

RUNNING HEAD: Incongruity Gender Gap

Gender and Incongruity between Educational Expectations and College Enrollment: The Roles  
of Race, Social Class, and Significant Others

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Abstract

Gender gaps in educational expectations and postsecondary enrollment are well studied, but few scholars have investigated the incongruity between expectations and enrollment decisions and even fewer have examined this incongruity by gender. Using thirty-five years of data, this study examines the differential influences of social origin and significant others on this incongruity for men and women. It also investigates how differences in these characteristics contribute to the overall incongruity gender gap—the difference between the proportion of men and proportion of women who do not enroll in ways that match their expectations. Results show trends in the incongruity gender gap over time. Group gender differences explain little of the incongruity gap but differential returns from students' characteristics differ by gender, which is a key explanatory factor for the incongruity gender gap. Implications of these findings relative to policy and program initiatives are discussed.

Keywords: gender gap, postsecondary enrollment, educational expectations, incongruity, logistic regression, decomposition

## Gender and Incongruity between Educational Expectations and College Enrollment: The Roles of Race, Social Class, and Significant Others

### Introduction

For the first three centuries of American higher education, men exceeded women in educational expectations (Wells et al., 2010), enrollment (Buchman, 2009), and degree completion (King, 2010). The last four decades, however, have seen a radical reversal in these trends, with women gaining parity and now exceeding men in these areas (Blackhurst & Auger, 2008; Buchmann, 2009; Buchmann & DiPrete, 2006; Wells et. al., 2010). While a substantial body of literature has examined the current gender gaps (e.g. Buchmann & Dalton, 2002; King, 2006, 2010; Mau & Bikos, 2000), few scholars have investigated the incongruity between educational expectations and enrollment decisions in which more students expect to attend college than actually enroll – i.e., unrealized expectations - and even fewer have examined this incongruity by gender (Seifert et al., 2010).

The limited research concerning the incongruity between expectations and enrollments suggests that social origin characteristics influence this phenomenon. Researchers have found that students of color may be more likely to experience this incongruity than white students (Hauser & Anderson, 1991; King, 2000, 2006, 2010), and students from lower social classes may be more likely to experience this incongruity as compared to students from higher social classes (Hanson, 1994; MacLeod, 1995). However, past research has not investigated how the effects of race and social class on the incongruity differ for men and women.

Further, research has shown parental education, parental expectations, and peer influences as important factors in shaping both educational expectations and enrollment decisions (Buchmann & Diprete, 2006; Grodsky & Jackson, 2009; Grodsky & Riegle-Crumb, 2010; Sandefur, Meier, & Campbell, 2005), though the extent to which these factors impact the

incongruity between expectations and enrollment for both women and men is not yet known. Similarly unknown is how the influence of the various factors related to incongruity has changed over time. For example, we know that the level of mother's education has increased over the past 40 years, but we do not know if the effect of mother's education on the incongruity has increased over this period of time and whether the relationship might differ for men and women.

Using thirty-five years of data from nationally representative samples of high school seniors, this study examines the differential influence of social class indicators (family income and parental education), significant others' influence (parental expectations and peers' plans), and race/ethnicity on the incongruity between educational expectations and postsecondary enrollment for men and women. In examining these factors, this study investigates the extent to which the incongruity gender gap—the difference between the proportion of men and proportion of women who do not enroll in ways that match their expectations—can be attributed to differences between men and women in their characteristics compared to the influences of, or returns on, those characteristics.

## Background

### *Social Origin Characteristics*

Students from low socioeconomic families have lower educational expectations and rates of enrollment than their higher socioeconomic counterparts (Dimaggio & Mohr, 1985; Grodsky & Jackson, 2009; McDonough, 1997; McLeod, 1995; Walpole, 2006). A key indicator of socioeconomic status, and an important factor in shaping educational expectations and enrollment decisions, is family income. In fact, recent research suggests that the effects of family income on some educational outcomes have increased over time (Grodsky & Jackson, 2009). Family income not only influences students' postsecondary educational expectations, but also

influences the types of institutions students expect to attend and in which they eventually enroll (Sandefur, Meier, & Campbell, 2005). Students from lower SES families are more likely than their higher SES peers to attend community college or certificate programs, while students from higher SES backgrounds are more likely to enroll in four year colleges and universities (Grodsky & Jackson, 2009; Walpole, 2006). The educational outcomes associated with family income are cumulative, beginning by influencing students' early academic socialization (Lareau, 2000), then enhancing secondary school achievement (Perie, Moran, & Lutkus, 2005), and finally shaping postsecondary aspirations and subsequent enrollment (Teachman & Paasch, 1998; Walpole, 2006). As such, the advantage students from higher levels of family income enjoy over those with lower levels is not easily captured by measuring a single outcome.

Often included in measures of socioeconomic status, parental education plays a substantial role in influencing students' educational expectations and enrollment decisions. Parents' educational attainment is closely related to the level of financial resources available to students (Hossler, Schmit, & Vesper, 1999; McDonough, 1997), which, as described above, significantly impacts students' expectations and enrollment decisions. The multiple benefits of higher levels of parental educational attainment exert a considerable influence on students' enrollment decisions, even when controlling for students' prior academic achievement (Ellwood & Kane, 2000; Grodsky & Jackson, 2009; Kane, 2001).

In addition, parents who have completed higher levels of education serve as models of college-going behavior for their children (Buchmann & Dalton, 2002; Cohen, 1987; McDonough, 1997), with students rarely failing to reach their parents' level of educational attainment (Mare & Chang, 2006). Parents who have attained higher levels of education often know more about the college-going process, which further helps to shape their children's

expectations and enhances the likelihood of enrollment (Grotsky & Jackson, 2009; McDonough, 1997). Similar to the effect of family income, the level of parental education not only influences if a student will attend college, but also what type of institution the student will attend. Students whose parents have attained at least a college degree are more likely to enroll in a four-year college or university and more likely to attend a more selective institution (Grotsky & Jackson, 2009; Sandefur, Meier, & Campbell, 2005). While scholars have consistently found positive effects of parental educational attainment on educational expectations and enrollment behaviors, some research suggests it does not exert as powerful of an influence over recent students as it once had (Goyette, 2008).

Race/ethnicity is a salient, but complicated social origin characteristic that influences educational expectations and enrollment, as well as gender gaps (Hanson, 1994; King, 2000, 2006, 2010; Lopez, 2003; Qin-Hilliard, 2003). Among those who complete high school, students of color continue to be underrepresented in higher education (National Center for Education Statistics [NCES], 2009), and experience a disproportionately larger gender gap between their expectations and enrollment (Seifert et al., 2010). These findings, however, do not thoroughly recognize the entanglement between race, social class, and academic performance—all of which are key predictors of expectations and enrollment (Grotsky & Jackson, 2009). In studies that control for social class and academic performance, students of color often have comparable or higher expectations than white students (Goyette & Xie, 1999; Hout & Morgan, 1975; Kao & Tienda, 1998; Wells et al, 2010) and some students of color are also more likely than white students to attend college (Alexander, Holupka & Pallas, 1987; Bennett, P. R., & Lutz, 2009; Kane & Spizman 1994). Interpretations of such findings often conclude with the phrase, “all else being equal,” but rarely are all other factors equal, complicating one’s understanding of the

influence race has on expectations and enrollment.

