unusually open college system, the historical context of being the “land of opportunity” and the “college for all” ethos, young people from all backgrounds continue to believe that they will obtain a bachelor’s degree even when they have little chance of actually doing so. As Grodsky and Riegle-Crumb (2010:17) explain, in the United States, “schools legitimate social inequality by nurturing what some call the myth of meritocracy: everyone (or at least almost everyone) can succeed if that individual only tries.” Because of this, the realities of social reproduction are not as apparent to teenagers in the United States as they are to young people elsewhere in the world. American teenagers therefore do not fully recognize or incorporate the constraints that they face into their expectations for the future. Consequently, misalignment between educational expectations, academic ability, and educational attainment is likely to be much more pronounced in the United States than in other countries.

Research Questions

The primary aim of this article is to establish whether the educational expectations of American teenagers are indeed particularly unrealistic and poorly aligned. To establish whether educational plans are in touch with reality at the population level, several researchers have compared the proportion of young people expecting to complete college and the proportion who actually do (Schneider and Stevenson 1999; Reynolds et al. 2006). I follow this analytic strategy to generate estimates of the size of the college expectation–attainment gap for a wide selection of OECD countries. These estimates will help establish whether young people in the United States hold particularly ambitious, and unrealistic, educational goals.

Hypothesis 1: The difference between the proportion of young people expecting to complete college and the actual graduation rate will be greater in the United States than in other developed countries.

I recognize that if the expectation–attainment gap does stand out as atypically large in the United States, this does not automatically mean that there is a problem that policymakers need to address. On the one hand, such expectations may have negative consequences if they are not realistic. But on the other, many believe that a high level of teenage ambition should be actively encouraged as such plans are an important determinant of later lifetime success. Thus, as argued by Schneider and Stevenson (1999), the critical point seems to be that expectations need to be properly aligned. In particular, there would seem to be little benefit to children expecting to go to college if they have little chance of actually reaching this goal.

My second objective is to establish whether misalignment between college expectations and academic ability is particularly large in the United States. Note that I am defining “alignment” as the match between educational expectations and actual academic ability. This is in contrast to Schneider and Stevenson (1999), who investigated whether teenagers’ educational expectations were consistent with the occupation they wished to pursue. To test my hypothesis, I shall examine whether the United States stands out as a country where college intentions remain very high, even among low academic achievers.

Hypothesis 2: More low academic achievers will expect to complete college in the United States than in other countries.

Of course, the fact that low achievers have high educational ambitions is not by definition a problem. Rather, it depends upon how the potential benefits of this high ambition (e.g., increased motivation to reach ambitious goals) compare with the possible negative consequences of these expectations being unrealistic (e.g., choice of an inappropriate educational pathway) and going unfulfilled (e.g., lacking the appropriate skills to be competitive in the labor market). I nevertheless argue that this type of misalignment is particularly important, as young people within this high-expectation–low-achievement group will be particularly at risk of their expectations being unmet. Negative consequences that are likely to be associated with this include young people choosing inappropriate educational pathways, “lost talent” from vocational occupations, and the misallocation of financial support to college students who are academically ill-prepared.

Finally, I turn to the issue of socioeconomic inequality in educational plans. Jerrim (2012) illustrates that the rich–poor gap in children’s cognitive skills is bigger in the United States than in most other developed countries. Consequently, one would also anticipate socioeconomic differences in educational expectations to stand out as atypically large. Yet, if disadvantaged children in the United States are particularly unrealistic about their prospects of completing college, this may not be the case. Specifically, the United States may be an outlier, where socioeconomic inequality in educational expectations is smaller than one would predict for a country with its level of academic inequality.

Hypothesis 3: The socioeconomic gap in college plans will be smaller in the United States than one would predict for a country with its level of academic inequality.

One may argue that this will be a particularly big problem if a large proportion of low-achieving children from disadvantaged backgrounds believe that they will obtain a four-year bachelor's degree when they clearly do not have the academic or financial means to do so.² I therefore also test this hypothesis in this piece of research.

DATA AND METHODS

Two data sources are used in this article:

1. The Programme for International Student Assessment (PISA);
2. The Trends in Mathematics and Science Study (TIMSS).

The former (PISA) is a study of the cognitive achievement of 15-year-old children held every three years. It includes young people from all countries within the OECD. Data are drawn from 2003 as this was the most recent wave to contain information on American children's educational expectations. The latter data source (TIMSS) examines the math and science skills of eighth-grade children (13- to 14-year-olds), with the 2007 wave used in this analysis. The motivation for using both of these studies, rather than focusing on just one, is to ensure that any apparent American "exceptionalism" holds across children of different ages and in different data sets. Information on sample design, countries included and measurement of key concepts (educational expectations, cognitive achievement, and family background) is provided below.

Sample Design

PISA 2003 included all members of the OECD. In each country, a two-stage sample design was used. Schools (a minimum of 150 up to a maximum of 1,124) were first selected with probability proportional to size. Thirty-five pupils were then chosen randomly from within each school. Average response rates of both schools (90 percent) and pupils (90 percent) were high, though they vary moderately between countries. Sampling weights are provided by the survey organizers in an attempt to correct for unit nonresponse. Table 1 provides information on sample sizes for each of the participating countries. A total of 5,456 children included in the study were from the United States.

Only a selection of OECD countries took part in TIMSS 2007. It also used a two-stage sample design, with schools selected as the primary sampling unit and then one or two classes randomly chosen from within. All pupils in these classes then took part. Response rates were generally high; school and pupil response rates in the United States were 89 and 95 percent, respectively. As in PISA, sampling weights have been provided by the survey organizers to adjust for nonresponse. A total of 7,377 children taking part in TIMSS 2007 were from the United States.

Country Selection

The aim of this article is to establish whether educational expectations in the United States are "exceptional." It is therefore important to compare the United States with a reasonably large number of other developed countries to provide a strong test of the

TABLE 1. Sample Sizes in PISA 2003 and TIMSS 2007 Data Sets

| Country | PISA | TIMSS |
|-----------------------|--------|-------|
| Scotland (Sco) | 2,723 | 4,070 |
| Northern Ireland (NI) | 2,853 | — |
| Iceland (Ice) | 3,350 | — |
| Ireland (Ire) | 3,880 | — |
| England (Eng) | 3,959 | 4,025 |
| Netherlands (Nld) | 3,992 | 3,065 |
| Norway (Nor) | 4,064 | 4,627 |
| Denmark (Den) | 4,218 | — |
| France (Fra) | 4,300 | — |
| Poland (Pol) | 4,383 | — |
| New Zealand (NZ) | 4,511 | 3,801 |
| Austria (Aut) | 4,597 | — |
| Portugal (Port) | 4,608 | — |
| Sweden (Swe) | 4,624 | 5,215 |
| Germany (Ger) | 4,660 | — |
| Hungary (Hun) | 4,765 | 4,111 |
| United States (USA) | 5,456 | 7,377 |
| Finland (Fin) | 5,796 | — |
| Czech Republic (Cze) | 6,320 | 4,845 |
| Slovakia (Slov) | 7,346 | — |
| Switzerland (Swz) | 8,420 | — |
| Spain (Esp) | 10,791 | — |
| Italy (Ita) | 11,639 | 4,408 |
| Australia (Aus) | 12,551 | 4,069 |
| Canada (Can) | 27,953 | — |

Notes: 1 Source: PISA 2003 and TIMSS 2007 data sets.

exceptionality hypothesis. Yet a certain degree of homogeneity, in terms of the countries included, is also needed to ensure that the comparisons made are meaningful. For instance, one could use the TIMSS data to compare the expectations of American children with those of children from Jordan—but would this really be a sensible thing to do? To strike an appropriate balance, I restrict the PISA and TIMSS data sets to a group of westernized countries that were all members of the OECD when the respective surveys were conducted. The analysis thus includes 11 developed countries in TIMSS and 25 in PISA. Table 1 provides further details. Appendix A provides some key information about the higher education system in each country.

Educational Expectations

In both PISA and TIMSS, children were asked to complete a background questionnaire. In PISA 2003, this included a question about educational expectations (see Appendix B). Country-specific response options were provided. The primary outcome

I analyze in this article is whether the child ticked the top category (bachelor's degree or higher). Response rates to this question were very high—99 percent in the United States and over 98 percent for the OECD as a whole. I thus exclude the few observations with missing values.

In TIMSS, children were asked a similar question (see Appendix B). Again, country-specific response options were provided, which resulted in very little missing information (less than 1 percent in the United States).³ As with PISA, children who did not answer this question have been excluded. Note that separate response options were provided for the International Standard Classification of Education (ISCED) level 5A (bachelor's degree) and ISCED level 6 (beyond bachelor's degree) categories. For the majority of the article, my interest is in whether children expect to obtain *at least* a bachelor's degree, and thus I combine the ISCED 5A and ISCED 6 categories into a single group. Combining these two categories may, however, result in some information loss. For instance, the United States may stand out even more from other countries in terms of the proportion of children expecting to complete a postgraduate qualification. Additional analysis of the TIMSS data, treating the ISCED level 5A and ISCED level 6 categories as two distinct response options, can be found in Appendix C.

It is important to recognize some of the difficulties with the questions above. First, one must consider whether they capture expectations or aspirations. Gutman and Akerman (2008:5) suggest that “whereas aspirations involve desired ambitions and goals, expectations connote a more realistic assessment of how much an individual believes he or she will actually achieve based on their own abilities and society's opportunity structures.” Educational aspirations are therefore the level of schooling young people would ideally like to complete if there were no academic, financial, or social barriers standing in their way. On the other hand, teenagers form their educational expectations through rational assessment of their own abilities (e.g., whether they will be able to cope with the demands of college), the opportunities that are available within society, and the external constraints that they face (e.g., whether they can realistically finance their studies). In other words, expectations differ from aspirations in that they are tempered by reality, so if a child *expects* to obtain a college qualification, they truly believe that this is the level of education they will go on to complete.

Gottfredson (2002) notes that it is only around age 14 (i.e., the age of children in TIMSS) that children begin to recognize the educational and occupational constraints that they face. Thus, it is around this age that young people begin to understand the need for compromise in their goals and that firm educational expectations are formed. The word “expect” is emphasized, at least in PISA, which should guide young people toward reporting what they realistically believe they will obtain. However, one implication of this is that there may be some differences in the magnitude of the expectation–attainment gap seen when using the TIMSS and PISA data sets. Specifically, as children in TIMSS tend to be younger—approaching age 14 rather than approaching age 16—they may report more ambitious educational goals. A second issue is language. Although the PISA and TIMSS survey organizers place great emphasis on cross-national comparability, and spend a great deal of time and energy trying to ensure this,

it is still possible that these questions may have slightly different meanings in different languages. However, both PISA and TIMSS include a number of English-speaking nations other than the United States (e.g., England, Scotland, Australia), where this is unlikely to be a significant issue. It will therefore be particularly interesting to compare the United States with these countries.

