# The Self-Expressive Edge of Occupational Sex Segregation<sup>1</sup>

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Recent gender scholarship speculates that occupational sex segregation is reproduced in large part through the gendered, self-expressive career decisions of men and women. This article examines the effects of college students' expression of their self-conceptions on their likelihood of entering occupations with a high or low proportion of women and theorizes the consequences of this mechanism for gender inequality. The author uses unique longitudinal data on students from four U.S. colleges to examine how the gender composition of students' field at career launch is influenced by their earlier self-conceptions. Students with emotional, unsystematic, or people-oriented self-conceptions enter fields that are more "female," even net of their cultural gender beliefs. Results suggest that cultural ideals of self-expression reinforce occupational sex segregation by converting gender-stereotypical selfconceptions into self-expressive career choices. The discussion section broadens this theoretical framework for understanding the role of selfexpression in occupational sex segregation and notes the difficulty of addressing this mechanism through social or policy actions.

#### INTRODUCTION

After decades of legal and cultural expectations for gender equality in the workforce (Kane 2000; Cotter, Hermsen, and Vanneman 2011), why is occupational sex segregation in the United States so resilient? Segregation remains one of the most consequential factors in economic gender inequal-

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ity more broadly and disadvantages women in prestige, pay, and power (Jarrell and Stanley 2004). A growing body of literature has identified institutional- and interactional-level processes that reproduce inequality, such as queuing, discrimination, exclusion, and cognitive bias (e.g., Reskin and Roos 1990; Podolny and Baron 1997; Ridgeway 2006). Efforts to remedy these processes through legal and structural changes will be only partially successful as long as men and women tend to aspire to genderconforming occupations and fields of study. Recent gender scholarship has argued that these gendered aspirations result in large part from social processes that are neither overtly coercive nor discriminatory, but rather through the subconscious gendering of men's and women's self-expressive career decisions (Hakim 2000; Correll 2004; Charles and Bradley 2009; England 2010; Polavieja and Platt 2010; Cech et al. 2011; Cotter et al. 2011). Although scholars have called for a systematic examination of this phenomenon, we lack a deeper understanding of self-expression as a mechanism of sex segregation and what it might mean for gender inequality more broadly.

The self-expressive edge of sex segregation, I argue, is the reproduction of occupational sex segregation in part by the deeply personal, self-reflective—yet culturally and structurally gendered—career decision making of men and women. Self-expression is culturally understood as an individualistic and agentic basis of career decision making in postindustrial countries such as the United States (Inglehart 1997; Charles and Bradley 2009); yet, self-expression is inextricably bound up in the fabric of the gender structure (Epstein 1973; West and Zimmerman 1987; Ridgeway 2006). The purpose of this article is to describe this self-expressive mechanism, demonstrate it among a sample of students from a diverse set of U.S. colleges, and use the analysis to theorize more deeply the implications of a self-expressive edge of sex segregation and what self-expression might mean for gender inequality more broadly.

My empirical analysis uses a longitudinal sample of recent college graduates to examine whether respondents' expression of their self-conceptions influences whether they enter fields with higher or lower concentrations of

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women. I am also interested in the impact of respondents' gender schemas (i.e., their cultural understandings of the gender structure) on their choice of career launch fields. Including gender schemas in the analysis along-side self-conceptions helps disentangle self-expressive processes from decision making that draws more explicitly on beliefs about the gender structure.

I use five-year longitudinal panel data of over 700 men and women who attended one of four U.S. colleges: Massachusetts Institute of Technology (MIT), the Franklin W. Olin College of Engineering (Olin), Smith College (Smith), and the University of Massachusetts, Amherst (UMass). I follow respondents from their freshman year in college in 2003 through 18 months after graduation (their "career launch") in 2008. This stage in the life course is ideal for studying these processes because it is a time when self-expressive career decision making is both most expected and most possible: the structural flexibility for self-expressive decision making at career launch is unmatched at any other point in the labor force.

Using measures of three self-conceptions (emotional, unsystematic, and people-oriented self-conceptions) and three gender schema dimensions (gender role beliefs, gender essentialist beliefs, and gender category beliefs), I predict the gender composition of the occupation or graduate education program respondents enter at career launch.<sup>2</sup> I find that men's and women's self-conceptions as sophomores differ in expected ways and that these gendered self-conceptions predict where respondents locate themselves along the spectrum of sex-segregated occupations: women who perceive themselves as emotional, unsystematic, and people oriented and men who perceive themselves as emotional and unsystematic, compared to their peers, are more likely to enter career launch paths with a higher concentration of women. Gender schemas, on the other hand, have little influence on respondents' career launch outcomes. Several of these effects hold even when predicting the change between a respondent's college major and her or his career launch field.

In the discussion, I describe how these results help expand the theoretical framework for thinking about self-expression as a mechanism of occupational sex segregation. First, self-expressive processes not only appear to reproduce the demographic imbalance among occupations but also reinforce the cultural gender typing of occupations as stereotypically maletyped or female-typed domains. Furthermore, in contrast to popular assumptions and policy approaches to undermining sex segregation, the weak

<sup>&</sup>lt;sup>2</sup> The outcome measure of interest in this study is the gender composition of the fields respondents enter after graduation rather than their planned or ideal career paths. Even though students' exact career aspirations often change over time, a British study showed that the degree of sex typing of the jobs young adults enter is strongly related to the degree of sex typing in the jobs they aspired to as children (Polavieja and Platt 2010).

effect of gender schemas suggests that young people's conscious endorsement of traditional, stereotypic, or essentialist gender beliefs may play a weaker role in sex segregation than current literature might expect; my results suggest that women and men do not have to consciously adhere to traditional gender role beliefs in order for their career decisions to be subconsciously influenced by those beliefs.