*Significant others' influence*

In addition to the social origin characteristics that influence students' educational expectations and enrollment, the expectations parents have for their child's educational attainment also help shape students' own educational expectations (Hossler, Schmit, & Vesper, 1999; Perna & Titus, 2005; Reynolds & Burge, 2002). The positive association between parental expectations and students' expectations extend to students' enrollment decisions, with students whose parents have high educational expectations enrolling in college at greater rates than those with parents who do not have such expectations of them (Sandefur, Meier, & Campbell, 2005). High parental expectations often lead to greater involvement with students' educational lives, which has also been shown to positively affect expectations and enrollment (Perna & Titus, 2005; Sandefur, Meier, & Campbell, 2005). While parental expectations are positively associated with students' own expectations and subsequent enrollment, this influence relies on the effective communication of parental expectations to their children, as well as a positive relationship between students and parents (Coleman, 1988).

Peer groups are another important influence on students' educational expectations and enrollment decisions. A variety of studies have revealed a correlation between peer postsecondary plans and students' expectations and enrollments (Chen, 1997; Hanson, 1994; Li, 2007; Sokatch, 2006; Tierney & Venegas, 2006), with students being more likely to enroll in college if their peers express plans for postsecondary enrollment (Choy, Horn, Nunez, & Chen, 2000; Horn, 1997; Perna & Titus, 2005). Like parents, peer groups act as models for students' educational actions, providing guidance for students as they go through the college preparatory and transition process (Tierney & Colyar, 2005; Tierney & Venegas, 2006; Woelfel & Haller,

1971). Recognizing that peer influence can create both negative and positive norms for postsecondary educational expectations and enrollment, intentionally designed programs have harnessed the positive influence of peers to develop “fictive kinships” (Tierney & Venegas, 2006). These “kinships” use the network of peers to supplement and augment the social capital provided by families.

Beyond the influences that all of these variables have on expectations and enrollment overall, they are also likely to influence whether students enroll in ways that align with their educational expectations —i.e., whether they experience an incongruity. Moreover, there also may be gender differences in students’ experiences of this incongruity between expectations and enrollment. For example, a gender-socialization perspective finds that students look to the same-sex parent in forming their educational expectations (Buchmann & DiPrete, 2006; Powell & Downey, 1997; Wells et al, 2010). The extent to which daughters differentially look to their mothers, and sons to their fathers, for cues not only for the level of postsecondary education expected but also for how to act (or fail to act) on these expectations, may contribute to an incongruity gender gap. Moreover, positive parental and peer influences have been shown to have a stronger positive relationship with expectations for women than men (Carter & Wojtkiewicz, 2000; Choy, Horn, Nunez, & Chen, 2000; Gándara, 1995; Hallinan & Williams, 1990; Hanson, 1994; Hossler, Schmit, & Vesper, 1999; Stage & Hossler, 1989; Wells et al, 2010). Whether or not such a gendered relationship exists with the incongruity between expectations and enrollment has not been explored.

As noted earlier, race/ethnicity is an important, yet complicated factor in the relationships between significant others’ influence and expectations, enrollment, and the incongruity of expectations and enrollment. Significant others’ expectations differ for women and men of

different racial/ethnic groups and could be a contributing factor to the incongruity gender gap. Since the late 1980s, parents of White students have had higher expectations for their daughters than sons; Latino parents expressed similar views but to a lesser degree and Black parents did not differ in their expectations for their children (Reynolds & Burge, 2002). In addition, coupling the extent to which male students of color are more frequently reported to receive disciplinary action and report lower enjoyment of school (Delaney, 2005; Lopez, 2003; Qin-Hilliard, 2003) with men's greater difficulty in working with and seeking help from others (Jacob, 2002) and their less dense social networks (Li, 2007), it seems likely that the role of peers may differ in its influence on incongruity for men and women of different racial/ethnic groups. Not surprisingly then, recent research has called for more focused examinations of gender differences by race, ethnicity, and immigrant status (Buchmann, DiPrete, & McDaniel, 2008). The present study extends the examination of such previously identified gendered relationships by investigating the associations between race, social class, and significant others' influence with the incongruity gender gap.

The influences of social origins as well as significant other's influences are prominent components of status attainment theory (Blau & Duncan, 1967; Sewell, Haller, & Ohlendorf, 1970; Sewell, Haller, & Portes, 1969; Sewell & Shah, 1968; Spenner & Featherman, 1978). This perspective suggests that education mitigates the influence of social class origins on adult status attainment and that the encouragement and expectations of significant others (e.g., parents and peers) influences the degree to which students expect, enroll, and attain postsecondary education. These factors are also relevant when studying educational outcomes from a rational action perspective, which posits that students are rational actors in choosing how to best maximize returns on educational investment (e.g. Averett & Burton, 1996; Beattie, 2002; Becker, 1993;

Manski, 1993; Wilson, Wolfe, & Haveman, 2005). Similar to status attainment theory, social class origins (particularly as they are embodied in family norms and values) and the influence of significant others contribute to students' cost/benefit calculus of pursuing education beyond high school (Jaeger, 2007). Even given the different assumptions and understandings that ground these theories, our analysis helps to inform both of these major theoretical conceptualizations in this area of research (see Grodsky & Jackson, 2009 for an in depth discussion of these perspectives.)

## Methods

### *Data*

In order to investigate potentially differing influences on the incongruity between educational expectations and college enrollment by gender, we analyzed data from four sources: a) National Longitudinal Study (NLS: 1972, 1974), b) High School & Beyond (HS&B: 1980, 1982), c) the National Educational Longitudinal Study (NELS: 1992, 1994), and d) the Educational Longitudinal Study (ELS: 2004, 2006). For each dataset, we created an original dichotomous variable concerning the incongruity between a student's educational expectations and actual enrollment behavior. There are many ways one could model an incongruity of this type, which could potentially lead to different results (Seifert et al, 2010). For example, one could examine students' expectations for any type of postsecondary education and determine whether their eventual enrollment behavior matched these expectations. For this study, we define incongruity as the expectation in 12<sup>th</sup> grade of at least a bachelor's degree, but no enrollment at a four-year institution within two years after high school graduation. Constructing the incongruity measure in terms of a four-year degree is useful given the normative assumption that "college" means a four-year degree (Goyette, 2008; Rosenbaum, 2001).

We acknowledge the partial limitation of looking at enrollment behavior only two years beyond high school graduation; some students with four-year degree expectations may enroll in a four-year institution and attain a bachelor's degree beyond this two year window. However, examining the initial post-high school period is important given that students who delay entry into college have much lower chances of completing a degree (Bozick and DeLuca, 2005; Rowan-Kenyon, 2007; Turner, 2004). Thus, we assume delayed entry is most likely, though not necessarily, incongruous with four-year expectations.

Failing to enroll at a four-year institution is also not necessarily incongruous with bachelor's degree expectations given the transfer function of U.S. two-year institutions (Brint & Karabel, 1989; Dougherty, 1994/2001). However, given that students who initially enroll at a two-year institutions are less likely to complete four-year degrees than those who initially enroll at a four-year institutions (Adelman, 1999; Pascarella & Terenzini, 2005, Reynolds & DesJardins, 2009) we also modeled expecting a four-year degree but attending a two-year institution as a likely incongruity.

A benefit to using these four datasets from NCES is that they contain a similar set of variables, which allows the use of parallel analyses across the years involved. As noted earlier, our primary interest is to examine the differences by gender of the influences of social class, significant others' influence, and race/ethnicity on enrollment two years after high school, conditional on their bachelor's degree expectations – in other words, the incongruity gender gap. To examine the influences of social class, we include variables for whether or not one's father had a bachelor's degree, whether or not one's mother had a bachelor's degree, and family income. These are common (though partial) representations of social class.