Information on Actual College Graduation Rates

To compare expected and actual college graduation rates, information on the proportion of children who successfully complete college is required. It is drawn from the 2009 Education at a Glance report (OECD 2009), which is produced by the OECD, the same organization that conducts the PISA study. This ensures that the information on expected and actual graduation rates is as comparable as possible. The 2009 report has been chosen over more recent editions as it refers to approximately the time when the PISA 2003 cohort were completing college (i.e., the 15-year-olds in the 2003 PISA study will be approaching age 22 in 2009). For a small number of countries where the data are unavailable, information has been drawn from the relevant national statistics authorities. See the notes to Figure 1 for further details.

Measurement of Children's Academic Achievement

Numerous authors have used PISA and TIMSS test scores as measures of academic ability (Lynn and Vanhanen 2006; Lynn and Meisenberg 2010). Indeed, as noted by Weiss (2008:134), "all sub-tests of PISA are heavily loaded with general cognitive ability." I therefore use children's scores on these tests as a proxy for academic skill.

As part of the PISA and TIMSS studies, children completed a two-hour exam, in which all questions were designed with cross-national comparability in mind. Math was the major focus of the PISA 2003 study, with roughly two thirds of questions assessing competency in this domain.⁴ TIMSS 2007 covered both science and math, with equal assessment time devoted to each. In this article, I focus upon children's math test scores as they are the best measure of academic achievement available in both data sets. Children's answers to the PISA and TIMSS tests were summarized by the survey organizers into five "plausible values" via an item-response model. These are five different estimates of children's ability in math at either the end of eighth grade (TIMSS) or at age 15 (PISA), and have each been scaled to have a mean of 500 points and a standard deviation of 100 points. The first of these plausible values is used throughout.⁵

One concern of this article is whether *low-achieving* children expect to obtain a bachelor's degree. In other words, to what extent do children who are ill-equipped for college still expect to go? Low achievers are defined here as all children with PISA/TIMSS test scores in the bottom quartile of the national population (i.e., the lowest 25 percent of achievers *within* each country). For the United States, this means scoring below 456 (417) on the TIMSS (PISA) math test. To put this into context, the average American within this low-achievement group has roughly the same math ability as a typical child from Jordan, Indonesia, or Iran. I recognize that this strategy implicitly

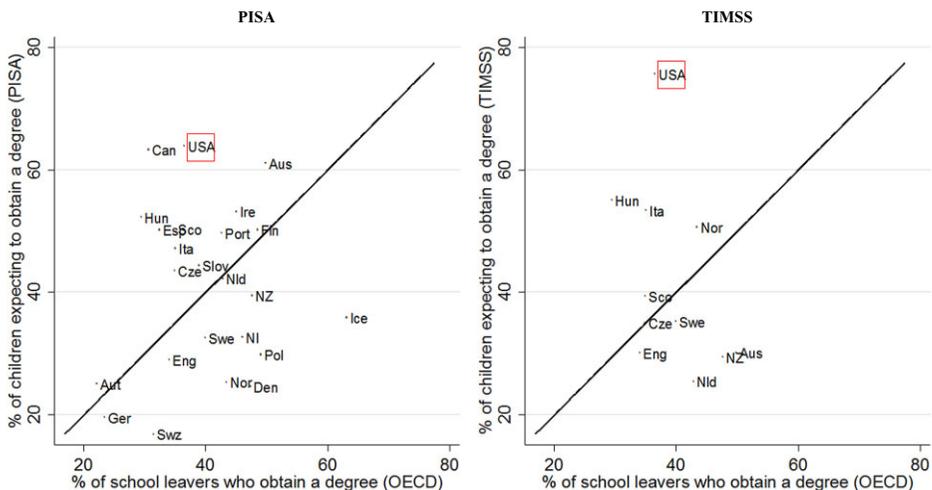


FIGURE 1. The Percentage of Children Expecting to Complete College versus Actual Graduation Rates.

Notes: Country names corresponding to abbreviations can be found in the first column of Table 1.

Source: Data on the percentage of school leavers who obtain a degree (*x*-axis) have been drawn from OECD (2009:74, table A3.2). This refers to net graduation rates (i.e., as the sum of age-specific graduation rates). Data on college participation rates are only available for the UK as a whole in OECD (2009). Therefore, college participation rates are drawn from <http://www.education.gov.uk/rsgateway/DB/SFR/s000716/index.shtml> for England, <http://www.scotland.gov.uk/Publications/2009/11/20112425/4> for Scotland, and <http://www.delni.gov.uk/he-api0607.pdf> for Northern Ireland. No data are available for France. Data on the percentage of children who expect to obtain a degree (*y*-axis) are based on author’s calculations from the Programme for International Student Assessment (PISA) 2003 or Trends in Mathematics and Science Study (TIMSS) 2007 data set.

assumes that it is the academic skill of an individual relative to that of their peers that determines their suitability for college. However, the results presented in the following section are robust to various alternatives, such as using an “absolute” skill threshold instead.⁶ Substantive findings also remain intact when defining the low-achievement group using a subject other than math.

Measurement of Family Background

Unfortunately, very little information on socioeconomic background is collected as part of TIMSS.⁷ I shall therefore focus on socioeconomic inequalities using the PISA data set. The preferred measure of family background is social class, defined by parental occupation, because of its frequent use in social stratification research. It is also likely to suffer less measurement error than the possible alternatives (Schulz 2006).

Information on parental occupation was captured in PISA from the sampled children via a questionnaire, which is then linked by the survey organizers to their PISA test scores.⁸ Specifically, they were asked the title of the main job of their mother and father, along with a description of the type of work this involves. Responses are coded by the survey organizers into four-digit ISCO codes, the International Labour Organization's occupational classification, which places the reported occupation into one of over 300 categories. These four-digit ISCO codes are then converted into the Erickson and Goldthorpe three-class schema using the "ISKO" user-written STATA command developed by Hendrickx (2004). This leads to the child's mother and the child's father being placed into one of three social class groups (professional, intermediate, or working class).⁹ The higher of the two is then used to define children's socioeconomic status.¹⁰ One limitation of this approach is that a broad range of occupations are included in each of the three social class groups. Yet an important advantage is that the number of parameter estimates is reduced, simplifying the interpretation and presentation of results in this cross-national analysis. Similar models have been estimated using alternative measures of family background, including a combination of household possessions, parental education, and parental occupation. These additional models have produced broadly similar results (available from the author upon request).

The parental occupation variable is then entered into a logistic regression model of children's educational expectations. Controls are also included for gender and immigrant status, defined as whether the child, their mother, or their father was born outside the country. This model is estimated separately for each country, and parameter estimates compared.¹¹

$$\log\left(\frac{\Pi(E_{ij})}{1-\Pi(E_{ij})}\right) = \alpha + \beta_1 \text{Sex}_i + \beta_2 I_i + \beta_3 \text{SES}_i + \beta_4 I_i * \text{SES}_i$$

where:

$\Pi(E_{ij})$ = probability of the child expecting to graduate from college, where $E = 1$ if the child expects to complete college, 0 otherwise.

Sex = a binary indicator of the child's gender (0 = female, 1 = male).

I = whether the child is a first- or second-generation immigrant (0 = native, 1 = immigrant).

SES = a set of two dummy variables reflecting children's social class (reference = working class).

i = child i

j = school j

Similar models have been widely used to study socioeconomic inequalities in educational achievement across developed countries (Schütz, Ursprung, and Wößmann 2008). The focus of this article will be on the difference in college plans between the most advantaged ("professional") and least advantaged ("working class") groups. This is captured by the parameter on the "professional" dummy variable. All estimates from this model will be presented in terms of log-odds, a metric commonly used in cross-

national comparisons with categorical outcome data (e.g., Breen 2005; Alzheimer 2008; Nevitte et al. 2009; Yaish and Stier 2009; Jackson 2013).¹² Substantive conclusions remain intact when using the odds ratio instead.

One must also consider whether the size of the estimated socioeconomic gap in young people's educational expectations is "realistic." Thus, the model presented above will be estimated a second time, but now via ordinary least squares (OLS) estimation with children's academic achievement (PISA math test scores) as the dependent variable. This will enable comparison of the socioeconomic gap in educational expectations and the socioeconomic gap in academic ability, and an assessment of whether the United States stands out in the relationship between the two. As noted above, I hypothesize that socioeconomic differences in children's college plans will be smaller in the United States than one would predict for a country with its level of inequality in educational achievement (Hypothesis 3).

RESULTS

The Difference between Expected and Actual College Graduation Rates

Figure 1 compares the percentage of children expecting to complete college with actual graduation rates. The left-hand panel refers to PISA and the right-hand panel to TIMSS. Running along the x -axis is the percentage of children who obtain at least a bachelor's degree ("actual" graduation rates). The y -axis, on the other hand, refers to the percentage of children who expect to graduate from college ("expected" graduation rates). The 45° line is where these two proportions are equal. Countries above this line are where expectations exceed, on average, actual levels of attainment. The United States is highlighted using a square. A list of country abbreviations can be found in Table 1.

Before discussing the position of the United States relative to other countries, it is worth considering the broad cross-national pattern seen in Figure 1. First, in most countries, children's expectations are not out of touch with reality (on average). In PISA, 45 percent of children expect to complete college compared to average actual graduation rates of roughly 40 percent (across all the countries considered). Indeed, in both PISA and TIMSS, many countries sit quite close to or even below the 45° line. This suggests that college expectations vastly exceeding actual graduation rates are not the "norm" in most developed countries. However, the United States is not unique in having an expectation–attainment gap; there are several other countries where the proportion of children expecting to complete college exceeds the proportion who actually do (e.g., Scotland, Hungary, Italy). Second, it is interesting to note that there is essentially no association between expected and actual graduation rates at the international level. The correlation is negative in TIMSS (−0.44 with the United States and −0.51 without) and almost nonexistent in PISA (0.02). Clearly, countries where many children expect to complete college are not necessarily the ones where the most actually do.

Moving to the primary question of interest, one can see that the United States is substantially above the 45° line in both the left- and right-hand panels. In the latter,

around 76 percent of eighth-grade children expect to obtain a degree against actual graduation rates of 37 percent, an expectation–attainment gap of 39 percentage points. The proportion of American children expecting to obtain a bachelor’s degree is notably lower in PISA (64 percent) but nevertheless remains well above the proportion who actually graduate; the college expectation–attainment gap is still 27 percentage points. This is different from the situation in most other developed countries, where the two proportions are roughly equal. Indeed, in both the left- and right-hand panels of Figure 1, the United States is one of the furthest points from the 45° line. This provides strong support for Hypotheses 1.

The uniqueness of the United States is further illustrated in Table 2. This ranks each country in terms of the difference between expected and actual graduation rates. The United States is at the top of the TIMSS league table (i.e., it has the largest expectation–attainment gap), with a two-sample *t*-test, assuming independence between countries, suggesting it is significantly different at the 1 percent level from all the other OECD nations included. In PISA, the United States is ranked second only to Canada, with the expectation–attainment gap significantly bigger than in the 22 other countries considered. The fact that Canada also stands out in such international comparisons perhaps suggests that overly ambitious plans may be a more general North American phenomenon, rather than something that only occurs in the United States. Nevertheless, there remains strong support for Hypothesis 1: American teenagers are less realistic about their prospects of obtaining a bachelor’s degree than young people in most other developed countries.