Next, I argue that both the power and the invisibility of self-expression as a cultural mechanism of occupational sex segregation emerge in part out of the rootedness of self-expression in U.S. ideologies of individualism. Because this gendered self-expression is coded as expression of one's individuality, self-expressive career decisions may not feel particularly gendered to those who engage in them; they may simply feel individualistic. Furthermore, because the self-expressive edge of sex segregation is a mechanism of inequality without a clear "oppressor," this mechanism entails particular challenges for social change. Because individualistic self-expression and the freedom to indulge one's self-beliefs are culturally exalted in the United States (Inglehart 1997), it is socially untenable to encourage men and women to change their self-conceptions or to limit the self-expressive freedoms in career decision making that college-educated Americans now enjoy. Finally, I speculate that self-expression might be a mechanism reproducing gender inequality in realms beyond occupational sex segregation.

Of course, individual-level career launch decisions are constrained by institutional- and interactional-level inequalities that are still very much a reality in the U.S. labor force (see Reskin 2000; Charles and Grusky 2004; Acker 2006; Gorman and Kmec 2009).<sup>3</sup> Although this article focuses on individual-level processes of self-expression, such processes are not somehow outside the realm of the gender structure: as I describe below, they are both constrained and enabled by more macrolevel structural contexts and cultural beliefs (Hakim 2000). I seek to show that, in addition to the institutional and interactional constraints and pressures that college-educated young adults may encounter, gendered processes of self-expression play a role in the reproduction of occupational sex segregation.

#### THEORETICAL FRAMEWORK

A central tenet in the cultural frame of career decision making in the 21st-century United States is self-expression: the selection of career paths based on who individuals "think they are" and how they can best realize such

<sup>&</sup>lt;sup>3</sup> In an analysis that separated young adults' occupational preferences from measures of hiring bias, Harper and Haq (2001) found that aspirations had stronger effects on the occupations that respondents held in their 30s than hiring bias.

expression through their paid employment.<sup>4</sup> The question What do you want to be when you grow up? is increasingly expected to be met with a self-expressive answer (Charles and Bradley 2009; Cotter et al. 2011). A male MIT student in my sample, for example, described in a diary entry how his realization that chemical engineering was the right career field for him was a self-confirmatory experience: "Last night while writing up my [engineering assignment] I all of a sudden realized that I loved chemical engineering. It was like an epiphany! I wouldn't want to do anything else! It was amazing; I was just writing along, minding my own business, and it hits me like a sack of flour . . . a moment of self-confirmation, if you will. Beautiful, absolutely beautiful."

The cultural expectation of self-expressive career choices is buttressed by the institutional structures and ideologies of U.S. higher education: not only is college culturally defined as a vehicle for self-realization and expression, its curricular structure is meant to enable students to maximize their self-expressive decision making during and after college (Charles 2011*a*, 2011*b*). The increased availability and prominence of career counseling also promote the notion that careers should not only support individuals financially but fulfill them personally.

Structurally, the existential security of postindustrial societies such as the United States allows recent generations of young adults—especially the college educated—to divert from strictly economic motivations when making employment decisions (Inglehart 1997; Inglehart and Welzel 2005). Charles and Bradley (2009) argue that men and women in advanced industrial societies can afford to "indulge" their gendered selves in their career choices because the economic and cultural contexts in these societies encourage development of gender-typical tastes and career aspirations and provide more latitude for the "indulgence" of these tastes in one's decision making.

Despite the centrality of self-expression in cultural understandings of career decision making, we have limited empirical understanding of this "indulgence" process. Charles and Bradley (2009) hypothesize the connection between gendered identities and sex segregation and identify the economic and cultural contexts that foster such a connection, but because they analyze cross-national differences, they are not able to show this indul-

<sup>&</sup>lt;sup>4</sup>Along these lines, Johnson (2001) found that intrinsic rewards were the most valued career consideration among men and women in high school and in their early 30s.

<sup>&</sup>lt;sup>5</sup>A random selection of 41 students were recruited from the survey sample to provide diary entries via an online portal. Students were asked to write about their college experiences in these entries. Although the tone of this quote is exuberant, it is typical of the logic that the students used when writing about moments when their choice of major was confirmed. See Seron et al. (2011) for more information on diary coding and methodology.

gence in action at the individual level. This article seeks to move beyond this foundation to investigate empirically and elaborate theoretically how self-expressive decisions reproduce occupational sex segregation.

But is self-expression really a driving factor in career decisions for college graduates? Perhaps, as in developing nations, those privileged enough to attend college tend to make career decisions that maximize their earning potential or their access to influential positions rather than their potential for self-expression. As a proxy for respondents' privileging of monetary concerns in their career decision making, I control for the importance to respondents of being wealthy. Alternatively, young men and women may consciously draw on their beliefs about the gender structure to inform where they, as men and women, should place themselves in the spectrum of sex-segregated occupations. As such, I control for several dimensions of respondents' gender schemas (described below). Parsing between these processes conceptually and empirically is important to understanding how sex segregation is reproduced at the individual level.

The next section hypothesizes the role of self-conceptions and gender schemas in career decision making. I then investigate the effects of several self-conceptions and gender schema measures on the career choices of my sample of college students. Drawing on these results, I theorize more deeply the role of self-expression in the reinforcement of occupational sex segregation and the reproduction of gender inequality more broadly.