We include variables indicating whether a parent expects a bachelor's degree for the student and whether most or all of the student's friends plan to go to college. These variables represent parental and peer influences, or what is more broadly considered to be significant others' influences (Sewell & Hauser, 1980; Sewell & Shah, 1968; Spenner & Featherman, 1978) or interpersonal influences (Buchmann & Dalton, 2002). We desired to include mother's and father's educational expectations separately, but inclusion of both of these variables in a regression model resulted in problems of collinearity. Because collinearity diagnostics produced variance inflation factors (VIF) above 2.5 (Allison, 1999), we eliminated separate variables for mother's and father's expectations and instead created one variable for overall parental expectations. We also desired to include peers' plans for four-year institutions specifically, but although these data are available for NELS and ELS, we use the broader measure of plans for any type of college to remain consistent with NLS data.

Although the variables in our models are almost exactly the same across the datasets, there are two exceptions in the High School & Beyond dataset. There was no specific question concerning father's educational expectations, and instead we substituted a question that asked what the father thought the student should do after high school, with college as one option. Additionally, this dataset differs in its item concerning friends' college plans. Whereas the three other datasets contain an item asking college plans for "most" or "all" of one's friends, for the HS&B dataset we had to substitute a question that asked about one's best friend's college plans. These differences must be kept in mind when interpreting results for significant others' influences from the HS&B dataset. Unfortunately, there were not consistent variables across all datasets to examine parental involvement, which has been shown to be significant in past research for gendered expectations and enrollment (e.g., Wells et al, 2010).

Given that students of color experience larger gender gaps in enrollment than their white peers (King, 2000, 2006, 2010; NCES, 2009b), and that students of color may also differ from white students in the way they realize or do not realize their plans (Hauser & Anderson, 1991), we are interested in the relationship between race/ethnicity and incongruity between expectations and enrollment. Therefore, we include variables for Asian, Black, and Latino, with White as the reference group. We include independent variables as controls for any other variables available in all four datasets that may also affect incongruity. These include number of siblings, standardized test score, type of high school curriculum, urbanicity, public versus private high school, and region of the country (see Wells et al., 2010 for research-based justifications for including these variables in the regression model). We present descriptive statistics for all variables in Table 1.

<insert Table 1 about here>

### *Statistical Analyses*

For each dataset, we restricted our analysis to only those students who expected a four-year degree, then calculated whether or not each student met our definition of incongruity. In other words, considering only students with four-year degree expectations, incongruity is coded as a 1 when a student does not enroll in a four-year institution within two years. This served as the dependent variable in each of our regression models. Given the dichotomous nature of this variable, we used binary logistic regression to investigate the influences of our independent variables on the incongruity. We ran regression models separately for male and female subsamples, for each of our four datasets. Although there were no single variables with an excessive amount of missing data, greater than 20% of the cases would have been dropped from our regression models due to missing data. Therefore, we used multiple imputation to retain all

cases in the datasets, which is the recommended approach for dealing with large amounts of missing data and which results in precise, unbiased estimates (Allison, 2002; Croninger & Douglas, 2005). We weighted all analyses given oversampling of some students in each dataset and accounted for the strata and clustering of the complex survey design used by NCES for each dataset.<sup>1</sup>

After running all of the regression models, we compared the coefficients for each variable between the male and female model in each cohort. We used a test statistic that is recommended for large samples, (Clogg, Petkova & Haritou, 1995) and which has been used in similar educational research (Turley, Santos & Ceja, 2007), defined as the difference in the coefficients divided by the square root of the sum of squares of the standard errors:  $b_2 - b_1 / \sqrt{se_2^2 + se_1^2}$ . For each dataset, this indicates if the strength of the relationship between an independent variable and incongruity, net of other variables, differs for men and women.

Although useful, the information gained via regression coefficients is only part of the story explaining gender gaps in incongruity. Regression coefficients inform us how a one-unit change in a given variable is related to a change in the likelihood of incongruity occurring, assuming that all other factors in the model are equal. By comparing these coefficients between models for males and females, we learn if there are gendered differences in the way variables are related to incongruity. However, this analysis relies on assuming that all else is equal. We know from the descriptive statistics for males and females (Table 1) that these groups are not actually equal in their characteristics. Put another way, a gap may be due to the differences between men and women in their characteristics or assets (mean differences, see Table 1), or it may be due to the differences that men and women experience in the returns to those assets (differences in

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<sup>1</sup> We conducted all analysis in Stata. The “ice” command was used for multiple imputation, with the “mim” command prefix used to account for multiple imputed datasets in our analyses. The “svy” command was used to account for the weights and complex survey design.

regression coefficients), or most likely, some combination of the two. The statistical technique that helps researchers separate gaps into these component parts is decomposition analysis.

Decomposition has been used often in economics to analyze wage gaps but is less frequently used in educational research (e.g., O’Conner, Hammack & Scott, 2010; Berends, Lucas & Peñaloza, 2008). This is a “technique of decomposing inter-group differences in mean levels of an outcome into those due to different observable characteristics or ‘endowments’ across groups and those due to different effects of characteristics or ‘coefficients’ of groups” (Fairlie, 2005, p. 305). Put another way, “the method allows the decomposition of outcome variables between two groups into (i) a part that is explained by differences in observable characteristics and (ii) a part attributable to differences in the returns to these characteristics” (Bauer & Sinning, 2008, p. 197). The portion of the gap attributable to mean differences is examined by assuming that each group has similar regression coefficients, and the portion of the gap attributable to differences in coefficients is examined by assuming that each group has the same mean characteristics.

The most well known technique for decomposition is the Oaxaca or Blinder-Oaxaca decomposition (Blinder, 1973; Oaxaca, 1973). However, this method is for gaps in linear outcomes, such as wage gaps. To decompose the gap for a non-linear outcome such as our dichotomous measure of incongruity, alternative decomposition procedures have been developed (Bauer & Sinning, 2008; Fairlie, 2005; Yun, 2000). Decomposition relies on regression coefficients as part of the computation, and the OLS regression coefficients used in the Oaxaca procedure are not appropriate for nonlinear outcomes. “In particular, since the parameter estimates of nonlinear models typically differ from the marginal effects of the latent outcome variable, they cannot be used to perform a standard Blinder–Oaxaca decomposition” (Bauer &

Sinning, 2008, p. 197-198). Additionally, an adjusted analysis is needed because the gap between men and women for the probability of experiencing incongruity (the outcome of interest in our logistic model) is not necessarily exactly the same as the gap between men and women on the mean value of the incongruity variable, which is what a linear model would use.

The specific formulas used to decompose the gap in incongruity are shown in equations 1 and 2 (from Fairlie, 2005), where superscripts  $M$  and  $F$  represent Male and Female subpopulations,  $\bar{Y}$  is the average probability of incongruity,  $N$  is the subpopulation sample size,  $F$  is the cumulative distribution function from the logistic distribution,  $X$  is a vector of average values of independent variables, and  $\hat{\beta}$  is a vector of coefficient estimates from our logistic regression models.

$$\bar{Y}^M - \bar{Y}^F = \left[ \sum_{i=1}^{N^M} \frac{F(X_i^M \hat{\beta}^M)}{N^M} - \sum_{i=1}^{N^F} \frac{F(X_i^F \hat{\beta}^M)}{N^F} \right] + \left[ \sum_{i=1}^{N^F} \frac{F(X_i^F \hat{\beta}^M)}{N^F} - \sum_{i=1}^{N^F} \frac{F(X_i^F \hat{\beta}^F)}{N^F} \right] \quad (1)$$

$$\bar{Y}^M - \bar{Y}^F = \left[ \sum_{i=1}^{N^M} \frac{F(X_i^M \hat{\beta}^F)}{N^M} - \sum_{i=1}^{N^F} \frac{F(X_i^F \hat{\beta}^F)}{N^F} \right] + \left[ \sum_{i=1}^{N^M} \frac{F(X_i^M \hat{\beta}^M)}{N^M} - \sum_{i=1}^{N^M} \frac{F(X_i^M \hat{\beta}^F)}{N^M} \right] \quad (2)$$

The reason that two equations are necessary is because in the first term of equation 1, male coefficient estimates ( $\hat{\beta}^M$ ) are used to weight the mean differences between the groups ( $X_i^M - X_i^F$ ), and in the first term of equation 2, the mean differences are weighted by the coefficient estimates for women ( $\hat{\beta}^F$ ). There is no clear way to choose between these two equations and they often give slightly different results. Therefore, it is recommended to present both (Treiman, 2009), which we do.