Socioeconomic Differences in Educational Expectations

The United States is a country where educational opportunities differ markedly between children from rich and poor backgrounds (Schütz et al. 2008). If young people are “realistic” about the future, this should be reflected in their educational goals. Specifically, the socioeconomic gap in children’s educational expectations should be consistent with the difference in their academic skill. Is there any evidence of this in the PISA data set?

Table 3 presents parameter estimates from the logistic regression model presented above. The “beta” columns provide parameter estimates in terms of log-odds (i.e., the logarithm of the odds ratio), while “SE” stands for the standard error. Log-odds measure the strength of association between a predictor and a binary outcome, with larger values indicating a stronger relationship. To convert these figures into odds ratios, one simply has to exponentiate the values provided. The columns of interest are highlighted in gray. These figures refer to the difference in college intentions between children from professional and working-class backgrounds (i.e., the socioeconomic gap in 15-year-old school pupils’ educational expectations). Positive beta values indicate that children with professional parents are much more likely to expect to go to university than children from working-class backgrounds.

In all countries, disadvantaged children are less likely to expect to complete college than their more affluent peers. This gap is generally big (around two log-odds) and is

TABLE 2. The Percentage Point Difference between Expected and Actual Graduation Rates across Developed Countries

| | PISA | TIMSS |
|------------------|--------|--------|
| Canada | 33*** | — |
| United States | 27 | 39 |
| Hungary | 23*** | 26*** |
| Spain | 18*** | — |
| Scotland | 16*** | 5*** |
| Italy | 12*** | 19*** |
| Australia | 11*** | -20*** |
| Czech Republic | 9*** | 0*** |
| Ireland | 8*** | — |
| Portugal | 7*** | — |
| Slovakia | 6*** | — |
| Austria | 3*** | — |
| Finland | 2*** | — |
| Netherlands | 0*** | -17*** |
| Germany | -4*** | — |
| England | -5*** | -4*** |
| Sweden | -7*** | -5*** |
| New Zealand | -8*** | -18*** |
| Northern Ireland | -13*** | — |
| Switzerland | -15*** | — |
| Norway | -18*** | 7*** |
| Poland | -19*** | — |
| Denmark | -23*** | — |
| Iceland | -27*** | — |

Notes: Positive figures refer to countries where the proportion of children expecting to complete college is greater than the proportion who actually complete college. ***Illustrates whether the expectation–attainment gap is significantly bigger in the United States than in that particular country at the 1 percent level. These significance tests have been calculated using a two-sample *t*-test assuming independence between countries. No adjustment has been made to these significance levels for multiple comparisons. France has been excluded from the table as information on actual graduation rates is not available.

Source: Author's calculations using the Programme for International Student Assessment (PISA) 2003 data set.

always significantly different from 0 at the 1 percent level. To put this into perspective, a typical child from a professional background is around 40 percentage points more likely to expect to complete college than a child from a working-class background in most OECD countries. The United States is, however, an interesting outlier. The socioeconomic gap is just 1.03 on the log-odds scale, the second *smallest* out of all the countries considered. In other words, the socioeconomic gap in educational expectations in the United States is just half of that in the typical OECD country. This result is not just

TABLE 3. Estimated Coefficients for the Logistic Regression Model of Educational Expectations (Log-Odds)

| | Intermediate class | | Professional class | | Gender (male) | | Immigrant | | Intermediate* Imm | | Professional* Imm | |
|------|--------------------|------|--------------------|------|---------------|------|-----------|------|-------------------|------|-------------------|------|
| | Beta | SE | Beta | SE | Beta | SE | Beta | SE | Beta | SE | Beta | SE |
| Fin | 0.29 | 0.09 | 1.02 | 0.11 | -0.17 | 0.06 | 0.37 | 0.43 | 0.02 | 0.44 | -0.31 | 0.51 |
| USA | 0.60 | 0.12 | 1.03 | 0.14 | -0.27 | 0.07 | 0.10 | 0.21 | 0.11 | 0.24 | 0.18 | 0.25 |
| Ice | 0.56 | 0.15 | 1.23 | 0.18 | -0.55 | 0.08 | 0.03 | 0.49 | 0.18 | 0.50 | 0.39 | 0.54 |
| NZ | 0.61 | 0.16 | 1.34 | 0.17 | -0.17 | 0.09 | 1.00 | 0.23 | -0.48 | 0.24 | -0.53 | 0.25 |
| Ire | 0.80 | 0.12 | 1.37* | 0.15 | -0.71 | 0.08 | 0.29 | 0.25 | -0.08 | 0.27 | -0.11 | 0.33 |
| Can | 0.65 | 0.07 | 1.45*** | 0.09 | -0.60 | 0.05 | 1.30 | 0.18 | -0.61 | 0.18 | -0.47 | 0.21 |
| Swe | 0.44 | 0.15 | 1.52** | 0.16 | -0.42 | 0.07 | 0.39 | 0.24 | 0.16 | 0.24 | -0.26 | 0.33 |
| Sco | 0.73 | 0.17 | 1.57** | 0.22 | -0.51 | 0.09 | 0.28 | 0.45 | 0.25 | 0.48 | 0.42 | 0.55 |
| Aus | 0.79 | 0.09 | 1.69*** | 0.12 | -0.60 | 0.06 | 0.80 | 0.14 | -0.31 | 0.15 | -0.39 | 0.19 |
| NI | 0.96 | 0.19 | 1.72*** | 0.21 | -0.45 | 0.11 | 0.86 | 0.44 | -0.26 | 0.46 | 0.01 | 0.50 |
| Den | 0.70 | 0.18 | 1.73*** | 0.19 | -0.15 | 0.07 | 1.06 | 0.28 | -0.63 | 0.30 | -0.86 | 0.37 |
| Aut | 0.85 | 0.16 | 1.75*** | 0.19 | -0.17 | 0.14 | 0.35 | 0.28 | -0.24 | 0.28 | 0.10 | 0.35 |
| Fra | 0.81 | 0.17 | 1.78*** | 0.19 | -0.50 | 0.09 | 0.72 | 0.24 | -0.58 | 0.24 | -0.71 | 0.31 |
| Nor | 0.86 | 0.22 | 1.79*** | 0.23 | -0.42 | 0.08 | 0.81 | 0.40 | -0.53 | 0.43 | -0.50 | 0.44 |
| Esp | 0.94 | 0.07 | 2.01*** | 0.13 | -0.69 | 0.07 | 0.32 | 0.25 | -0.26 | 0.27 | -0.47 | 0.39 |
| Eng | 1.22 | 0.22 | 2.04*** | 0.21 | -0.43 | 0.10 | 1.90 | 0.33 | -0.99 | 0.34 | -1.66 | 0.34 |
| Nld | 1.33 | 0.18 | 2.08*** | 0.22 | -0.21 | 0.08 | 1.23 | 0.26 | -1.21 | 0.26 | -1.16 | 0.32 |
| Swz | 1.21 | 0.29 | 2.13*** | 0.32 | -0.13 | 0.11 | 0.71 | 0.35 | -0.58 | 0.37 | -0.45 | 0.38 |
| Port | 0.92 | 0.09 | 2.28*** | 0.17 | -0.75 | 0.06 | -0.13 | 0.26 | 0.05 | 0.23 | -0.31 | 0.35 |
| Ger | 0.86 | 0.22 | 2.30*** | 0.23 | -0.23 | 0.10 | 0.00 | 0.37 | 0.00 | 0.38 | -0.18 | 0.42 |
| Slov | 1.29 | 0.14 | 2.35*** | 0.17 | -0.50 | 0.09 | -0.07 | 0.38 | -0.04 | 0.41 | -0.08 | 0.44 |
| Pol | 1.14 | 0.13 | 2.41*** | 0.17 | -0.70 | 0.07 | — | — | — | — | — | — |
| Ita | 0.68 | 0.08 | 2.50*** | 0.14 | -0.72 | 0.09 | 0.14 | 0.27 | -0.18 | 0.30 | -1.13 | 0.39 |
| Cze | 1.40 | 0.19 | 2.72*** | 0.21 | -0.51 | 0.09 | 0.44 | 0.53 | -0.70 | 0.55 | -0.48 | 0.68 |
| Hun | 1.23 | 0.14 | 2.96*** | 0.21 | -0.77 | 0.11 | 0.88 | 0.51 | -0.77 | 0.56 | -0.92 | 0.75 |

Notes: *, **, and *** indicate statistically significant differences compared with the United States at the 10, 5, and 1 percent levels. The highlighted column illustrates differences in educational expectations between children from working-class and professional backgrounds. "Beta" refers to the parameter estimates (in log-odds) and "SE" the standard errors. Reference groups are as follows: social class = working class; immigrant status = country native; gender = female. Statistical significance has been calculated using a two-sample *t*-test assuming independence between countries. No adjustment has been made to significance levels for multiple comparisons. Immigrant coefficients not estimated for Poland because of the small number of observations. A list of country abbreviations can be found in Table 1.

Source: Author's calculations using the Programme for International Student Assessment (PISA) 2003 data set.

a matter of sampling variation; Table 3 shows that results for the United States are statistically different from 20 of the other countries included at the 5 percent significance level. One could, of course, argue that this finding is simply because of differences in academic achievement between socioeconomic groups. However, in additional analysis not presented for brevity, I find that socioeconomic differences in educational expecta-

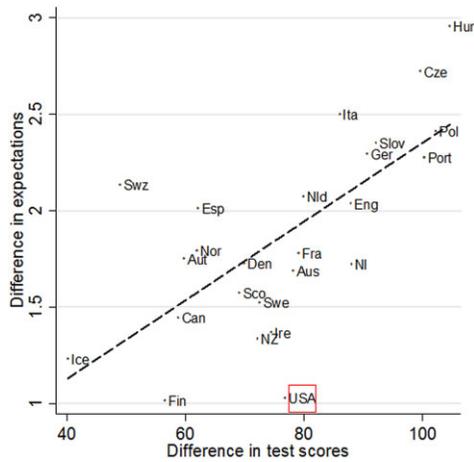


FIGURE 2. Estimated Difference between Professional and Working-Class Children’s Plans to Complete College versus the Difference in Their PISA Math Test Scores.

Notes: Figures on the y-axis refer to the difference in educational expectations between “professional” and “working-class” groups (and refer to log-odds). These are based upon estimates from the logistic regression model presented in Table 3. Results on the x-axis are estimates from an OLS regression model of children’s PISA math test scores (see Appendix D). Figures refer to the test point difference between “professional” and “working-class” groups. For example, professional children score roughly 80 points more (on average) than working-class children in the United States (100 PISA test points = 1 standard deviation). Country names corresponding to abbreviations can be found in the first column of Table 1. The United States has been highlighted with a square.