## Self-Conceptions and Self-Expression

Self-conceptions, as the beliefs people hold about themselves as experiencing, functioning, unique individuals within a deeply individualistic culture (Epstein 1973; Gecas 1982), are the "referent" of self-expressive thought and behavior. Self-conceptions are an "organization of various identities, attributes, and their evaluations, developed out of the individual self-reflexive, social, and symbolic activities" and past experiences (Gecas 1982, p. 4; see also Epstein 1973), and function as "theories" or "systems of generalization" about the self (Markus and Wurf 1987).

Self-conceptions come to differ systematically by gender through processes of internalization, framing, and regulation that translate more macrolevel structural contexts and cultural ideologies into self-beliefs. From childhood socialization into identities and preferences, to the internalization

<sup>6</sup> Self-conceptions are structural and cultural entities whose effects go far beyond the individual level. The "common social origin and constitution of individual selves and their structures does not preclude wide individual differences and variations among them" (Mead [1934] 1962, p. 201). Perhaps because these wide differences are sustained, self-conceptions fail to appear to their holders as social in origin.

of gender role expectations, to experiences with gendered institutions, individuals' sense of self comes to reflect the gendered society they live in (West and Zimmerman 1987; Markus and Kitayama 2003). As a result of their upbringing within the gender structure, women's and men's self-conceptions tend to align with stereotypical characteristics of "men" and "women" (Lee 1998; Lueptow, Garovich-Szabo, and Lueptow 2001). These complementary and hierarchical characteristics make up the suite of stereotypically "masculine" and "feminine" traits and are central to the maintenance of the gender hierarchy (Schippers 2007). In adulthood, gendered self-conceptions are regulated and reinforced through institutional- and interactional-level expectations of the gender frame that hold individuals accountable to behaviors and identities considered appropriate for men and women (Ridgeway and Correll 2004; Risman 2004; Ridgeway 2009).

Contrary to early research on gender identities (e.g., Bem 1984), self-conceptions are not solidified after early childhood socialization (Gecas 1982; Markus and Wurf 1987). Self-conceptions can and do change over the life course in reaction to individuals' structural and cultural circumstances. However, social psychologists have argued that it is relatively difficult for adults to redefine their self-conceptions. According to Swann (1987), in order for self-conceptions to change, individuals must undergo a reorganization of the way they view themselves, and others in their social environment must provide feedback that supports the revised self-conception. While these circumstances are more abundant in college than in many other social environments, even American college students tend to seek out people and environments that support, rather than challenge, their existing self-conceptions (Swann 1987). Thus, self-conceptions, although not rigid and fixed, provide a fairly consistent touchstone for self-expressive career decision making.

Career decisions that are based on gendered self-conceptions may thus be influential in the gendering of career decisions—especially among young college-educated men and women in the United States. I expect that self-conceptions stereotypically associated with women will encourage men's and women's entrance into fields with a higher concentration of women and that respondents with self-conceptions stereotypically associated with men will be more likely to enter fields with a higher concentration of men.

Because individuals hold a multitude of beliefs about themselves, research using self-conceptions does not usually attempt to capture individuals' entire perceptions of themselves (see, e.g., Nagy et al. 2008). Similarly,

<sup>&</sup>lt;sup>7</sup> In an analysis of the changes in self-conceptions in my sample between respondents' sophomore year and 18 months after graduation, respondents' self-conception measures changed, on average, by less than half a point on a seven-point scale (or less than 7%).

my research focuses on three career-relevant self-conceptions that serve as exemplars: "I am emotional" (vs. "unemotional"), "I am unsystematic" (vs. "systematic"), and "I am people oriented" (vs. "things oriented"). These measures are useful because they are career relevant and correspond well with stereotypes of ideal incumbents of gender-typed fields, yet they are not overly specific (Gecas 1982; Eccles 1994). They are also strongly gender-typed examples of the opposing and hierarchical character traits that help to uphold the gender structure (Schippers 2007).

A recent line of social psychological literature has explored how a related analytic concept, gendered self-assessments, influences the career choices of men and women. Correll (2001) argues that individuals' self-assessments are influenced by broader cultural beliefs about the gender structure. For example, cultural beliefs that men are better at math than women bias young women's perceptions of their own abilities in math, leading them to develop less confidence in their math abilities than similarly performing men (Steele 1997; Spencer, Steele, and Quinn 1999; Correll 2001). Selfassessment research is a powerful illustration of the processes by which more macrolevel cultural beliefs can lead to the development of gendered self-beliefs (see also Ridgeway and Correll 2004). While analytically distinct from self-conceptions, self-assessments may be an important part of how individuals arrive at their self-conceptions: gendered self-assessments provide information to individuals about what they are skilled at, and individuals may be more inclined to personally identify with task realms they believe they are good at. More social-psychological research is needed to understand how self-assessments of one's skills are related to broader selfconceptions like those I examine here and how they may be used in tandem in career decision making.

#### Gender Schemas

An alternative explanation for the gendering of occupational choices is that individuals make career decisions on the basis of the beliefs they hold about what it means to be a man or a woman in a gendered society. To test this possibility among my sample, I examine the effects of men's and women's *gender schemas*, their shared cultural models about the social categories "men" and "women" and the proper power and status relations

<sup>&</sup>lt;sup>8</sup> If my data allowed, I could have substituted many other self-conceptions (e.g., "I am nurturing" or "I am aggressive") in this analysis. These three self-conceptions are likely more salient in career decision making than, e.g., respondents' conceptions of themselves as (un)flirtatious.

<sup>&</sup>lt;sup>9</sup> Self-assessment is defined as one's personal conception of one's competence at specific tasks (Correll 2001).

between them.<sup>10</sup> As with other cultural schemas, gender schemas shape social structures through their "salience in institutions, interactions, and culture" and shape individual values and actions by "ordering cognitive processes, evoking emotional responses, and acting as moral universes" (Blair-Loy 2003, p. 176). Gender schemas can vary in progressiveness or traditionalism, in how widespread they are (nationally held ideologies or those specific to a particular subculture), and in how explicitly in conflict they are with other cultural models (Ridgeway and Correll 2004). As Connell (2005) argues about hegemonic masculinity, the cultural models of proper behavior for men and women are widespread and are known by both dominant and nondominant groups and by both men and women.