The first term of either of these equations represents the portion of the incongruity gender gap attributable to group differences, also known as the explained portion. The second term of either equation represents the portion of the gap attributable to differences in the effects of those

characteristics, i.e., differences in coefficients shown in the separate male and female regression models. The second term can be thought of as “the difference remaining if assets were equalized” (Treiman, 2009, p. 174). Therefore, the second term of the equations also captures the part of the gap that is “due to group differences in unmeasurable or unobserved endowments” (Fairlie, 2005, p. 307). In other words, the second term of the equations captures all explanations for the gap other than those explained by differences in group characteristics. Similar to Fairlie (see also cites therein) and Berends, Lucas & Peñaloza (2008) we do not focus on the unexplained portion of the gap (the second term of the equations) because of the difficulty in interpretation, but present results of the portion of the gap explained by group differences (the first term of the equations).<sup>2</sup>

## Results

### *Descriptives*

Table 1 shows the weighted estimated means and standard errors of the estimates for all variables in our models, by gender. Focusing particularly on our variables of interest, we find some interesting trends over time. Based on our definition of incongruity, a higher percentage of men have experienced incongruity than their female peers in each of the four cohorts. However, this gender gap has decreased over time, with men and women of the recent ELS cohort experiencing incongruity between expectations and enrollment behavior two years after high school at roughly the same rate (see Figure 1). Thus, our findings suggest a narrowing of the incongruity gender gap, as we have defined it.

<insert Figure 1 about here>

Looking at the independent variables we use to predict the incongruity gender gap in Table 1, the results show that among students who expected a bachelor’s degree, the proportion

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<sup>2</sup> The specific Stata command we use to conduct the decomposition is “fairlie” (Jann, 2006).

who have a mother with a bachelor's degree has nearly doubled from 1972 to 2004. The proportion of students with fathers who have a bachelor's degree has also increased, though to a lesser degree. Parental expectations of attaining a bachelor's degree have stayed relatively consistent for this cohort of students who expect bachelor's degrees; 89-94% of students who expect a bachelor's degree have a parent who expects them to get a bachelor's degree. Finally, the percentage of those who expect to go to college who also have peers planning to attend college decreased somewhat in the 1992 and 2004 cohorts. However, it is worth noting more of the women's peers indicate planning to attend college than men's peers, a four to five percent difference in the last two cohorts.

### *Regression*

We present logistic regression results from each cohort, separately for men and women in Table 2. We present odds ratios, which can be interpreted as the proportional change in one's odds of experiencing incongruity, given a one unit change in the independent variable. Because this is a ratio of odds, if the odds of incongruity are identical for men and women, then the value of the ratio is 1. Therefore, numbers less than one represent a decrease in the odds of incongruity, while a number greater than one represents an increase in the odds of incongruity. We indicate statistical significance beginning at  $p < .05$  to give a complete picture and to remain consistent with most educational research, but given the large sample sizes of our datasets, we concentrate our interpretations more appropriately on those for which  $p < .01$  (Raftery, 1995).

<insert Table 2 about here>

The first two independent variables in Table 2 show results for whether or not the student's father and mother attained a bachelor's degree. In the 1972 cohort, results may represent a form of the traditional gender-socialization perspective (though for incongruity rather

than expectations or attainment). For men, having a father with a bachelor's degree decreased their odds of experiencing incongruity by 39 percent. Women's incongruities were relatively unrelated to fathers' education levels. On the other hand, for women, having a mother with a bachelor's degree decreased their odds of experiencing incongruity by 34 percent. Mothers' level of education, however, was relatively unrelated to men's incongruities between expectations and college enrollment.

This relationship looks different for the 1980 and 1992 cohorts, with only marginally statistically significant relationships between parental education and incongruity for males or females. In 2004, the relationships changed markedly from those in 1972. In 2004, fathers' and mothers' with bachelor's degrees predicted a decrease in the odds of incongruity for both men and women. However, women experienced statistically and substantively greater decreases. Having a father with a bachelor's degree decreased the odds of women experiencing incongruity by 45 percent and having a mother with a bachelor's degree decreased the odds by 40 percent, whereas the reduction in odds for men experiencing incongruity in the 2004 cohort was 33 percent (father with bachelor's) and 26 percent (mother with bachelor's), respectively.

The relationship between income and incongruity has changed substantially for women over time. In the 1972 cohort, a \$10,000 increase in parents' income was related to a statistically significant 20 percent reduction in the odds of experiencing incongruity. Three decades later, the magnitude of a \$10,000 increase in parents' income on reducing the odds of experiencing incongruity has shrunk to just 3 percent for both women and men. This modest effect of parents' income on reducing the odds of children experiencing incongruity was similar for the 1992 and 2004 cohorts.

Like income, the effect of parents expecting their children to attain a bachelor's degree has also decreased in reducing the odds of children experiencing incongruity. In the 1972 cohort, having parents who expected a bachelor's degree reduced the odds of children experiencing incongruity by 62 percent for daughters and 60 percent for sons, respectively. In the two most recent cohorts, parents' expectations no longer significantly influence the odds of experiencing incongruity. In particular, for women in the 2004 cohort, there was no reduction in the odds of experiencing incongruity between daughters whose parents expected them to attain a bachelor's degree and those whose parents did not expect their daughters to attain a bachelor's degree.

Although the influence of parents' expectations on reducing the odds of incongruity has waned over recent decades, the influence of positive peers' plans on reducing the odds of experiencing incongruity remain strong. With the exception of the 1980 cohort (in which the question was asked differently, making comparisons with this cohort inappropriate), having peers who plan to attend college, on average, reduces the odds of experiencing incongruity by about half. In 1972, the influence of positive peers' plans reduced the odds of experiencing incongruity marginally more for men than women (although this difference in coefficients was not statistically significant). By the 1992 cohort that marginal difference had expanded, with peers' planning to attend college reducing the odds of men experiencing incongruity by half, while positive peers' plans reduced the odds of experiencing incongruity by 34 percent for women. In the most recent cohort, for students whose peers plan on attending college, the odds of experiencing incongruity is about 50 percent less than for students whose peers do not plan to attend college.

Race plays a role in students' experiences of incongruity between expectations and enrollment behavior even in the presence of a host of controls. Excluding the 1992 cohort, Asian

women tend to have lower odds of experiencing incongruity than their White female peers. Yet, there appears to be no difference in the odds of experiencing incongruity between Asian men and White men. With one exception, we found no difference between Latinos and White men and no differences in predicting incongruity between Latinas and White women, controlling for all other variables in the model.

Excluding the 1980 cohort, Black students had lower odds of experiencing incongruity than their White peers. This decrease in odds of experiencing incongruity for Black students compared to their White peers has vacillated from 56 and 52 percent lower odds for women and men, respectively, in the 1972 cohort, to 45 percent and 29 percent lower odds for women and men, respectively, in the most recent cohort. Compared to White men, the reduction in odds for Black men changed in magnitude by 25 percent from 1992 (odds of incongruity was 54 percent lower) to 2004 (odds of incongruity was 29 percent lower). In the same time period, the exact opposite trend happened for Black women compared to their White female peers: in 1992, the odds of incongruity were 27 percent lower and not statistically significant; in 2004, the odds of incongruity were 45 percent lower and statistically significant.