Source: Author’s calculations based upon the Programme for International Student Assessment (PISA) 2003 data set.

tions still stand out as atypically small even once children’s PISA reading, math, and science test scores have been controlled for. This is consistent with Hypothesis 3.

How does socioeconomic inequality in educational expectations compare with the level of inequality in academic achievement? The answer to this question can be found in Figure 2. In this, I have re-estimated the same model used to measure socioeconomic differences in children’s educational expectations—but now using OLS with age 15 math test scores as the dependent variable. A full set of parameter estimates can be found in Appendix D. The difference in test scores between the professional and working-class groups is presented along the x-axis, with the socioeconomic gap in children’s college plans, as has just been presented in Table 3, on the y-axis. Running through the center of the graph is a regression line. This represents the socioeconomic difference in educational expectations one would predict for a country given its level of educational inequality.

One of the most notable features of Figure 2 is the relatively strong cross-national correlation (approximately 0.7) between socioeconomic differences in expectations

and socioeconomic differences in achievement; inequality in academic skill is generally reflected in inequality in college plans. Yet, despite this strong pattern, the United States is again an outlier, and is in fact the point furthest *below* the fitted regression line out of all the countries considered. In other words, the difference between advantaged and disadvantaged children's educational expectations is much *lower* in the United States than one would predict for a country with its level of educational inequality. This supports the notion that there is something quite unusual about the expectations of young people in the United States, and provides further evidence in favor of Hypothesis 3.

To What Extent Do Low Achievers Expect to Obtain at Least a Bachelor's Degree?

Although the college expectation–attainment gap is bigger in the United States than in other countries and socioeconomic differences are smaller, it is unclear thus far whether this necessarily represents a problem that American policymakers should seek to address. Indeed, one could argue that the comparatively small gap in expectations between rich and poor may actually help disadvantaged children's prospects of future upward social mobility. The findings from previous subsections may generate more concern, however, if they are associated with high expectations of young people who are ill-equipped to cope with college demands. Indeed, as Kalogrides and Grodsky (2011:854) note, "high school students increasingly expect to attend college and to complete a bachelor's degree, regardless of their prior academic achievements." Table 4 thus presents the percentage of low-achieving children who expect to obtain at least a bachelor's degree. Recall that low achievement is defined as scoring in the bottom national PISA/TIMSS test quartile.

The United States is again at the top of the international league table. Sixty-one percent of low-achieving children in TIMSS, and 44 percent in PISA, expect to obtain at least a bachelor's degree. These percentages are higher than in every other country included in the analysis, with the analogous figures for several other English-speaking nations standing at less than half this amount (e.g., 20 percent in Scotland and 9 percent in England). Indeed, the United States is significantly different from every other country in both PISA and TIMSS at the 1 percent level, with the exception of Canada in PISA for which the difference is significant at only the 10 percent level. Clearly, the United States is a country where many children who are ill-equipped to complete college nevertheless expect to reach this ambitious goal. This is consistent with Hypothesis 2.

How do the expectations of this low-achieving group compare with actual graduation rates? Unfortunately, as PISA and TIMSS are only cross-sectional studies, I am unable to investigate this issue across a wide set of nations. In the United States, however, there is a panel data set (the Educational Longitudinal Study of 2002) that does include information on children's estimated PISA math test scores and enrollment into four-year bachelor's degree courses by age 20. My exploration of the Educational Longitudinal Study data suggests that just 15 percent of U.S. children scoring in the bottom math test quartile have pursued this academic route. This is roughly 30 percentage points lower than the number expecting to do so in the PISA

TABLE 4. The Percentage of Low-Achieving Children Expecting to Complete College across Developed Countries

| | PISA | TIMSS |
|------------------|-------|-------|
| United States | 44 | 61 |
| Canada | 40* | — |
| Australia | 38*** | 12*** |
| Finland | 37*** | — |
| Italy | 32*** | 27*** |
| Ireland | 27*** | — |
| Scotland | 20*** | 15*** |
| New Zealand | 20*** | 16*** |
| Sweden | 20*** | 20*** |
| Portugal | 17*** | — |
| Hungary | 16*** | 18*** |
| Iceland | 15*** | — |
| Spain | 15*** | — |
| Norway | 12*** | 35*** |
| Slovakia | 11*** | — |
| Netherlands | 11*** | 7*** |
| Denmark | 10*** | — |
| Northern Ireland | 10*** | — |
| England | 9*** | 10*** |
| Czech Republic | 9*** | 9*** |
| France | 8*** | — |
| Poland | 8*** | — |
| Austria | 6*** | — |
| Switzerland | 4*** | — |
| Germany | 3*** | — |

Notes: *, **, and *** illustrate whether the expectation–attainment gap is significantly bigger in the United States than in that particular country at the 10 percent, 5 percent, and 1 percent levels. These significance tests have been calculated using a two-sample *t*-test assuming independence between countries. No adjustment has been made to these significance levels for multiple comparisons. Low achievement is defined as PISA/TIMSS test scores in the bottom national quartile.

Source: Author’s calculations using the Programme for International Student Assessment (PISA) 2003 and Trends in Mathematics and Science Study (TIMSS) 2007 data sets.

2003 cohort, and thus suggests that there is likely to be a substantial expectation–attainment gap. Moreover, judging by the figures in Table 4, it seems unlikely that such a big absolute difference will occur in most of the other countries considered.

To conclude, I investigate whether the United States has a particularly high proportion of “vulnerable” children (low achievers from poor backgrounds) expecting to complete college and who thus have clearly misaligned plans. Estimates are not presented in the text, for the sake of brevity, but can be found in Appendix E. I find that

this misalignment exists in several developed countries, though again standing out as a particular issue in the United States. In this country, around 40 percent of low-achieving children from working-class backgrounds believe they will obtain a bachelor's degree, compared with around one in ten in most of the other OECD nations. Clearly, the ambitious nature of American teenagers' educational plans highlighted in Figure 1, along with the comparatively small socioeconomic gap in expectations shown in Figure 2, is being driven at least in part by the overly ambitious plans of vulnerable youth.¹³ This finding is consistent with Hypotheses 2 and 3 and is supported by Agnew and Jones (1988), who argue that disadvantaged young people in the United States inflate their educational expectations to unrealistic levels in order to adapt to the deprivation they face.

DISCUSSION—WHY ARE EDUCATIONAL EXPECTATIONS SO HIGH IN THE UNITED STATES?

The previous section illustrated how educational expectations in the United States are particularly poorly aligned. Earlier, I discussed social reproduction theory and how the unrealistic expectations of American youth could be attributed to schools in the United States nurturing "the myth of meritocracy" (Grodsky and Riegle-Crumb 2010:17). I now build upon this argument while also offering alternative explanations for my findings.

First, the United States has a large immigrant and African-American population, especially in comparison with many of its European counterparts. Such minority groups are particularly likely to overestimate their chances of later educational success and are known to suffer from a large expectation–attainment gap (Beutel and Anderson 2008; Gutman and Akerman 2008). This could, in turn, help explain why the difference between expected and actual graduation rates is unusually large in the United States. Moreover, as such minority groups tend to be overrepresented within the lower social classes, this also potentially explains why the socioeconomic gap in educational expectations is comparatively small.

Second, an "education for all" ethos has emerged in the United States over the last 30 years (Rosenbaum 2001). Government policy has explicitly encouraged more and more young people to consider college over this period, with a bachelor's degree or higher being constantly promoted as the path to a good job and long-run labor market success. For instance, Morgan (2005) discusses how the Gaining Early Awareness and Readiness for Undergraduate Programs (GEAR-UP) program was designed to raise educational expectations, particularly among children from disadvantaged and minority groups; even President Obama, in his first speech to Congress, actively encouraged all young people to strive toward this goal. Such views are often reinforced in the home, where parents and families stress the importance of a college education from a very early age. For instance, Kim, Sherraden, and Clancy (2012) find that 93 percent of American mothers expect their child to complete college when asked during the first two years of the child's life. Vocational training such as apprenticeships is much more

widely respected in other countries, including the “tracking” countries (e.g., Germany, Austria, the Netherlands) discussed earlier. This difference in status of vocational pathways is likely to influence educational expectations; young people will be more inclined to consider vocational training if it is held in high regard. It is thus clear that active promotion of college is not so extensive in other countries, particularly those with a strong vocational sector, which could plausibly lead the United States to stand out from the crowd.

In contrast, it may be that young people can hold out hope of completing college longer in the United States than in other countries, and that this is driving the apparently large expectation–attainment gap. In particular, the United States still has a relatively open college system, which easily and frequently allows older students to enter. The TIMSS and PISA respondents are between 14 and 16 years old, and it is not unusual in the United States for young people performing poorly in high school to undertake a college course later in life (e.g., in their late 20s). This is less common in many other countries, where the structure of the education system does not allow easy access to college at older ages. Thus, it may be quite reasonable that non-U.S. children who are not performing well in school, and who are potentially in curriculum tracks that do not allow access to college, may be much less likely to expect to complete a bachelor’s degree than their peers in the United States. Indeed, a rich literature, perhaps best represented by work on sponsored and contest mobility (Turner 1960; Morgan 1990; Buchmann and Dalton 2002; Miller, Glick, and Cardinal 2005), has noted that young people adapt to institutional possibilities; it seems likely that this is playing at least some role here.

The United States is also somewhat unusual in having an extensive two-tier higher education system, with a large number of community colleges offering two-year associate degrees. Such institutions are meant to improve access to four-year colleges, particularly among underrepresented and vulnerable groups but suffer from relatively low upgrade rates. In other words, disadvantaged children’s expectations “cool out” during this period (Reynolds et al. 2006), with relatively few completing a four-year qualification. This then leads to a gap between educational plans and actual achievement (although, as Kalogrides and Grodsky 2011 note, community college also acts as a “safety net” for disadvantaged young people who may otherwise drop out after starting a four-year degree). The fact that other countries do not have a similar two-tier college structure, or not one that is nearly as well developed, could thus also potentially explain why educational ambition seems to be higher in the United States than elsewhere.

Finally, the proportion of children who drop out of college before graduation is very high in the United States by international standards. This is demonstrated in Figure 3. Almost half (44 percent) of those who enter college in the United States leave without a bachelor’s degree. The only country with a higher noncompletion rate is Italy, with the cross-country average standing at 32 percent. This is perhaps not surprising, given the high cost of college in the United States (see Appendix A) but may also have important implications for the accuracy of young people’s educational plans.