Gender schemas encompass multiple dimensions of beliefs about the gender structure (Ridgeway and Correll 2004). I include measures of three dimensions: beliefs about the proper relational dynamics between men and women (gender role beliefs), beliefs about the shared characteristics of the individuals that make up each gender category (gender category beliefs), and the extent to which gender differences are believed to be inscribed in physiological or natural differences (gender essentialist beliefs).<sup>11</sup> Each dimension captures a set of beliefs that are important to the maintenance of a hierarchical gender structure.

Gender role beliefs are cultural models about the proper relations between men and women that often include beliefs about the division of paid work and family responsibilities. The most traditional gender role beliefs in the United States are separate spheres ideologies in which men and women are perceived to be responsible for nonoverlapping realms of society (i.e., work and family). More progressive beliefs assume that men and women should have at least some responsibilities in each realm (Davis and Greenstein 2009). Young women who adhere to traditional gender role beliefs may, for example, choose career paths that help them uphold gendered caregiving roles in their own lives (Hakim 2000).

<sup>&</sup>lt;sup>10</sup>Some psychologists have used the term "gender schemas" in psychoanalytical, social learning, and development theories of gender (e.g., Stoller 1968; Bem 1984), while others use this term to describe gendered cognition (Bem 1993). Sociological perspectives, in contrast, start with the social structures that such psychological theories of individual gender beliefs usually presuppose.

<sup>&</sup>lt;sup>11</sup> Self-conceptions differ from gender schemas in that the former are not based on shared cultural models in the same way. There are, of course, prescriptive cultural ideologies about how one ought to perceive oneself (e.g., independent or moral) and shared beliefs about the sorts of self-conceptions that are valuable or problematic, but there are not similar cultural models about how each of us individually should see ourselves (Frank and Meyer 2002): the very ideology of individuality assumes that no two people can or will be the same person or conceive of themselves in the same way.

<sup>&</sup>lt;sup>12</sup> In the language of the social-psychological literature on stereotypes, gender role beliefs are prescriptive, while gender category beliefs are descriptive (see Heilman 2001).

Gender category beliefs are the beliefs people hold about the characteristics that define members of their gender category, for example, the characteristics that individual men believe are held in common by other men. Gender category beliefs help maintain the perception of difference between men and women (Heilman 1997). In order for the gender structure to be perpetuated, men and women must be portrayed as different, on average, with dissimilar characteristics. Schippers (2007) argues that stereotypical gender qualities (e.g., "masculine," "emotional," "cooperative") are clustered into configurations that become the idealized notions of masculinity and femininity. The complementary and hierarchical relationships between the characteristics of masculinity and femininity help reproduce male dominance and uphold the gender hierarchy (Heilman 2001; Prentice and Carranza 2002). Thus, men's and women's perceptions of the characteristics that define their own gender category are important to the maintenance of the gender structure.

Gender schemas help perpetuate the gender structure not only because people believe that men and women have different characteristics and are suited for different roles but also because of the ubiquity of legitimizing cultural explanations of why these differences exist. A "biological explanation is the master narrative holding that men and women are naturally different and have different intelligences, physical abilities, and emotional traits" (Epstein 2007, p. 7). *Gender essentialist beliefs* hold that men and women are "inherently" different and that these inherent qualities define men's and women's talents, behaviors, and affect. The perpetuation of biological explanations reinforces gender differences as a "natural" and ageless occurrence (Schilt 2010)—explanations that are often invoked as "proof" of the gender system's legitimacy.<sup>13</sup>

Gender schemas may influence men's and women's career decisions in several ways: First, men and women with traditional gender role beliefs may choose same-gender-typed occupations as they seek to enact such traditional roles through their career decisions; more progressive gender role beliefs may free individuals to consider and pursue a more diverse range of occupational paths. Second, men and women who have gender-stereotypic perceptions of their gender category may be more likely to enter male- or female-dominated occupations, respectively, than their peers with more neutral gender category beliefs. Third, people who adhere to gender essentialism may be more likely to believe that their "natural" talents lie in same-gender-dominated occupations and thus reproduce occupational sex segregation in their career decisions. In each of these processes, men and

<sup>&</sup>lt;sup>13</sup> These beliefs do not necessarily have to be grounded in scientific or pseudoscientific arguments, although they often are. Essentialist gender beliefs can stem from religious beliefs about, e.g., the ways "God made" men and women.

women make explicitly gendered decisions, following the paths they consider correct or feasible for them as men or as women.

Even though men and women may hold essentialist, traditional, or stereotypic gender schemas, they may not necessarily consciously draw on those schemas in their career decision making. Many scholars have argued that individual decision making based explicitly on categorical affiliations such as gender has declined in over the past half century. Frank and Meyer (2002) argue that choices made on the basis of "specialized identity claims" (such as "man" or "woman") have become absorbed into general notions of individuality. "It becomes increasingly hard for a person with the identity of 'woman' to say she plays the role of 'housewife' because that's 'what women do.' ... The preferred accounting depicts the woman as a sovereign individual person with a taste for domesticity: 'That's what I choose to do'" (p. 91). If it is no longer legitimate to claim that "I am choosing this occupation because I am a man and that's what men do" and is instead legitimate to claim "I choose this occupation because it suits me," then implicitly gendered decision making may become coded as individualistic selfexpression. Thus, I compare the relative strength of self-conceptions to the influence of gender schemas on whether men and women choose maledominated or female-dominated career fields.14

# Sex Segregation at Career Launch

I call the early stage of college graduates' career decisions their "career launch." Specifically, I examine the gender composition of the jobs or graduate school programs respondents enter 18 months after they have graduated. This time lag is helpful, as the first year after college graduation is often a period of adjustment (Astin 1993). Some graduates may take a year off from employment or work in a temporary job while they search for a more long-term position in their field of interest.