Test scores are notable for consistent relationships with experiencing incongruity. In other words, those with higher test scores are always less likely to experience incongruity, even controlling for many other factors. In the 1972 cohort, the odds of incongruity associated with higher test scores were slightly lower for males than females (i.e., a male advantage). These relationships changed slightly over the cohorts, with both the 1980 and 2004 cohorts showing significant differences (confirmed by the test statistic, indicated in bold) favoring women in each case. In 2004, an increase in one standard deviation in standardized test score decreased the odds of incongruity by a factor of 65 percent for females, but only by 52 percent for males.

*Decomposition*

The regression results paint an interesting picture concerning how relationships between the independent variables and incongruity differ between men and women and how they have changed over time. Regression coefficients show how the “returns” on these independent variables differ for men and women; it does not take into account the basic differences men and women have in the “amount” of their group characteristics (e.g., the proportion of men whose friends plan on going to college compared to the proportion of women whose friends plan on going to college). To tell even more of the story, we decompose the incongruity gender gaps to see how much of the gaps are actually explained by these group differences in each cohort. Table 3 shows the percentage of the gap between men and women in their likelihood of incongruity that can be explained by mean differences between the two groups on selected characteristics.

<insert Table 3 about here>

The gap we are investigating is small in numerical terms, though still important for educational outcomes for individuals. The gender incongruity gaps in the cohorts range from 5.0 to 0.3 percentage points. For the ELS cohort, there is essentially no gap, so the proportion of the gap that is explained is essentially meaningless and we do not include these analyses in Table 3. However, for the other cohorts, the decomposition reveals which student attributes conceptually contribute to widening the incongruity gender gap, and which contribute to narrowing the gap.

The percentage values in Table 3 are the percentages of the total gap explained by differences between men and women on that particular variable. Positive percentages indicate that group differences on that variable contribute to, or widen, the incongruity gender gap, while negative percentages indicate that group differences on that variable actually diminish the incongruity gender gap. For example, the overall gap in the 1972 cohort is approximately 0.05 or

5 percentage points. This is the sum of the values for each variable in that column of Table 3 (with the sum of percentages totaling to 100%, excepting for rounding error). Therefore, a positive value for a given variable adds to this sum (widens or exacerbates the total gap) while a negative value takes away from the sum total (narrows or diminishes the total gap) (see Fairlie, 1999).

Because a positive percentage conceptually adds to the gap, and the gap exists because men are more likely than women to experience incongruity, a positive percentage represents a variable that contributes to greater male incongruity. A negative percentage, therefore, represents a variable that conceptually contributes to greater female incongruity. These gender differences, however, are only in relation to our analytic sample of students that expect a four-year degree in each cohort.

Social class differences (father's education, mother's education, and income) between men and women were minor contributors in explaining the incongruity gender gap, evident by the relatively small percentage values across cohorts for the first three variables in Table 3. This is not surprising, given that there are not large differences in these characteristics for 12<sup>th</sup> graders who expect a bachelor's degree. When these variables have explanatory power, however, the values are negative. This indicates that gender differences in social class characteristics help diminish the existing incongruity gender gap. The fact that the explanatory value of these variables has increased over time may be due to greater dropout rates for low-SES men in more recent years and/or differences over time in the relationship between social class and gendered expectations (again recalling that our regression models are restricted to only students with four-year degree expectations.)

Gendered differences in parental expectations did not contribute substantially to explaining the gendered differences in the likelihood of incongruity, evident from small percentage values. Differences between men and women concerning peers' plans to attend college, however, tended to exacerbate the incongruity gap (i.e., contribute to greater male incongruity). In 1972, six to seven percent of the incongruity gender gap was explained by differences between men and women concerning their peers' plans to attend college. In 1992, 12 to 20 percent of the gap was attributed to these differences in peers' plans. (The results for 1980 appear counter to this trend. However, as discussed above, peers' plans were measured differently for that cohort, and thus carry a slightly different meaning.)

Group differences in race/ethnicity were generally small in the portion of the incongruity gender gap that they explained. The most noteworthy results show that differences in the Black composition of male and female groups explained between three to 12 percent of the incongruity gender gap, depending on the cohort. To make sense of such a result, consider it in relation to results in Tables 1 and 2. Because Black students are somewhat less likely to experience incongruity relative to White students when controlling for other factors (see Table 2), the fact that the male cohorts have a lower proportion of Black students than female cohorts (Table 1) illustrates how this factor is associated with a widening of the incongruity gender gap.

We included one additional variable separately in Table 3 rather than grouping it with all of the other control variables because it exhibited noteworthy results, even though it was not a stated variable of interest in our study. Differences in test scores between men and women explained the largest proportion of the gap of any variable in our models. Gender differences in test scores contributed to diminishing the existing incongruity gender gap in 1972 and 1980 (i.e., test score differences alone would lead to greater female incongruity), while in 1992 gender

differences on test scores explained between 11 to 15 percent of incongruity, widening the gap (i.e., leading to greater male incongruity). The role of test score gender gaps in explaining whether men and women enroll in accordance with their educational expectations, and how these relationships have changed over time, deserves more attention.

All of the variables that we include in this study, when considered in the aggregate, were associated with narrowing or diminishing the incongruity gender gap (negative “total explained” portion of the gap in Table 3, with the exception of the male specification in 1992). In other words, the gender gaps in incongruity that we are attempting to explain were, overall, not primarily due to differences in these characteristics between men and women. In fact, group differences in these characteristics actually contributed to narrowing the incongruity gender gap (i.e., conceptually contributing to greater female incongruity). Therefore, most of the incongruity gender gap is actually due to differences between men and women in the effects of those characteristics (represented by regression coefficients in Table 2) or by omitted or unobservable factors. It is unlikely that men experience greater incongruity between their expectations and enrollment due to having “less” of any of the characteristics we observed (e.g., men tend to come from families with less income than women). Rather, the incongruity gender gap is more likely due to the fact that the processes by which students experience returns on these characteristics in the college transition process differs by gender.

### Discussion and Implications

Although a substantial body of literature has examined the gender gap between men’s and women’s educational expectations and postsecondary enrollment (Buchmann & Dalton, 2002; Buchmann, DiPrete, & McDaniel, 2008; King, 2000, 2006, 2010; NCES, 2009; Reynolds & Burge, 2002, 2008), this is the first study to examine how the incongruity between

expectations and enrollment differs for men and women over four cohorts of nationally representative data from U.S. high school students. Our findings coalesce in three main areas: 1) there are trends in the incongruity gender gap over time; 2) group differences between men and women explain little of the incongruity gap, and 3) the processes by which students experience the “returns” from their characteristics differ by gender, which is a critical component contributing to the incongruity gender gap. We discuss our key findings and implications of these findings relative to policy and program initiatives.

### *35 Years of the Incongruity Gap*

Popular literature this decade has asked, “where are the boys?” (Kindlon & Thompson, 2000; Sommers, 2001). Our findings complicate this question by showing that over the last 35 years men have consistently had greater incongruity (by our operational definition) between their expectations and enrollment than women, but that the gap is narrowing. In fact, in the most recent cohort, the gender gap for expecting a four-year degree but failing to enroll in a four-year institution effectively has been eliminated. In other words, women may currently outnumber men in higher education, but our results suggest this likely is not due to differential rates of enrolling in congruence with expectations.