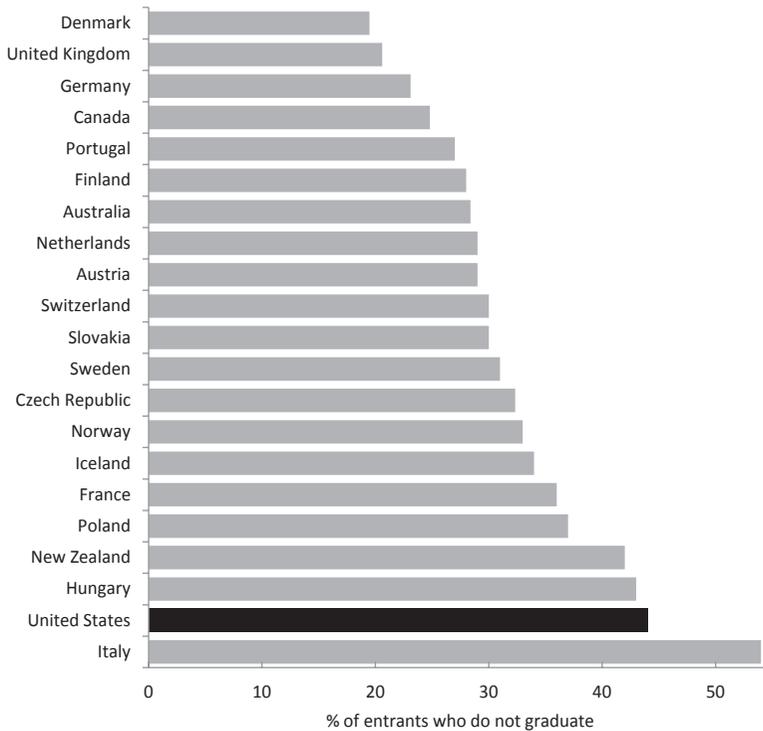


FIGURE 3. The Percentage of ISCED 5A Students Who Leave College without an ISCED 5A Qualification.

Notes: The United States has been highlighted using a black bar. Information on college completion rates was collected in a special survey conducted by the OECD in 2007. The completion rate is calculated as the ratio of the number of students who graduate from an initial degree during the reference year to the number of new entrants in this degree n years before, with n being the number of years of full-time study required to complete the degree. Further details on methodology can be found in OECD (2008:42, annex 3). Information is not available for Spain and Ireland. Data are only available for the UK as a whole (not separately for England, Scotland, and Northern Ireland).

Source: Author's calculations using data drawn from Organisation for Economic Co-operation and Development (OECD) (2008:table A4.1).

In particular, it may be that many teenagers who expect to obtain a four-year bachelor's degree in the United States do actually *enroll* upon such a course. Indeed, Reynolds and Pemberton (2001) find that the proportion of U.S. children expecting to complete college is roughly in line with actual college *entrance* rates. But many then leave college without a formal qualification, leading to the large gap between educational expectations and eventual attainment. This will cause the United States to stand out as a country where many young people's educational ambitions are not met.

Unfortunately, PISA and TIMSS contain limited information on children's background (e.g., there is no information on ethnicity), making it difficult to establish

empirically the reasons why American children hold less realistic educational expectations than young people in other developed countries. Similarly, as TIMSS and PISA are cross-sectional rather than longitudinal studies, one can only speculate as to the long-run implications of American children having particularly misaligned educational goals. However, trying to explain why the educational plans of American teenagers are less realistic than those of young people elsewhere in the world, and developing a better understanding of the long-run consequences of this for American society, is an important direction for future research. This may draw upon more detailed panel data sets from a smaller number of strategically selected countries, in an attempt to isolate the causal contextual factors behind what I have found.

POLICY IMPLICATIONS

What do these findings imply for public policy? Answering this question involves weighing the social benefits of young people holding ambitious educational plans against the potential harm that misaligned expectations may cause. As noted in the introduction, many sociologists believe that high expectations have a positive effect upon children's lives (Sewell et al. 1970; Wigfield 1994). Arguably, the results presented in this article could thus be interpreted as positive for the United States, with little need for policymakers to intervene. Yet, Schneider and Stevenson (1999), Reynolds et al. (2006), and Wrosch et al. (2007) have all argued that high expectations may be counterproductive if they are not properly aligned. The large discrepancy between educational expectations and academic achievement may therefore have negative consequences for American society, and hence is something that policymakers should seek to address.

For example, a great deal of government money is currently being spent on young people who are academically ill-prepared to cope with the demands of college. This includes the provision of financial aid, mainly to disadvantaged groups, and remedial courses to all low-achieving children regardless of their socioeconomic background. Indeed, \$237 billion of college aid was distributed in the 2011/12 academic year alone (College Board 2012), while one in three first-year undergraduate students took a remedial course (National Center for Education Statistics 2012:table 243). Many of these teenagers may enter college in order to fulfill their ambitious educational expectations—even though their inadequate academic preparation means they are highly likely to drop out. In increasingly austere times, policymakers must consider whether financial aid and remedial education for students with little chance of completing college is the best use of financial and human resources. I thus advise policymakers to heed the call of the OECD (2011b:49) and consider “whether the current balance between support for basic skills in school as opposed to developmental postsecondary education represents an optimal use of resources.”

Recent studies have also shown that employers are not satisfied with the quality of vocational trainees in the United States (OECD 2011b). The short supply of vocationally educated, technically skilled high-school graduates is a particular problem

in certain geographical areas; the OECD (2011c) highlights South Carolina as an example. This may be because many young people who are well equipped to undertake vocational training are reluctant to do so because of its low prestige, and so turn to college education instead. Yet, college may not be appropriate for these individuals, leading to regret later (Reynolds et al. 2006). The widespread misalignment found in this article suggests that such “lost talent” from the vocational sector could be a particularly big problem in the United States compared with other developed countries. Policymakers should therefore consider strategies to raise the prestige of vocational training, so that young people see it as a viable alternative to college. Unfortunately, funding for high school vocational training programs, which have typically served as a conduit to postsecondary vocational training and work placements, is being cut (The Economist 2010; Education Insider 2011; Rich 2011). Without government intervention to change this situation, it is unlikely that the status of vocational education will improve within the foreseeable future.

How do policymakers bring children’s educational expectations into closer alignment with their actual academic abilities? One option is to raise academic skills and better prepare young people for college—particularly those from less fortunate backgrounds. This will improve alignment without reducing ambition, which may have important benefits, as previously noted. This would be both an equitable and efficient solution, helping disadvantaged children to achieve more in school while also raising productive capacity in the U.S. economy via boosting the aggregate level of skill.

Alternatively, one could take the view that young people, particularly disadvantaged low achievers, are simply unrealistically ambitious and that educational expectations therefore need to be altered. Consequently, policymakers may seek to help young people better understand the realities of their educational and occupational options, so that they can develop the appropriate skills for the future. This includes providing higher quality career guidance (OECD 2011b) and promoting the benefits of alternative educational routes in schools, such as vocational training. Although this may be an efficient solution, in that young people may choose more appropriate educational pathways, it may not lead to greater equity between socioeconomic groups. One danger is that by tempering expectations during secondary school, social reproduction via the American education system becomes further entrenched. Policies designed to alter educational plans therefore need to be handled with care. Disadvantaged young people in particular need to understand that they are able to access college, but also that there are other possible routes to success.

SUMMARY AND CONCLUSIONS

For almost half a century, a substantial body of sociological research has focused on children’s educational expectations as a key causal determinant of academic and labor market attainment. Yet, more recently, some preeminent sociologists have argued that American teenagers may have become detached from reality—that their expectations

are now so high that they are unrealistic. This has led some to question whether it will lead to inappropriate educational choices and have a negative impact upon later labor market success. There has, however, been little attempt to put these problems into a comparative context. Do American children overestimate their chances of completing college by more, on average, than their peers in other developed countries?

I have addressed this issue throughout the course of this article. My results suggest that although the college expectation–attainment gap is not unique to the United States, it does seem to be bigger in this country than elsewhere. Even more worryingly, the United States has a particularly high proportion of vulnerable children (low achievers from working-class backgrounds) who believe that they will obtain a bachelor's degree. This group is among the most at risk of holding expectations that are not later met, and thus of the negative consequences that this may entail. This should concern policymakers, as it may mean that a particularly large number of disillusioned youth emerge in the United States who have been unable to fulfill their ambitious educational goals.

It is important to recognize, however, that at least some of my results could be interpreted in a rather different way. For instance, one might argue that the high ambition of American youth demonstrates a willingness to work hard at school and to reach for challenging goals. Similarly, in the context of status attainment research, the comparatively small gap in expectations between advantaged and disadvantaged groups could be taken as an indication that the United States is doing particularly well at limiting one of the key factors behind intergenerational persistence of social status. Thus, based on the results of this article, one is unable to definitively conclude that the high and unrealistic expectations of American youth are necessarily a bad thing. But the article has demonstrated how important it is for the academic community to build a better understanding of such issues, as any problems that are caused by unmet or unrealistic expectations are likely to be particularly prevalent in the United States. Indeed, the unrealistic expectations of American youth may help to explain the recent disappointing performance of this country in terms of educational outcomes, such as the moderate position in the OECD PISA rankings and the high college dropout rate. Further work along the lines of Reynolds and Baird (2010); Rosenbaum (2011); and Domina, Conley, and Farkas (2011) should thus be considered a priority for American sociological research.

The other important point to draw from this study, particularly for international readers, is that the social and economic relationships that hold in the United States do not necessarily generalize to other parts of the developed world. A significant proportion of the theoretical and empirical work exploring the link between expectations and attainment has been based upon the experiences of American children. Yet this research has illustrated that the expectations of American youth are systematically different from those held by young people in other countries. Thus a cross-national study, exploring how the link between expectations and attainment varies across developed nations, is an important and largely neglected topic that is ripe for future work.

ACKNOWLEDGMENTS

Thanks are given to the ESRC for providing funding for this project. I would particularly like to thank Ingrid Schoon, John Micklewright, Patrick Sturgis, Sandra McNally, and Sylke Schnepf for their helpful comments and the hospitality of the Institute for Research on Poverty at the University of Wisconsin, Madison, on a visit while this article was produced.

NOTES

¹Bruce and Yearley (2006:130) describe habitus as “a set of acquired principles of thought, behaviour and taste that generates social practices and is particularly associated with a certain social class. It is described as a person’s own knowledge and understanding of the world.”

²Low-achieving children with parents from professional backgrounds expecting to complete college may also be a problem; although this group may be able to afford to attend college, they are just as unlikely to keep up with the academic demands. However, I choose to focus on low-achieving children from disadvantaged backgrounds because they face two significant barriers to entry (lack of adequate academic preparation and lack of finances) rather than just one.

³Around one in ten children picked the “don’t know” category in the United States. In this article, I do not consider this as missing data. Rather, I view it as a legitimate substantive answer for children to provide, indicating that they have not committed to the educational path they are going to take.

⁴Reading and science were also covered in the PISA 2003 study but in a lot less detail than math. All of the results presented are robust to the use of reading or science test scores instead of math test scores. Results are available from the author upon request.

⁵I experimented using the other plausible values and by running five separate models and averaging the estimated coefficients and standard errors. Results are very similar to those presented.

⁶An absolute skill threshold refers to children scoring below a certain number of points on the test. In PISA, for instance, the survey organizers define any child scoring below 420 test points as in achievement “level one.” The implication of using such an absolute threshold is that the proportion of children defined as low achievers will vary across countries. Results using this absolute skill threshold are available from the author upon request.