My outcome variable is a continuous measure of the percentage of women in respondents' career launch field. Instead of a dichotomous variable predicting whether or not respondents enter a female-dominated (or male-dominated) occupation, which invokes concerns over cutoff points for what are considered "female-dominated," "male-dominated," or "neutral" fields (Anker 1998), this measure of sex segregation captures the full range of gender representation in respondents' career launch fields. In addition to respondents' career launch activity, I also have a measure of

<sup>&</sup>lt;sup>14</sup> Of course, gender schemas and self-conceptions are themselves interrelated. Gender schemas likely help construct self-conceptions over a longer time horizon. My research with future waves of this sample will examine the coconstruction of gender schemas and self-conceptions over time.

the percentage of women in respondents' college major field. After examining the effects of self-conceptions and gender schemas on the percentage of women in respondents' career launch activity, I replicate this analysis predicting whether men and women enter fields with a higher or lower concentration of women than the fields in which they earned their degree. This analysis is an indication of whether self-conceptions might continue to matter beyond the career launch phase, as people make shifts in their careers over time.

#### **METHODS**

#### Data

This article uses longitudinal panel data collected from four U.S. colleges: Massachusetts Institute of Technology (MIT), the Franklin W. Olin College of Engineering (Olin), Smith College (Smith), and the University of Massachusetts, Amherst (UMass). Respondents were surveyed several times between their freshman year and 18 months after graduation through online surveys administered to the students via e-mail. The sample consists of 731 respondents (266 men and 465 women) who graduated from college by spring 2007 and either entered the workforce or a graduate or professional education program. Following the recommendation of Allison (2002) and others, I use multiple imputation in descriptive and ordinary least squares (OLS) regression analysis and maximum likelihood in structural equation modeling (SEM) to handle missing data resulting from skipped survey waves or nonresponses. To

While these schools provide an illuminating cross section of institution types in the United States (a private research university, a single-sex liberal arts college, a public land-grant university, and a small elite engineering-only college), as a group, they are not representative of the U.S. college population as a whole. Others (e.g., England 2010) have conducted excel-

 $<sup>^{15}</sup>$  Nonresponders were sent no fewer than four e-mail reminders over a six-week period. Regardless of the previous years' response status, the entire cohort was invited to participate in each year's survey round. The entire freshman classes at MIT, Olin, and Smith, along with 332 randomly selected UMass freshmen, were invited to participate in the study, with an overall response rate of 35.8%. Nonresponse bias analyses (Winship and Mare 1992; Blair-Loy and Wharton 2002) run between the sample and the 2003 population data at each school show that the sample marginally overrepresents Asian students at MIT (P=.08) and marginally underrepresents African-American students at UMass (P=.09). No other gender or race/ethnicity differences were found.

<sup>&</sup>lt;sup>16</sup> Owing to monotone missingness from skipped survey waves, I would have lost over half of the sample size by using listwise deletion. Listwise deletion in panel data can yield biased estimates and inflate standard errors (Allison 2002). For these reasons, I use multiple imputation (20 imputations, using the chained command in Stata) and maximum likelihood (in AMOS).

lent analyses of national trends in sex segregation using representative samples. It is, however, a theoretically useful sample for examining the effects of self-conceptions on career launch. MIT and Olin are elite private institutions that emphasize training in male-dominated fields. Students who attended these institutions experience greater-than-average pressure to pursue prestigious (largely male-dominated) occupations. At more representative institutions such as UMass, cultural encouragement and expectation to choose self-expressive career paths may largely overshadow pressures to choose prestigious career paths meant to launch students into leadership roles.

Smith is a useful case because it considers itself a locus of progressive gender beliefs, where women are challenged to think outside of and beyond traditional stereotypes of the types of work that women "can" or "should" do. 17 It should be more difficult, therefore, to find evidence that feminine self-conceptions lead Smith women to choose more female-dominated occupations when those very lines of social reasoning are challenged by institutional culture. Thus, the self-expressive decision-making trends I document here may be even stronger among a more representative sample of college students.

Finally, these respondents entered the workforce or graduate school in the midst of the 2007–8 economic downturn. The historical timing of their career launch may have led members of this sample to be more likely than other cohorts to act instrumentally, privileging job security and salary over self-expression. Thus, the economic circumstances facing this particular population may make this a harder case in which to identify self-expressive processes than earlier or later cohorts.

## Operationalization

## Dependent Variable

The dependent variable is the concentration of women in respondents' career launch field on a scale ranging from 0% to 100% women. A positive coefficient predicting %women means that respondents with a high value on that characteristic are more likely to choose female-dominated occupations or graduate programs; a negative predictor coefficient means that such a characteristic leads respondents to choose career launch paths that are more male dominated. I identified the concentration of women

<sup>&</sup>lt;sup>17</sup> For example, Smith's advertising materials state, "At Smith, there are no stereotypes about what women should do, but there are unlimited expectations about what women can do" (http://www.smith.edu/about-smith/why-a-womens-college).