From a programmatic standpoint, it seems warranted to continue supporting pre-college programs that encourage students’ expectation formation and, importantly, that provide students with the knowledge and skills to realize those expectations and the preparation necessary to enroll accordingly (see the Posse program (<http://www.possefoundation.org>) and Puente (<http://www.puente.net>) for national examples). To the extent that such programs are successful in reaching out to men and women from lower social class backgrounds as well as diverse racial/ethnic backgrounds in connecting expectation formation with college-going knowledge

and behaviors, we expect to see the incongruity gender gap remain trivial in the next cohort of students.

*The “Amount” Matters Little: Decomposing the Incongruity Gender Gap*

Recognizing the limitation of regression in that coefficients are calculated based on “all else being equal,” Wells and colleagues (2010) noted in their conclusion the relative inequality of resources between men and women in the ELS cohort and posited part of the gender gap in expectations may be due to men and women simply having differential “amounts” of resources. The present study extends the literature in this way, by decomposing the gap between men and women in college enrollment that is congruous with their bachelor’s degree expectations. In the aggregate, we found the examined characteristics (social class, significant others’ influence, and race) were conceptually associated with slightly narrowing the incongruity gender gap, rather than exacerbating it. In other words, the incongruity gender gap that has existed in the last 35 years is not due to differences in “how much” of these characteristics men and women have, but is more due to the differential effects these characteristics have on decreasing or increasing the odds of experiencing incongruity for men and women. If the education community is committed to eliminating the incongruity gender gap, not just in the aggregate but across racial/ethnic groups and social classes, then future research must help to better understand the processes at work as well as the social, economic, and political contexts that may lead to differential effects of the variables examined in the present study.

*Differential Influence of Characteristics: The Primary Source of the Incongruity Gender Gap*

*Social origin characteristics.* The impact of parental educational attainment on the aspirations, expectations and attainment of children has a long scholarly history, with a portion of that history focusing on the gender socialization effect (i.e., women look to their mothers and

men to their fathers for the value of an education) (Buchmann & DiPrete, 2006; Cohen, 1987; Mahaffy & Ward, 2002). From 1972 to 2004, the influence of parental education on incongruity has shifted from a gender socialization effect to one where both parents appear to play more significant roles for their daughters and sons. The fact that greater educational attainment of both mothers and fathers is associated with lowered odds of incongruity for both men and women suggests the gender socialization effect found in past literature for other educational outcomes (Downey & Powell, 1993; Powell & Downey, 1997; Wells et al., 2010) does not hold for incongruity.

Whereas parental educational attainment has increased its association with reduced incongruity for both men and women over time, the strength of the association between family income and incongruity has lessened. From a \$10,000 increase in family income reducing women's incongruity by 20 percent in 1972, this same increase in family income reduced women's incongruity by only three percent in the most recent cohort. This finding differs from the increasing effect of income for some other educational outcomes (Grotsky & Jackson, 2009). Much of this may be due to retaining income in the dollar values from their given years rather than a common year value; a \$10,000 increase in 1972 would be expected to have a larger effect than a \$10,000 increase in 2004 because it was a larger proportion of average income. Additionally, however, it may suggest that irrespective of family income, women are realizing the first step of their four-year educational expectations by enrolling in four-year institutions. This could be the result of more gender egalitarian social values within the family (DiPrete & Buchmann, 2006), increased occupational options requiring postsecondary education (Goldin, Katz, & Kuziemko, 2006) or the recognition of destabilized marital structures and the uncertainty that marriage will provide financial stability (DiPrete & Buchmann, 2006). In

contrast to women, the influence of income on reducing men's incongruity has become statistically significant only in the last two cohorts, and suggests that men from families of increased means experience incongruity at rates lower than their less affluent peers.

The association of race/ethnicity with incongruity also differs by gender. When statistically significant, students of color generally experience less incongruity, controlling for the other factors in our models. Generally this effect appears to be greater for women than men, and more so for Black students than other students of color compared to White students. How these results contribute to the past literature whereby other educational racial disparities are diminished once social class and/or achievement variables are included, is worthy of continued research.

*Significant others' influence.* Our analysis focused also on examining the relationship between significant others' influence and men's and women's incongruity over time. We found the statistical significance of parents' and peers' influence in reducing incongruity changed in discrepant ways over time. In the earliest cohort, parents' expectations for a bachelor's degree reduced the odds of students' incongruity by 60 percent. In the present cohort, parents' expectations exert no statistically significant influence on incongruity. In fact for daughters of the present cohort, parents' expectations have no effect at all (i.e., the odds ratio is 1).

We posit this finding may be an artifact of the "college for all" and bachelor's degree norm that Goyette (2008) and Rosenbaum (2001) identify. Parental expectations of a bachelor's degree may have become normalized, therefore having relatively few that do not expect college for their child, to the point of having no relationship with incongruity. Instead, the social and cultural capital, college knowledge, and practical information that come from having attained a bachelor's appear to be more important parental factors. These findings may also be related to

the fact that our analytic sample is only students that expect a bachelor's degree or more.

Parental expectations for this group of students, even as this group has grown more inclusive over time, may not be influential, whereas they might be for a broader sample of students.

Our findings support the significance of peers on the educational transition, and we recognize the enabling and the disabling nature of peer groups. Previous literature (Stanton-Salazar, 1997; 2005; Tierney & Colyar, 2005; Tierney & Venegas, 2006) highlights the varied types of support engendered by peer groups to the amelioration of school-related problems. We encourage future research to assess the evolving notion of gendered peer networks. One of most important findings from this study is that the incongruity gender gap between educational expectations and enrollment behavior, is likely based on the differential returns men and women experience from characteristics such as peers who plan to attend college. In light of these findings, we acknowledge that many transition programs and initiatives need to address the complex environments in which these characteristics possess (or do not possess) currency and relevance for different student populations.

Additional research should examine and highlight specific initiatives that address the complex factors that may influence male and female populations to act incongruously with their educational expectations. Moreover, while mentorship and support from institutional agents and peers are important, we encourage future research and programmatic initiatives to modify approaches based on differences related not only to gender, but also to racial/ethnic groups within gender. This nuanced approach signifies the importance of greater attention to the experiences, histories and norms that operate and inform the educational possibilities in diverse student populations.

Although not a social origin or significant others' influence measure, we found the relationship between test scores and incongruity to be noteworthy. The twelve percentage point difference between men and women in the HSB and ELS cohorts highlights that standardized test scores contribute disproportionately more to reducing incongruity for women than men since the 1980s. Men who score similarly to women still experience greater incongruity in actualizing their post-secondary enrollment expectations. This finding requires additional research into the relevance of test scores for male students and what other factors contribute to men's experiences of incongruity, in light of tests performance that is similar to their female peers.

Finally, the gendered enrollment and transfer patterns at community colleges, as well as the factors influencing these trends, should be examined for their role in students' incongruity. Our findings are specific to a definition of incongruity that can and should be complicated by other operational definitions of the concept and alternate conceptualizations of the processes at work that influence students to enroll in ways that are congruous with their expectations. More broadly, future research should continue to attempt to understand all of these complicated processes better and to explore social, economic, and political contexts that may lead to gender differences in incongruity as well as changes in these effects over time.