⁷In TIMSS, the only information available on family background are children’s reports of parental education and only in a selection of countries. On the other hand, PISA contains detailed information on parental occupation in all participating nations.

⁸As this information is based upon children’s reports, measurement error may be a concern. However, Jerrim and Micklewright (2012) have investigated this issue with specific reference to the PISA data set. They find a strong correlation between child and parent reports of father’s occupational status in the 10 countries with data available.

⁹Approximately 10 percent of the U.S. sample is defined as working class, 60 percent as intermediate, and 30 percent as professional class. Figures for the OECD as a whole are approximately 15 percent working class, 65 percent intermediate, and 20 percent professional class. The social class distribution in England, Canada, and Australia is comparable to that in the United States, perhaps because of the similar labor market structures.

¹⁰Maternal and paternal occupation may have independent influences upon children’s educational expectations, and the relative importance of each parent may also depend upon the

gender of the child. Here, I use the higher of the two to create a broad measure of socioeconomic background, though note that distinguishing between the impact of mothers and fathers is an important issue worthy of further research.

¹¹There has been some debate as to whether comparing logit coefficients across groups is an appropriate empirical strategy (Allison 1999; Hauser and Andrew 2006). A few alternative approaches have been suggested, although none has been universally accepted (Williams 2009). Consequently, I have used a nonparametric approach to test the robustness of my results. The main conclusions drawn remain largely intact (results available from the author upon request).

¹²This measure is more attractive than alternatives such as the odds ratio and marginal effect (predicted probabilities), as it is linear, can take values at any point along the real number line, and is not sensitive to the point on the logistic distribution at which estimates are produced. Log-odds are therefore not influenced by differences between countries in the absolute proportion of children who expect to complete college.

¹³It is also interesting to note that 50 percent of low-achieving children from the professional group expect to obtain a bachelor's degree in the United States—a greater proportion than in most other developed countries. Although these young people may be able to afford to attend college, they are still unlikely to have the academic ability to do so. This group may therefore also undertake inappropriate educational pathways (potentially leading to a waste of human and financial resources).

REFERENCES

- Agnew, Robert and Diane H. Jones. 1988. "Adapting to Deprivation: An Examination of Inflated Educational Expectations." *The Sociological Quarterly* 29(2):315–37.
- Allison, Paul D. 1999. "Comparing Logit and Probit Coefficients across Groups." *Sociological Methods & Research* 28(2):186–208.
- Altheimer, Irshad. 2008. "Do Guns Matter? A Multi-Level Cross-National Examination of Gun Availability on Assault and Robbery Victimization." *Western Criminology Review* 9(2):9–32.
- Betts, Julian. 2011. "The Economics of Tracking in Education." Pp. 341–81 in *Handbook of the Economics of Education*, edited by Erik Hanushek, Stephen Machin, and Ludger Wößmann. Amsterdam, the Netherlands: Elsevier.
- Beutel, Ann M. and Kermyt G. Anderson. 2008. "Race and the Educational Expectations of Parents and Children: The Case of South Africa." *The Sociological Quarterly* 49(2):335–61.
- Biddle, Bruce J. and David C. Berliner. 2002. "Unequal School Funding in the United States." *Educational Leadership* 59(8):48–59.
- Blanden, Jo. 2013. "Cross-National Rankings of Intergenerational Mobility: A Comparison of Approaches from Economics and Sociology." *Journal of Economic Surveys* 27(1):38–73.
- Blanden, Jo, Paul Gregg, and Lindsey Macmillan. 2007. "Accounting for Intergenerational Income Persistence: Noncognitive Skills, Ability and Education." *Economic Journal* 117(519): C43–60.
- Bourdieu, Pierre. 1974. "The School as a Conservative Force: Scholastic and Cultural Inequalities." Pp. 32–46 in *Contemporary Research in the Sociology of Education*, edited by John Egleston. London: Methuen.
- . 1977. *Outline of a Theory of Practice*. Cambridge, England: Cambridge University Press.
- Breen, Richard. 2005. "Explaining Cross-National Variation in Youth Unemployment. Market and Institutional Factors." *European Sociological Review* 21(2):125–34.

- Brown, Sarah, Aurora Ortiz-Nunez, and Karl Taylor. 2011. "What Will I Be When I Grow Up? An Analysis of Childhood Expectations and Career Outcomes." *Economics of Education Review* 30(3):493–506.
- Bruce, Steve and Steven Yearley. 2006. *The SAGE Dictionary of Sociology*. London: SAGE.
- Buchmann, Claudia and Ben Dalton. 2002. "Interpersonal Influences and Educational Aspirations in 12 Countries: The Importance of Institutional Context." *Sociology of Education* 75(2):99–122.
- Chmielewski, Anna, Hanna Dumont, and Ulrich Trautwein. Forthcoming. "Tracking Effects Depend on Tracking Type: An International Comparison of Mathematics Self-Concept." *American Educational Research Journal*. doi: 10.3102/0002831213489843
- College Board. 2012. "Trends in Student Aid 2012." *Trends in Higher Education Series*. New York. Retrieved January 28, 2013 (<http://trends.collegeboard.org/sites/default/files/student-aid-2012-full-report.pdf>).
- Cowan, Benjamin W. 2011. "Forward-Thinking Teens: The Effects of College Costs on Adolescent Risky Behavior." *Economics of Education Review* 30(5):813–25.
- Domina, Thurston, Anne-Marie Conley, and George Farkas. 2011. "The Link between Educational Expectations and Effort in the College-for-All Era." *Sociology of Education* 84(2):93–112.
- Duncan, Otis, David Featherman, and Beverly Duncan. 1972. *Socioeconomic Background and Achievement*. New York: Academic Press.
- Dustmann, Christian. 2004. "Parental Background, Secondary School Track Choice, and Wages." *Oxford Economic Papers* 56(2):209–30.
- Education Insider. 2011. "Decreased Funding for Vocational Schools: Raising Quality or Limiting Opportunity?" Retrieved October 4, 2012 (http://education-portal.com/articles/Decreased_Funding_for_Vocational_Schools_Raising_Quality_or_Limiting_Opportunity.html).
- Gottfredson, Linda S. 2002. "Gottfredson's Theory of Circumscription, Compromise, and Self Creation." Pp. 85–149 in *Career Choice and Development*, edited by Duane Brown. San Francisco, CA: Jossey-Bass.
- Grodsky, Eric and Catherine Riegle-Crumb. 2010. "Those Who Choose and Those Who Don't: Social Background and College Orientation." *The ANNALS of the American Academy of Political and Social Science* 627(1):14–35.
- Gutman, Leslie and Rodie Akerman. 2008. "Determinants of Aspirations." Centre for Research on the Wider Benefits of Learning. Research Report 27. London: Institute of Education. Retrieved July 24, 2012 (<http://eprints.ioe.ac.uk/2052/1/Gutman2008Determinants.pdf>).
- Hauser, Robert M. and Megan Andrew. 2006. "Another Look at the Stratification of Educational Transitions: The Logistic Response Model with Partial Proportionality Constraints." *Sociological Methodology* 36(1):1–26.
- Haveman, Robert and Timothy Smeeding. 2006. "The Role of Higher Education in Social Mobility." *The Future of Children* 16(2):125–50.
- Hendrickx, John. 2004. "ISKO: Stata Module to Recode 4 Digit ISCO-88 Occupational Codes." Boston College Department of Economic Research. Working Paper. Retrieved July 24, 2012 (<http://econpapers.repec.org/software/bocbocode/s425802.htm>).
- Jackson, Michelle. 2013. *Determined to Succeed? Performance versus Choice in Educational Attainment*. Stanford, CA: Stanford University Press.
- Jacob, Brian A. and Tamara Wilder Linkow. 2011. "Educational Expectations and Attainment." Pp. 133–65 in *Whither Opportunity: Rising Inequality, Schools, and Children's*

- Life Chances*, edited by Greg Duncan and Richard Murnane. New York: Russell Sage Foundation.
- Jenkins, Stephen P., John Micklewright, and Sylke V. Schnepf. 2008. "Social Segregation in Secondary Schools: How Does England Compare with Other Countries?" *Oxford Review of Education* 34(1):21–37.
- Jerrim, John. 2012. "The Socio-Economic Gradient in Teenagers' Literacy Skills: How Does England Compare to Other Countries?" *Fiscal Studies* 33(2):159–84.
- Jerrim, John and John Micklewright. 2012. "Socioeconomic Gradients in Children's Cognitive Skills: Are Cross-Country Comparisons Robust to Who Reports Family Background?" Institute of Education, Department of Quantitative Social Science. Working paper. Retrieved April 18, 2013 (<http://ideas.repec.org/p/qss/dqsswp/1206.html>).
- Kalogrides, Demetra and Eric Grodsky. 2011. "Something to Fall Back On: Community Colleges as a Safety Net." *Social Forces* 89(3):853–77.
- Kerckhoff, Alan C. 2003. "From Student to Worker." Pp. 251–68 in *Handbook of the Life Course*, edited by Jeylan Mortimer and Michael Shanahan. New York: Springer Science.
- Khoo, Siek Toon and John Ainley. 2005. "Attitudes, Intentions and Participation." Longitudinal Surveys of Australian Youth. Research Report 41. Australian Council for Educational Research. Retrieved July 24, 2012 (http://www.acer.edu.au/documents/LSAY_1say41.pdf).
- Kim, Youngmi, Michael Sherraden, and Margaret Clancy. 2012. "Do Mothers' Educational Expectations Differ by Race and Ethnicity, or Socioeconomic Status?" *Economics of Education Review* 33(2):82–94.
- Lynn, Richard and Gerhard Meisenberg. 2010. "National IQs Validated for 108 Nations." *Intelligence* 38(4):353–60.
- Lynn, Richard and Tatu Vanhanen. 2006. *IQ and Global Inequality*. Augusta, GA: Washington Summit Publishers.
- Miller, Chet C., William H. Glick, and Laura B. Cardinal. 2005. "The Allocation of Prestigious Positions in Organizational Science: Accumulative Advantage, Sponsored Mobility, and Contest Mobility." *Journal of Organizational Behavior* 26(5):489–516.
- Morgan, Harriet P. 1990. "Sponsored and Contest Mobility Revisited: An Examination of Britain and the USA Today." *Oxford Review of Education* 16(1):39–54.
- Morgan, Stephen. 2004. "Methodologist as Arbitrator: Five Methods for Black-White Differences in the Causal Effect of Expectations on Attainment." *Sociological Methods and Research* 33(1):3–53.
- . 2005. *On the Edge of Commitment: Educational Attainment and Race in the United States*. Stanford, CA: Stanford University Press.
- National Center for Education Statistics. 2012. *Digest of Education Statistics*. Washington, DC: Institute of Education Sciences. Retrieved February 2, 2013 (<http://nces.ed.gov/programs/digest/d11/>).
- Nevitte, Neil, Andre Blais, Elisabeth Gidengil, and Richard Nadau. 2009. "Socioeconomic Status and Nonvoting: A Cross-National Comparative Analysis." Pp. 85–108 in *The Comparative Study of Electoral Systems*, edited by Hans-Dieter Klingemann. Oxford, England: Oxford University Press.
- OECD. 2008. *Education at a Glance 2008: OECD Indicators*. Paris, France: Organisation for Economic Co-operation and Development.
- . 2009. *Education at a Glance 2009: OECD Indicators*. Paris, France: Organisation for Economic Co-operation and Development.