 $<sup>^{18}</sup>$ The skewness and kurtosis values for the dependent variable were both well within assumptions for normality (Finney and DiStefano 2006): skewness = 0.58; kurtosis = 0.66.

in each respondent's career launch field by matching their detailed occupation or graduate program with national statistics of the percentage of women in each of these occupations or fields of study. For those in the workforce, I referenced the U.S. Department of Labor's Bureau of Labor Statistics to find the percentage of women in each respondent's occupation in 2008. I used statistics computed by the National Science Foundation's Division of Science Resource Statistics (NSF 2008) for the percentage of women in science and engineering-related graduate programs, and the National Center for Education Statistics' *Digest of Educational Statistics* for the percentage of women in nonscience or engineering graduate or professional credentialing programs.<sup>19</sup>

## Independent Variables

Self-conceptions.—Following common practice in self-conceptions research, I use higher-order abstraction measures that tap respondents' perceptions of their "actual" self rather than those that represent their "ideal" self or the "ought" self (Markus and Wurf 1987; Nagy et al. 2008). In year 2 (their sophomore year), respondents were asked to locate themselves along several attitude spectrum scales developed by Lee (1998): "Usually I am very unemotional" to "very emotional," "usually I am very systematic" to "very unsystematic," and "usually I like to work with things" to "like to work with people." All self-conception variables are coded on a seven-point scale. These attitudinal spectrum scales help capture the theoretical notion that the characteristics that define hegemonic masculinity and femininity are complementary and hierarchical: for example, women are assumed to like to work with people, which is complementary to, yet less valued than, men's assumed preference to work with things. Tests for discriminant validity between the three self-conception measures are significant at the .001 and .05 levels for women and men, respectively.20

Gender schemas.—I use three sets of variables corresponding to the three dimensions of gender schemas discussed above: traditional gender role beliefs, gender category beliefs, and gender essentialist beliefs. Questions that tap respondents' traditional gender role beliefs are modeled after

<sup>&</sup>lt;sup>19</sup> Sources of the data mentioned in this paragraph are as follows: for the Bureau of Labor Statistics, http://www.bls.gov/data; for the NSF, http://www.nsf.gov/statistics/wmpd/pdf/tabc-5.pdf; and for the *Digest of Educational Statistics*, http://nces.ed.gov/programs/digest/d09/tables/dt09\_286.asp.

<sup>&</sup>lt;sup>20</sup> Specifically, I compared the chi-squared and degrees of freedom between a model in which the three manifest measures are separate and correlated with one another and a second model in which all three manifest measures predicted a single latent measure. The significance of the difference in the chi-squared and degrees of freedom between the two models indicates discriminant validity.

those used in the General Social Survey and the World Values Survey (e.g., "a wife should take her husband's name at marriage," 1 = strongly disagree to 5 = strongly agree; see table 1 for question wording and response values). Second, I use a set of attribute spectrum scales that capture respondents' gender category beliefs (e.g., "usually, others of my same sex are very systematic" to "very unsystematic"). These are useful in measuring the extent to which respondents adhere to gender stereotypic views of their own gender category. I match the characteristics of the gender category beliefs to the three self-conception measures being tested. Specifically, I use a year-2 measure of gender category as "emotional" in models with emotional self-conceptions, a year-2 measure of gender category as "unsystematic" in models with unsystematic self-conceptions, and a year-5 measure of gender category as people oriented in models with people oriented self-conceptions. Self-conceptions.

Finally, questions that capture gender essentialist beliefs ask this in four ways: whether respondents expect men and women to act differently from one another at work, whether they adhere to separate but equal notions of justice, whether they explain occupational sex segregation as the result of men's and women's natural talents, and whether they believe that some jobs and professions are more suitable for men than for women.<sup>23</sup> Tests for discriminant validity of these gender schema measures were significant at the .000 level for both men and women, and the strong goodness of fit indices in the CFA for both men and women suggest that these manifest variables cohere into a single latent measure.<sup>24</sup>

Controls.—All models control for the following measures: whether respondents identify as African-American, Hispanic or Latino, Asian or Asian American, or non-Hispanic white (reference category); whether they

<sup>&</sup>lt;sup>21</sup>The "stand in the way" variable is the reference indicator in the latent measure for traditional gender role beliefs. Confirmatory factor analysis (CFA) for men:  $\chi^2 = 18.2$ , df = 2, comparative fit index (CFI) = .847, root mean square error of approximation (RMSEA) = .075; regression estimates: "husband's name," 1.493 (P < .001); "women marrying," 1.104 (P < .001); "feminist (reverse code)," 1.608 (P < .001). CFA for women:  $\chi^2 = 14.2$ , df = 2, CFI = .823, RMSEA = .075; regression estimates: "husband's name," .957 (P < .001); "women marrying," .951 (P < .001); "feminist (reverse code)," .951 (P < .001)

<sup>&</sup>lt;sup>22</sup> A people oriented gender category belief measure was not available in year 2.

 $<sup>^{23}</sup>$  The "some jobs better suited for men" variable is the reference indicator in the latent measure of gender essentialist beliefs. CFA for men:  $\chi^2=3.8,\ df=2,\ {\rm CFI}=.983,\ {\rm RMSEA}=.058;$  regression estimates: "act differently," .857 (P<.01); "talented at different things," .1.511 (P<.001); "separate but equal," .745 (P<.001). CFA for women:  $\chi^2=1.6,\ df=2,\ {\rm CFI}=1.000,\ {\rm RMSEA}=.000;$  regression estimates: "act differently," .282 (P<.01); "talented at different things," .993 (P<.001); "separate but equal," .886.  $^{24}$  I also ensured that none of the manifest measures are more highly correlated with a measure outside its latent group than are correlated with the measures inside its latent group.