Table 1. Estimated (weighted) means and standard errors of the estimates, for students who expect a bachelor's or higher in 12th grade

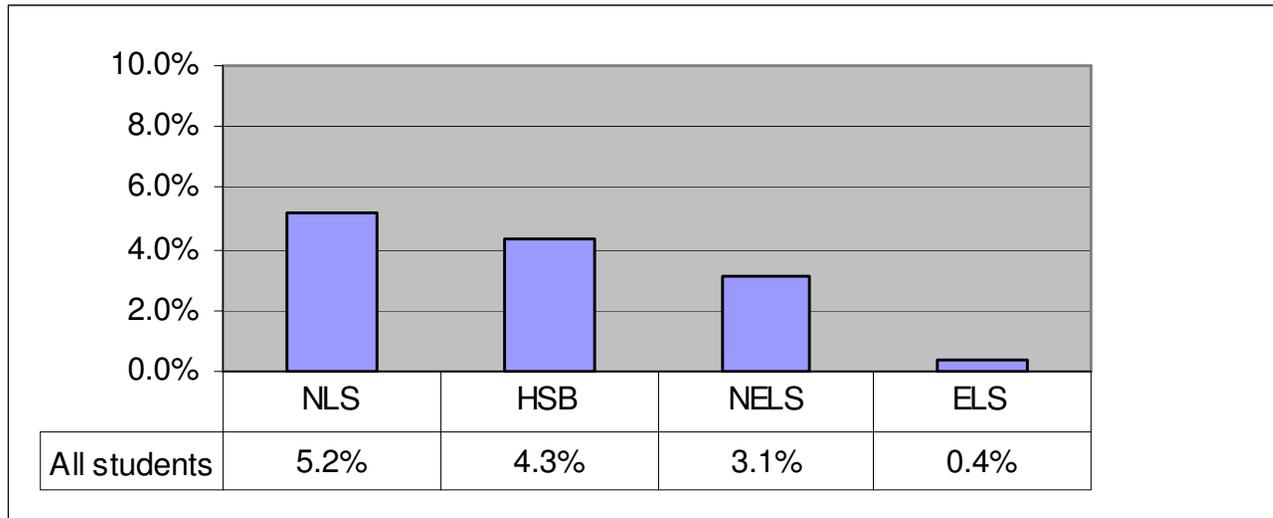
	NLS – 1972		HSB – 1980		NELS – 1992		ELS – 2004	
	Female	Male	Female	Male	Female	Male	Female	Male
Incongruity	.314 (0.011)	0.366 (0.010)	0.291 (0.016)	0.334 (0.016)	0.373 (0.013)	0.404 (0.014)	0.336 (0.010)	0.340 (0.011)
Dad has bachelors	0.295 (0.011)	0.293 (0.010)	0.293 (0.018)	0.346 (0.018)	0.331 (0.013)	0.400 (0.015)	0.370 (0.011)	0.396 (0.011)
Mom has bachelors	0.179 (0.009)	0.180 (0.008)	0.205 (0.014)	0.234 (0.017)	0.271 (0.011)	0.328 (0.013)	0.310 (0.010)	0.351 (0.011)
Family income (\$10,000)	1.441 (0.024)	1.517 (0.021)	2.448 (0.056)	2.684 (0.059)	5.624 (0.139)	6.015 (0.209)	7.313 (0.157)	7.826 (0.165)
Parent expects bachelors	0.890 (0.008)	0.891 (0.008)	0.943 (0.008)	0.937 (0.008)	0.933 (0.007)	0.944 (0.005)	0.901 (0.006)	0.890 (0.006)
Peers plan college	0.826 (0.008)	0.799 (0.009)	0.871 (0.011)	0.875 (0.011)	0.789 (0.012)	0.740 (0.011)	0.768 (0.008)	0.721 (0.009)
Asian	0.017 (0.003)	0.013 (0.002)	0.030 (0.003)	0.022 (0.004)	0.040 (0.003)	0.041 (0.004)	0.049 (0.004)	0.059 (0.004)
Latino	0.030 (0.004)	0.032 (0.004)	0.065 (0.006)	0.063 (0.006)	0.084 (0.007)	0.087 (0.008)	0.133 (0.009)	0.115 (0.008)
Black	0.116 (0.007)	0.077 (0.006)	0.135 (0.011)	0.108 (0.010)	0.134 (0.013)	0.114 (0.014)	0.129 (0.008)	0.127 (0.008)
Test score (std.)	0.550 (0.020)	0.637 (0.017)	0.542 (0.040)	0.731 (0.030)	0.437 (0.024)	0.427 (0.028)	0.182 (0.022)	0.300 (0.022)
Siblings	2.854 (0.048)	2.790 (0.043)	2.715 (0.157)	2.711 (0.124)	2.157 (0.042)	2.064 (0.035)	2.223 (0.033)	2.113 (0.034)

Table 1 (continued). Estimated (weighted) means and standard errors of the estimates

	NLS – 1972		HSB – 1980		NELS – 1992		ELS – 2004	
	Female	Male	Female	Male	Female	Male	Female	Male
Vocational education	0.080 (0.006)	0.067 (0.005)	0.098 (0.009)	0.087 (0.010)	0.067 (0.007)	0.052 (0.005)	0.062 (0.005)	0.080 (0.006)
College prep track	0.698 (0.012)	0.696 (0.010)	0.646 (0.017)	0.634 (0.020)	0.569 (0.013)	0.575 (0.013)	0.627 (0.011)	0.621 (0.012)
Urban school	0.288 (0.013)	0.264 (0.012)	0.229 (0.020)	0.213 (0.019)	0.307 (0.019)	0.296 (0.017)	0.305 (0.011)	0.305 (0.011)
Rural school	0.433 (0.015)	0.421 (0.014)	0.232 (0.019)	0.234 (0.020)	0.285 (0.017)	0.266 (0.017)	0.183 (0.009)	0.180 (0.009)
Private school	0.098 (0.015)	0.097 (0.012)	0.154 (0.015)	0.149 (0.017)	0.113 (0.010)	0.143 (0.014)	0.100 (0.006)	0.121 (0.007)
Northeast region	0.276 (0.015)	0.253 (0.012)	0.276 (0.023)	0.277 (0.023)	0.212 (0.015)	0.214 (0.015)	0.201 (0.010)	0.205 (0.011)
South region	0.282 (0.012)	0.277 (0.012)	0.288 (0.021)	0.266 (0.021)	0.340 (0.013)	0.349 (0.015)	0.340 (0.011)	0.345 (0.010)
West region	0.169 (0.011)	0.175 (0.008)	0.183 (0.018)	0.174 (0.018)	0.187 (0.011)	0.179 (0.010)	0.213 (0.010)	0.205 (0.010)
N	4290	5190	2650	2610	4100	3710	5210	4370

Note: Sample sizes are rounded nearest 10 in accordance with the NCES restricted data use agreement.

Figure 1. Gender gap for the incongruity between four-year expectations and enrollment, conditional on expectations of a bachelor's or higher in 12th grade



Note: Calculations are made by subtracting the male mean from the female mean for each cohort in Table 1.