- . 2011a. *Strong Performers and Successful Reformers in Education: Lessons from PISA for the United States*. Paris, France: Organisation for Economic Co-operation and Development.
- . 2011b. *Learning for Jobs: OECD Reviews of Vocational Education and Training—United States, Texas*. Paris, France: Organisation for Economic Co-operation and Development.
- . 2011c. *Learning for Jobs: OECD Reviews of Vocational Education and Training—United States, South Carolina*. Paris, France: Organisation for Economic Co-operation and Development.
- . 2012. *Education at a Glance 2012: OECD Indicators*. Paris, France: Organisation for Economic Co-operation and Development.
- Reardon, Sean and Kendra Bischoff. 2011. *More Unequal and More Separate: Growth in the Residential Segregation of Families by Income, 1970–2009*. New York: Russell Sage Foundation.
- Reardon, Sean, John T. Yun, and Michal Kurlaender. 2006. “Implications of Income-Based School Assignment Policies for Racial School Segregation.” *Educational Evaluation and Policy Analysis* 28(1):49–75.
- Reynolds, John R. and Chardie L. Baird. 2010. “Is There a Downside to Shooting for the Stars? Unrealized Educational Expectations and Symptoms of Depression.” *American Sociological Review* 75(1):151–72.
- Reynolds, John R. and Jennifer Pemberton. 2001. “Rising College Expectations among Youth in the United States: A Comparison of the 1979 and 1997 NLSY.” *Journal of Human Resources* 36(4):703–26.
- Reynolds, John R., Michael Stewart, Ryan MacDonald, and Lacey Sischo. 2006. “Have Adolescents Become Too Ambitious? High School Seniors’ Educational and Occupational Plans 1976 to 2000.” *Social Problems* 53(2):186–206.
- Rich, Motoko. 2011. “Tough Calculus as Technical Schools Face Deep Cuts.” *The New York Times*, July 9. Retrieved October 4, 2012 (<http://www.nytimes.com/2011/07/10/business/vocational-schools-face-deep-cuts-in-federal-funding.html?pagewanted=all&r=0>).
- Rosenbaum, James. 2001. *Beyond College for All*. New York: Russell Sage Foundation.
- . 2011. “The Complexities of College for All: Beyond Fairy-Tale Dreams.” *Sociology of Education* 84(2):113–17.
- Sabates, Ricardo, Angel L. Harris, and Jeremy Staff. 2011. “Ambition Gone Awry: The Long-Term Socioeconomic Consequences of Misaligned and Uncertain Ambitions in Adolescence.” *Social Science Quarterly* 92(4):959–77.
- Schneider, Barbara and David Stevenson. 1999. *The Ambitious Generation: America’s Teenagers, Motivated but Directionless*. New Haven, CT: Yale University Press.
- Schoon, Ingrid. 2010. “Planning for the Future. Changing Education Expectations in Three British Cohorts.” *Historical Social Research* 35(2):99–119.
- Schulz, Wolfram. 2006. “Measuring the Socio-Economic Background of Students and Its Effect on Achievement in PISA 2000 and PISA 2003.” Annual Meetings of the American Educational Research Association, San Francisco, CA, April 7–11. Retrieved July 24, 2012 (http://works.bepress.com/wolfram_schulz/10/).
- Schütz, Gabriela, Heinrich Ursprung, and Ludger Wößmann. 2008. “Education Policy and Equality of Opportunity.” *Kyklos* 61(2):279–308.
- Sewell, William H., Archibald O. Haller, and George W. Ohlendorf. 1970. “The Educational and Early Occupational Status Attainment Process: Replication and Revision.” *American Sociological Review* 35(6):1014–27.

- Sewell, William H. and Robert Hauser. 1975. *Education, Occupation, and Earnings*. New York: Academic Press.
- The Economist. 2010. "Too Narrow, Too Soon? America's Misplaced Disdain for Vocational Education." *The Economist*, June 17. Retrieved October 4, 2012 (<http://www.economist.com/node/16380980>).
- Thomas, Gail E. 1979. "The Influence of Ascription, Achievement and Educational Expectations on Black-White Postsecondary Enrollment." *The Sociological Quarterly* 20(2):209–22.
- Turner, Ralph H. 1960. "Sponsored and Contest Mobility and the School System." *American Sociological Review* 25(6):855–67.
- Van Krieken, Robert, Philip Smith, Daphne Habbis, Kevin McDonald, Michael Haralambos, and Martin Holborn. 2000. *Sociology: Themes and Perspectives*. Sydney: Pearson Education Australia.
- Weiss, Volkmar. 2008. "National IQ Means, Calibrated and Transformed from Educational Attainment, and Their Underlying Gene Frequencies." *The Mankind Quarterly* 49(2):130–64.
- Wigfield, Allan. 1994. "Expectancy-Value Theory of Achievement Motivation: A Developmental Perspective." *Educational Psychological Review* 6(1):49–78.
- Williams, Richard. 2009. "Using Heterogeneous Choice Models to Compare Logit and Probit Coefficients across Groups." *Sociological Methods & Research* 37(4):531–59.
- Wrosch, Carsten, Gregory E. Miller, Michael F. Scheier, and Stephanie Brun de Pontet. 2007. "Giving Up on Unattainable Goals: Benefits for Health?" *Personality and Social Psychology Bulletin* 33(2):251–65.
- Yaish, Meir and Haya Stier. 2009. "Gender Inequality in Job Authority: A Cross-National Comparison of 26 Countries." *Work and Occupations* 36(4):343–66.

APPENDIX A. KEY FEATURES OF THE TERTIARY EDUCATION SYSTEM ACROSS A SELECTION OF OECD COUNTRIES

TABLE A1. Key Statistics of College across Countries

| | Factors considered for entry | | | | Average annual tuition fee (US\$ PPP) | | Odds of entering higher education by parental education | | | Internal rate of return |
|----------------|------------------------------|-----------|---------------|------------------|---------------------------------------|------------------|---|--------|------|-------------------------|
| | Grades | Ethnicity | Family income | Applicant letter | Public | Private | Low | Medium | High | % |
| | | | | | | | | | | |
| Australia | No | Yes | Yes | Yes | 4,222 | 9,112 | 0.47 | 1.12 | 1.85 | 9.8 |
| Austria | — | — | — | — | 859 | 235– 11,735 | 0.40 | 0.80 | 2.04 | 10.6 |
| Canada | — | — | — | — | 3,774 | — | 0.22 | 0.69 | 1.57 | 10.8 |
| Czech Republic | Yes | No | No | No | 0 | — | 0.32 | 1.11 | 2.43 | 19.7 |
| Denmark | Yes | No | No | Yes | 0 | — | 0.59 | 0.76 | 1.26 | 7.9 |
| Finland | Yes | No | No | Yes | 0 | — | 0.43 | 0.64 | 1.47 | 10.9 |
| France | Yes | No | Yes | Yes | 1,127– 8,339 | 1,127– 8,339 | 0.38 | 0.93 | 1.99 | 9.9 |
| Germany | Yes | Yes | No | Yes | — | — | 0.42 | 0.70 | 1.69 | 9.6 |
| Hungary | Yes | No | Yes | No | — | — | 0.33 | 1.23 | 2.41 | 24.8 |
| Iceland | — | No | No | No | 0 | 8,433– 12,650 | 0.73 | 0.83 | 1.36 | — |
| Ireland | No | No | Yes | No | 2,800– 10,000 | — | 0.62 | 1.17 | 1.77 | 12.8 |
| Italy | Yes | Yes | No | No | 1,289 | 4,741 | 0.46 | 1.52 | 2.54 | 8.1 |
| Netherlands | Yes | No | No | No | 1,861 | — | 0.50 | 0.88 | 1.51 | 7.9 |
| New Zealand | — | — | — | — | 3,031 | — | 0.21 | 0.41 | 1.94 | 6.1 |
| Norway | Yes | Yes | No | No | 0 | 5,503 | 0.39 | 0.79 | 1.39 | 6.1 |
| Poland | Yes | No | No | No | — | 1,889– 2,537 | 0.43 | 1.34 | 1.97 | 23.4 |
| Portugal | Yes | No | No | No | 1,259 | — | 0.65 | 1.92 | 3.28 | 18.5 |
| Slovakia | — | — | — | — | 2,707 | — | — | 0.82 | 2.40 | 24.2 |
| Spain | Yes | No | No | No | 1,052 | — | 0.51 | 1.41 | 2.26 | 9.3 |
| Sweden | Yes | No | No | Yes | 0 | — | 0.52 | 0.98 | 1.43 | 6.4 |
| Switzerland | — | — | — | — | 889 | 7,342 | 0.34 | 0.85 | 1.59 | — |
| United Kingdom | Yes | No | No | Yes | 4,731 | — | 0.61 | 0.91 | 1.59 | 7.4 |
| United States | Yes | No | No | Yes | 6,312 | 22,852 | 0.29 | 0.74 | 1.58 | 11.5 |

Notes:

- 1 All tuition fees reported in U.S. dollars (converted by the OECD using an index of purchasing power parity [PPP]).
- 2 Odds greater than 1 correspond to an above-average chance of entering higher education. Odds below 1 correspond to a below-average chance of entering higher education.
- 3 Higher values of the internal rate of return suggest higher economic value (this includes both private and social costs and returns).
- 4 Data for England, Scotland, and Northern Ireland are not available separately. Information is therefore presented for the United Kingdom as a whole.
- 5 Source: OECD 2012 (<http://www.oecd.org/edu/eag2012.htm>).

APPENDIX B. EDUCATIONAL EXPECTATION QUESTION IN THE PISA AND TIMSS DATA SETS

PISA

“Which of the following do you *expect to complete*?” [emphasis in original question]

Lower secondary education (middle or junior high school)

Upper secondary education (high school)

Post-secondary non-tertiary (vocational/technical certificate after high school)

Tertiary “type b” education (associate degree)

Tertiary “type a” education or higher (bachelor’s degree or higher)

TIMSS

“How far in school do you *expect to go*?”

ISCED level 3 (finish high school)

ISCED level 4 (finish vocational/technical education after high school)

ISCED level 5B (finish community or junior college)

ISCED level 5A (complete a bachelor’s degree at a college or university)

ISCED level 6 (beyond a bachelor’s degree)

I don’t know

APPENDIX C. DO YOUNG PEOPLE EXPECT TO OBTAIN A POSTGRADUATE QUALIFICATION?