TABLE 1 LIST OF VARIABLES INCLUDED IN THE ANALYSIS

Variable	Value
Dependent variable:	
%women in occupation,	0–100
graduate/professional program	
Independent variables:	
Career-launch activity	What are you doing now? $0 = \text{employed}$ ; $1 = \text{graduate/professional program}$
Self-conception measures:	
Emotional	Usually I am $1 = \text{very unemotional to } 7 = \text{very emotional}$
Unsystematic	Usually I am $1 = \text{very systematic to } 7 = \text{very unsystematic}$
People oriented	Usually I $1 = $ like to work with things to $7 = $ like to work with people
Gender schemas measures:	
Traditional gender role beliefs <sup>a</sup>	1 = strongly disagree; $5 = strongly agree$
Gender essentialist beliefs <sup>b</sup>	1 = strongly disagree; $5 = strongly agree$
Gender category beliefs:	
Same sex emotional	Usually, other members of my same sex are $1 = \text{very unemotional}$ to $7 = \text{very emotional}$
Same sex unsystematic	Usually, other members of my same sex are $1 = \text{very systematic}$ to $7 = \text{very unsystematic}$
Same sex work with people	Usually, other members of my same sex $1 = $ like to work with things to $7 = $ like to work with people
Control measures, demographic:	
Female	Yes = 1; no = 0
Umass graduate (reference)	Yes = 1; no = 0
MIT graduate	Yes = 1; no = 0
Olin graduate	Yes = 1; no = 0

= 0 = 0 = 0 = 0 = 0 = 0 = 0	Centered dottar amount, 1s value ranges from 0–1s,000 to 300,000 and above  Where would you place yourself on this scale? 1 = very liberal to 7 = very conservative  How religious would you say you are, compared to your peers? 1 = lowest decile to 5 = highest decile  It is important to me to be very well off financially: 1 = strongly disagree; 4 = strongly agree
Yes = 1; no = 0 Yes = 1; no = 0	Centered dol Where would How religiou It is importa 4-point scale 0-800 0-800
Smith graduate Hispanic/Latino African-American Asian or Asian American White or other (reference) Born in United States	ramily income Political conservatism Religiosity, compared to peers Importance of being wealthy Control measures, performance: GPA SAT Math Scores (0–800) SAT Verbal Scores (0–800)

members of the opposite sex to act differently than me at work"; "The trend of occupational sex segregation in the U.S. exists because men and women are naturally talented at different things"; "Men and women should have equal rights, but they are different by nature." <sup>b</sup> A latent measure including four manifest variables: "There are some jobs and professions that are more suited for men than for women"; "I expect three items are reverse coded.

<sup>a</sup> A latent measure including four manifest variables: "A wife should willingly take her husband's name at marriage"; "Women should not let bearing children stand in the way of a career if she wants one"; "Women can have a full and happy life without marrying"; "I consider myself a feminist." The last

attended MIT, Olin, Smith, or UMass (reference category); and their self-reported Scholastic Aptitude Test (SAT) math and verbal test scores. I also control for whether respondents entered graduate school or the work-force after graduation. To control for the importance to respondents of being wealthy, I include a year-1 measure of the importance to respondents of "being very well off financially." The demographic models in table 2 predicting %women capture a more complete list of characteristics, including whether respondents were born in the United States, their college grade point average (GPA), their family's income, their political conservatism, and how they rate their religiosity compared to that of their peers. <sup>25</sup>

# Analytic Strategy

I provide bivarate statistics for basic descriptives and then use OLS regressions to predict the percent women in respondents' career launch field with basic demographic measures and self-conception measures. Analyses that include the gender schemas measures use SEM conducted with AMOS, as gender role beliefs and gender essentialist beliefs are operationalized as latent measures. I present the chi-squared and degrees of freedom, the CFI, and the RMSEA as measures of fit for each SEM.<sup>26</sup>

I begin by presenting the bivariate statistics and basic models predicting the percent women in respondents' career launch fields. I then present OLS models predicting %women with emotional, unsystematic, and people-oriented self-conceptions, plus controls. Next, I examine the role of self-conceptions controlling for respondents' gender role beliefs, gender essentialist beliefs, and gender category beliefs. I find that self-conceptions predict where men and women end up along the spectrum of sex-segregated occupations and that, in contrast, gender schemas have little effect. I end by showing that several self-conceptions even predict whether respondents enter more or less "female" career launch fields than the academic disciplines in which they earned their degree.

<sup>&</sup>lt;sup>25</sup> Checks for normality of categorical data found that skewness and kurtosis scores for all Likert-scale independent variables were well within ranges required for assumptions of approximate normality. (Skewness scores were all below one and kurtosis scores all below two.) As such, there is no assumed distortion in the SEM fit indices from the use of noncontinuous variables (Finney and DiStefano 2006).

<sup>&</sup>lt;sup>26</sup> Latent measures are meant to represent overarching concepts, the components of which are captured by the manifest variables predicted by the latent measure (Byrne 2010). A strong CFI is larger than .900 and an acceptable fit is larger than .800. An RMSEA below .06 indicates a strong fit and an RMSEA below .08 is acceptable (Byrne 2010). RMSEA is a more accurate fit statistic with medium-size samples than CFI because the CFI may be deflated with sample sizes less than 500 (SEMs can be reliably interpreted with samples of 100 or more; Chen et al. 2008).

#### RESULTS

## Univariate and Bivariate Statistics and OLS Models

Table 2 presents the means and standard errors for all respondents and for men and women separately. The final column indicates the significance of the difference in means between men and women. As expected, women enter career launch fields with significantly higher representations of women than the fields men enter. Women have higher GPAs than men but lower SAT math and verbal scores on average. Women in this sample are also significantly less politically conservative than men. Table A1 in the appendix breaks down the outcome measure by school and by career launch activity. Women who graduate from UMass and MIT enter significantly more "female" career launch activities than men graduates from those schools, but there are no gender differences in the career launch activities of Olin graduates. Because Olin is an engineering-only college, there is less diversity in the training—and thus career launch tracks available—to graduates of that institution.