Table 2: Logistic Regression for Incongruity between Expectations and Enrollment, for students who expect a bachelor's or higher in 12th grade

	NLS - 1972		HSB - 1980		NELS - 1992		ELS - 2004	
	Female	Male	Female	Male	Female	Male	Female	Male
Dad has bachelors	<b>0.790</b> ( <b>0.104</b> )	<b>0.605***</b> ( <b>0.073</b> )	<u><b>0.596*</b></u> ( <b>0.120</b> )	<u><b>0.935</b></u> ( <b>0.193</b> )	0.661* (0.085)	0.816 (0.145)	0.555*** (0.062)	0.677** (0.081)
Mom has bachelors	0.662** (0.102)	0.884 (0.116)	0.840 (0.174)	1.024 (0.207)	<b>0.787</b> ( <b>0.115</b> )	<b>0.578**</b> ( <b>0.096</b> )	0.603*** (0.071)	0.741* (0.090)
Family income	0.805** (0.062)	0.892 (0.055)	0.959 (0.062)	0.883 (0.051)	0.950* (0.014)	0.938** (0.017)	0.972* (0.011)	0.966** (0.011)
Parent expects bachelors	0.375*** (0.058)	0.399*** (0.057)	<u><b>0.540</b></u> ( <b>0.164</b> )	<u><b>0.380*</b></u> ( <b>0.129</b> )	0.708 (0.166)	0.802 (0.155)	<u><b>1.000</b></u> (0.140)	<u><b>0.763</b></u> (0.108)
Peers plan college	0.536*** (0.070)	0.493*** (0.055)	0.784 (0.176)	0.637 (0.172)	<u><b>0.659*</b></u> ( <b>0.094</b> )	<u><b>0.503***</b></u> ( <b>0.071</b> )	0.461*** (0.050)	0.518*** (0.053)
Asian	0.388** (0.137)	0.415 (0.206)	<u><b>0.272**</b></u> ( <b>0.114</b> )	<u><b>0.794</b></u> ( <b>0.386</b> )	0.931 (0.187)	0.600 (0.194)	0.637* (0.102)	0.827 (0.128)
Latino	0.642 (0.181)	0.785 (0.204)	1.291 (0.344)	0.966 (0.220)	<b>1.002</b> ( <b>0.195</b> )	<b>0.554**</b> ( <b>0.100</b> )	1.117 (0.166)	1.353 (0.233)
Black	0.443*** (0.078)	0.488*** (0.087)	0.735 (0.157)	0.702 (0.201)	<u><b>0.725</b></u> ( <b>0.167</b> )	<u><b>0.460**</b></u> ( <b>0.110</b> )	<b>0.553**</b> (0.089)	<b>0.714*</b> (0.110)
Test score	0.564*** (0.039)	0.543*** (0.032)	<u><b>0.425***</b></u> ( <b>0.061</b> )	<u><b>0.553***</b></u> ( <b>0.058</b> )	0.365*** (0.054)	0.387*** (0.035)	<u><b>0.351***</b></u> (0.022)	<u><b>0.476***</b></u> (0.031)

\*  $p < 0.05$ . \*\*  $p < 0.01$ . \*\*\*  $p < 0.001$ .

Bold, no underling underline = test stat at  $p < .05$ . Bold single underline = test stat at  $p < .01$ . Bold double underline = test stat at  $p < .001$ . Standard errors in parentheses. Sample sizes are rounded nearest 10 in accordance with the NCES restricted data use agreement.

Table 2. Logistic Regression for Incongruity between Expectations and Enrollment, for students who expect a bachelor's or higher in 12th grade (cont.)

	NLS - 1972		HSB - 1980		NELS - 1992		ELS - 2004	
	Female	Male	Female	Male	Female	Male	Female	Male
Siblings	1.080** (0.028)	1.078** (0.027)	1.023 (0.045)	0.986 (0.046)	<b><u>1.132*</u></b> <b>(0.050)</b>	<b><u>1.019</u></b> <b>(0.044)</b>	1.093* (0.044)	1.081* (0.040)
Vocational education	1.654* (0.317)	1.443 (0.283)	1.826* (0.428)	1.719 (0.455)	2.035* (0.496)	1.382 (0.300)	1.220 (0.243)	0.919 (0.174)
College prep track	<b>0.758*</b> <b>(0.095)</b>	<b>0.598***</b> <b>(0.066)</b>	0.658* (0.127)	0.607* (0.111)	0.541** (0.066)	0.548*** (0.074)	0.866 (0.094)	0.691** (0.077)
Urban school	0.993 (0.140)	0.921 (0.105)	0.993 (0.183)	0.919 (0.181)	0.905 (0.142)	0.974 (0.152)	0.633** (0.078)	0.692* (0.101)
Rural school	0.876 (0.119)	0.726** (0.079)	0.853 (0.185)	0.759 (0.148)	0.737 (0.094)	0.643** (0.100)	0.975 (0.124)	1.073 (0.152)
Private school	0.679 (0.157)	0.486** (0.110)	0.908 (0.225)	0.896 (0.221)	0.573* (0.119)	0.720 (0.166)	0.848 (0.144)	0.784 (0.117)
Northeast region	0.821 (0.119)	0.958 (0.117)	1.172 (0.300)	1.579 (0.346)	0.907 (0.167)	0.891 (0.166)	0.943 (0.153)	0.902 (0.158)
South region	1.043 (0.131)	1.011 (0.125)	1.242 (0.274)	1.480 (0.303)	<b><u>1.097</u></b> <b>(0.155)</b>	<b><u>1.627**</u></b> <b>(0.245)</b>	1.348* (0.189)	1.018 (0.147)
West region	1.298 (0.212)	2.076*** (0.271)	3.318*** (0.811)	3.025** (0.713)	2.043** (0.363)	2.858*** (0.487)	1.507* (0.236)	1.958*** (0.333)
Constant	4.040*** (1.089)	5.899*** (1.405)	1.425 (0.559)	3.703* (1.618)	2.686* (0.776)	4.504*** (1.233)	1.449 (0.350)	2.020** (0.473)
N	4290	5190	2650	2610	4100	3710	5210	4370

\*  $p < 0.05$ . \*\*  $p < 0.01$ . \*\*\*  $p < 0.001$ .

Bold, no underling underline = test stat at  $p < .05$ . Bold single underline = test stat at  $p < .01$ . Bold double underline = test stat at  $p < .001$ . Standard errors in parentheses. Sample sizes are rounded nearest 10 in accordance with the NCES restricted data use agreement.

Table 3. Decomposition - Portion of the incongruity gender gap explained by group differences on selected characteristics

	NLS		HSB		NELS	
	Female spec	Male Spec	Female spec	Male Spec	Female spec	Male Spec
Father education	0.0002 0%	0.0002 0%	-0.0030 -7%	-0.0008 -2%	-0.0034 -10%	-0.0017 -5%
Mother education	0.0003 1%	-0.0003 -1%	-0.0006 -1%	0.0001 0%	-0.0017 -5%	-0.0039 -11%
Income	-0.0030 -6%	-0.0016 -3%	-0.0016 -4%	-0.0057 -14%	-0.0026 -7%	-0.0033 -9%
Parent expects bachelor's	-0.0003 -1%	0.0003 1%	0.0007 2%	0.0009 2%	0.0000 0%	-0.0001 0%
Peers plan college	0.0031 6%	0.0033 7%	-0.0002 -1%	-0.0005 -1%	0.0044 12%	0.0069 20%
Asian	0.0006 1%	0.0008 2%	0.0016 4%	0.0004 1%	-0.0001 0%	-0.0002 0%
Latino	-0.0004 -1%	-0.0001 0%	-0.0001 0%	0.0000 0%	0.0000 0%	-0.0003 -1%
Black	0.0061 12%	0.0055 11%	0.0017 4%	0.0021 5%	0.0010 3%	0.0023 7%
Test score	-0.0101 -20%	-0.0117 -23%	-0.0244 -59%	-0.0203 -49%	0.0051 15%	0.0039 11%
Controls	-0.0015 -3%	0.0005 1%	-0.0045 -11%	-0.0049 -12%	-0.0041 -12%	-0.0003 -1%
Total explained	-0.0049 -10%	-0.0033 -6%	-0.0305 -74%	-0.0288 -70%	-0.0014 -4%	0.0033 10%
Total unexplained	0.0556 110%	0.0540 106%	0.0716 174%	0.0699 170%	0.0365 104%	0.0318 90%
Total gap	0.0507	0.0507	0.0411	0.0411	0.0351	0.0351

Note: Results for ELS dataset not shown because there is no incongruity gap to explain.

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