In TIMSS, children were asked what level of education they expect to complete. Response options included (i) a bachelor’s degree and (ii) a qualification *beyond* a bachelor’s degree. In the main body of the article, I combined these two response options into a single category (bachelor’s degree or higher) for consistency with the PISA data set. However, this strategy has its limitations, including the loss of potentially interesting information. For instance, it could be that children in the United States are particularly likely to expect to obtain a qualification *beyond* a bachelor’s degree (e.g., an MSc or PhD), thus causing the expectation–attainment gap to be even bigger.

Table C1 presents the percentage of children who expect to obtain (i) a bachelor’s degree only and (ii) a postgraduate qualification. Results are stratified by academic ability, with low achievement defined as scoring in the bottom national quartile of the TIMSS math test. Low achievers can be considered to hold particularly misaligned expectations—despite struggling at high school, they nevertheless believe that they will obtain a postgraduate qualification. Educational expectations are again extremely high in the United States. Almost 30 percent of the low-achievement group expect to complete a postgraduate degree compared with 13 percent in Norway, the country ranked second in the table, and a cross-country average of just 7 percent. This supports one of the main conclusions reached in this article—educational expectations are particularly poorly aligned with actual academic ability in the United States, and more so than in other developed countries.

TABLE C1. The Percentage of Children Expecting to Obtain a Postgraduate Qualification

| | Bachelor's degree (ISCED 5A) | | Postgraduate qualification (ISCED 6) | |
|----------------|---------------------------------|----------------------|---|----------------------|
| | Low achievers | Not low achievers | Low achievers | Not low achievers |
| United States | 32 | 35 | 29 | 45 |
| Norway | 22 | 32 | 13 | 22 |
| New Zealand | 5 | 12 | 12 | 22 |
| Sweden | 12 | 22 | 8 | 17 |
| Italy | 20 | 40 | 8 | 22 |
| Czech Republic | 3 | 13 | 7 | 30 |
| Hungary | 11 | 28 | 7 | 36 |
| England | 4 | 15 | 6 | 23 |
| Australia | 7 | 19 | 5 | 17 |
| Scotland | 13 | 37 | 2 | 9 |

Notes:

- 1 "Low achievers" are defined as those children scoring in the bottom national quartile of the PISA math test.
- 2 Data sorted by the postgraduate qualification, low achievers column.
- 3 In the Netherlands, separate information was not collected for the "bachelor's degree" and "beyond bachelor's degree" categories. This country has therefore been excluded.
- 4 Source: Author's calculation based upon the TIMSS 2007 data.

APPENDIX D. PARAMETER ESTIMATES FOR THE OLS REGRESSION MODEL OF CHILDREN'S PISA MATH TEST SCORES

Table D1 provides parameter estimates from the OLS regression model of children's PISA math test scores. The column labeled "professional class" reflects the difference in test performance between children from working-class and professional backgrounds. These figures are used as the *x*-axis coordinates in Figure 2.

TABLE D1. Parameter Estimates from the OLS Regression Model of PISA Math Test Scores

| | Intermediate class | | Professional class | | Gender (male) | | Immigrant | | Intermediate* Imm | | Professional* Imm | |
|------|--------------------|-----|--------------------|-----|---------------|-----|-----------|------|-------------------|------|-------------------|------|
| | Beta | SE | Beta | SE | Beta | SE | Beta | SE | Beta | SE | Beta | SE |
| US | 40.6 | 6.3 | 76.8 | 7.3 | 7.6 | 2.6 | -17.1 | 11.7 | 1.3 | 12.2 | 13.0 | 13.5 |
| NI | 46.2 | 5.6 | 88.0 | 7.3 | 6.0 | 6.9 | 13.7 | 11.3 | -16.6 | 13.6 | -11.0 | 14.3 |
| Sco | 34.6 | 6.1 | 69.0 | 7.2 | 5.3 | 3.5 | -0.3 | 17.5 | 18.3 | 18.1 | 22.5 | 18.9 |
| Eng | 42.1 | 5.2 | 87.9 | 6.8 | 5.9 | 4.9 | 1.6 | 12.2 | 3.9 | 13.6 | -6.7 | 14.6 |
| Swz | 21.8 | 5.6 | 49.0 | 6.3 | 17.2 | 3.9 | -65.9 | 7.5 | 18.4 | 8.8 | 43.9 | 9.0 |
| Swe | 26.6 | 6.1 | 72.5 | 6.9 | 6.4 | 2.8 | -27.5 | 13.8 | -9.8 | 13.8 | 16.4 | 15.6 |
| Esp | 31.9 | 3.3 | 62.1 | 5.5 | 8.9 | 2.7 | -36.0 | 9.4 | 16.4 | 9.9 | 31.9 | 14.6 |
| Slov | 45.9 | 5.0 | 92.1 | 6.8 | 15.9 | 4.0 | 7.1 | 13.1 | -8.7 | 14.6 | -16.5 | 16.4 |
| Port | 39.2 | 3.9 | 100.2 | 7.5 | 8.2 | 2.8 | -20.3 | 11.7 | -1.1 | 8.6 | -2.0 | 15.9 |
| Pol | 37.7 | 3.9 | 102.2 | 6.1 | 4.5 | 2.9 | — | — | — | — | — | — |
| Nor | 21.1 | 5.7 | 61.9 | 6.2 | 8.2 | 3.1 | -16.7 | 14.8 | -8.6 | 15.9 | 0.9 | 16.7 |
| NZ | 30.4 | 6.2 | 72.1 | 7.4 | 11.9 | 4.5 | -12.8 | 11.2 | 9.4 | 11.0 | 13.1 | 12.7 |
| Nld | 42.8 | 5.4 | 79.8 | 7.5 | 5.1 | 3.7 | -34.4 | 13.1 | -5.8 | 12.9 | 8.8 | 15.7 |
| Ita | 34.1 | 4.2 | 86.0 | 7.3 | 19.7 | 5.5 | 23.5 | 11.3 | -21.0 | 11.6 | -64.9 | 19.9 |
| Ire | 39.1 | 4.4 | 74.5 | 6.0 | 15.8 | 4.1 | 2.4 | 9.7 | -2.0 | 10.9 | -2.9 | 12.0 |
| Ice | 16.8 | 7.0 | 40.2 | 7.4 | -15.1 | 4.2 | -9.7 | 17.5 | -5.8 | 18.2 | 24.4 | 20.0 |
| Hun | 38.6 | 6.2 | 104.5 | 8.8 | 5.7 | 4.0 | -11.4 | 18.8 | 4.3 | 20.4 | 41.2 | 25.4 |
| Ger | 42.8 | 5.7 | 90.6 | 7.3 | 12.0 | 3.7 | -54.8 | 8.4 | 1.9 | 8.9 | 21.0 | 13.6 |
| Fra | 40.7 | 5.9 | 79.0 | 8.1 | 7.1 | 3.6 | -34.5 | 9.5 | 10.4 | 8.6 | 18.9 | 12.0 |
| Fin | 16.7 | 3.8 | 56.5 | 4.2 | 5.0 | 2.2 | -21.9 | 18.9 | -10.3 | 19.5 | -30.4 | 20.3 |
| Den | 31.8 | 5.2 | 69.9 | 6.4 | 15.8 | 2.7 | -29.7 | 11.5 | -1.6 | 12.1 | -1.7 | 14.7 |
| Cze | 49.4 | 5.7 | 99.6 | 7.9 | 14.3 | 3.9 | -5.2 | 14.9 | -16.8 | 15.6 | 2.4 | 19.5 |
| Can | 27.8 | 3.1 | 58.8 | 4.5 | 11.1 | 2.1 | 0.2 | 6.7 | 0.4 | 7.0 | 3.1 | 7.7 |
| Aut | 27.2 | 4.6 | 59.7 | 6.5 | 10.2 | 5.9 | -41.7 | 8.9 | -2.2 | 9.0 | 29.4 | 12.3 |
| Aus | 40.4 | 4.2 | 78.1 | 4.8 | 7.1 | 3.1 | -1.7 | 6.4 | 1.9 | 6.8 | 7.2 | 7.4 |

Notes:

- 1 Reference groups are as follows: social class = working class; immigrant status = country native; gender = female.
- 2 "Beta" refers to the parameter estimates (in log-odds) and "SE" the standard errors.
- 3 Immigrant coefficients not estimated for Poland due to small number of observations.
- 4 A list of country abbreviations can be found in Table 1.
- 5 Figures refer to differences in terms of PISA math test scores.
- 6 Source: Author's calculations based upon the PISA 2003 data set.

APPENDIX E. COLLEGE EXPECTATIONS FOR DIFFERENT CLASS AND ACADEMIC ACHIEVEMENT GROUPS

TABLE E1. The Percentage of Children Who Expect to Obtain a Bachelor's Degree—Stratified by Social Class and Academic Achievement (PISA)

| | Low achievement | | | Not low achievement | | |
|------------------|-----------------|--------------------|--------------------|---------------------|--------------------|--------------------|
| | Working class | Intermediate class | Professional class | Working class | Intermediate class | Professional class |
| United States | 39 | 45 | 50 | 55 | 69 | 76 |
| Canada | 34 | 38 | 53 | 56 | 65 | 81 |
| Finland | 32 | 34 | 50 | 45 | 53 | 68 |
| Australia | 32 | 39 | 54 | 55 | 68 | 83 |
| Italy | 23 | 35 | 70 | 42 | 57 | 86 |
| Ireland | 22 | 28 | 41 | 45 | 62 | 71 |
| New Zealand | 17 | 19 | 26 | 31 | 41 | 57 |
| Sweden | 17 | 19 | 35 | 25 | 34 | 55 |
| Scotland | 15 | 20 | 33 | 43 | 59 | 75 |
| Netherlands | 12 | 10 | 17 | 27 | 48 | 63 |
| Portugal | 10 | 21 | 40 | 46 | 63 | 81 |
| Spain | 9 | 17 | 29 | 41 | 61 | 81 |
| Denmark | 8 | 9 | 18 | 20 | 28 | 49 |
| England | 7 | 9 | 14 | 20 | 33 | 46 |
| France | 7 | 8 | 19 | 32 | 39 | 59 |
| Norway | 6 | 10 | 24 | 14 | 26 | 43 |
| Northern Ireland | 6 | 10 | 22 | 21 | 38 | 54 |
| Slovakia | 5 | 12 | 24 | 25 | 52 | 73 |
| Hungary | 5 | 17 | 40 | 39 | 63 | 89 |
| Austria | 4 | 5 | 12 | 15 | 27 | 47 |
| Germany | 4 | 3 | 5 | 9 | 19 | 46 |
| Iceland | 4 | 14 | 22 | 30 | 39 | 55 |
| Poland | 4 | 10 | 26 | 18 | 37 | 62 |
| Switzerland | 4 | 4 | 7 | 9 | 19 | 36 |
| Czech Republic | 3 | 8 | 24 | 19 | 41 | 71 |

Notes:

- 1 “Low achievement” is defined as the bottom national quartile of the PISA math test distribution.
- 2 Data sorted by the low achievement, working class column.
- 3 Source: Author's calculation based upon the PISA 2003 data set.