The gendering of men's and women's self-conceptions is also evident in table 2. Women are significantly more likely to consider themselves to be more emotional, marginally more unsystematic, and marginally more people-oriented than men perceive themselves to be. There are also significant gender differences on the gender schema measures. Men are more likely to have traditional gender role beliefs (high scores indicate more traditional beliefs) and are also more likely than women to adhere to three of the four gender essentialist beliefs (high scores indicate more essentialist beliefs). Unsurprisingly, women and men have substantially different understandings of the qualities that characterize their gender categories: women perceive other women to be more emotional, more people oriented, and marginally more unsystematic than men perceive other men to be.

Table 3 presents OLS regression models predicting the %women for all respondents and for men and women separately with the individual-level controls. As expected, gender is a significant predictor of %women in respondents' career launch field, net of school, race/ethnicity, nativity, family income, GPA, SAT scores, political views, religiosity, importance of being wealthy, and career launch activity. Both men and women who attend Olin are more likely to enter career launch paths with lower representations of women than those who graduated from UMass. Among women, Smith graduates do not enter more "female" career paths than women from UMass, but women MIT graduates enter career launch activities with significantly lower concentrations of women than the fields UMass women graduates enter. Asian and Asian American women are marginally more likely than white students to enter fields with higher concentrations of women, but no other racial/ethnic differences emerge in these models. Women with high math SAT scores and those who enter postgraduate education are more likely

	$\mathrm{All}\ (N=731)$	= 731	Women $(N = 465)$	7 = 465	$\mathrm{Men}\;(N=266)$	= 266)	
	Mean	SE	Mean	SE	Mean	SE	P-VALUE
% women in career launch field	38.086	1.167	44.053	1.500	27.659	1.360	< .001
Female	.636	.018	:		:		
UMass	.170	.017	.113	.019	.266	.029	< .001
MIT	.417	.018	.312	.022	.602	.030	< .001
Olim	.081	.010	.052	.010	.132	.026	< .001
Smith	.332	.017	.523	.023	:		
Hispanic/Latino	.034	.005	.022	.012	.055	.023	< .01
African-American	.041	.007	.046	.010	.031	.010	
Asian or Asian American	.240	.016	.228	.020	.259	.028	
Born in the United States	.774	.015	.785	.019	.756	.026	
Family income	990,66	2,589	99,919	3,366	97,573	4,338	
Political conservatism	2.505	.061	2.402	.074	2.689	.126	< .05
Religiosity	2.617	.035	2.660	.043	2.543	.058	
Importance of being wealthy	3.015	.035	2.983	.045	3.068	050.	
GPA	3.364	.022	3.400	.025	3.302	.041	< .05
SAT math score	696.785	3.738	677.213	4.413	731.002	6.014	< .001
SAT verbal score	674.343	4.012	667.223	5.011	686.787	6.592	< .05
Entered graduate school	.370	.0215	.364	.030	.379	.033	

Self-conceptions: I am emotional	4.674	060.	5.008	.129	4.089	.101	> .001
I am unsystematic	2.747	090.	2.910	.095	2.707	.100	< .10
I am people oriented	4.896	.074	4.989	.091	4.726	.129	<.10
Wife should take husband's name at marriage	2.867	.067	2.637	680.	3.269	.085	< .001
a career if they want one (reverse coded)	2.173	.048	2.025	690.	2.432	.077	< .001
(reverse coded)	1.977	.054	1.881	.062	2.145	.087	< .05
I consider myself a feminist (reverse coded)	3.101	.055	2.789	690.	3.645	680.	< .001
Some jobs better suited for men	2.893	.065	2.606	640.	3.395	.093	< .001
	2.418	.075	2.479	.091	2.312	.101	< .001
Men and women are naturally talented at different things Men and women should have equal rights but are different	2.399	.056	2.128	990.	2.715	.100	< .001
by nature	3.723	.070	3.561	.077	4.006	.117	< .01
Others of same sex: emotional (year 2)	4.736	.077	5.678	.074	3.089	.087	< .001
Others of same sex: unsystematic (year 2)	3.561	.077	3.647	.077	3.409	.116	< .10
Others of same sex: people oriented (year 5)	4.735	.059	5.395	.070	3.583	.119	< .001
NI more and an arrangement of the control of the co	. does no took	1					

Note.—P-values (two-tailed test) represent the significance of a t-test on each measure by gender.

 ${\bf TABLE~3}$  OLS Models with Descriptive Measures Predicting Percent Women in Career Launch Field

	All	Women	Men
Female	7.814***		
	(2.41)		
MIT graduate	-11.536*	-16.305**	-9.283
	(4.53)	(5.90)	(5.58)
Olin graduate	-25.327***	-33.950***	-20.642**
	(5.23)	(7.04)	(6.42)
Smith graduate	2.625	-1.242	,
	(3.65)	(4.45)	
Hispanic or Latino	3.297	1.236	6.132
1	(3.79)	(4.98)	(5.51)
Black or African-American	2.216	3.919	769
	(6.88)	(7.51)	(10.94)
Asian or Asian American	4.317	6.758+	2.228
	(3.12)	(3.46)	(4.80)
Born in the United States	-3.461	-2.239	-4.706
	(2.93)	(3.39)	(4.83)
Family income	.000	.000	.000
,	(.00.)	(.00.)	(.00.)
GPA	.048	557	525
	(3.07)	(3.91)	(3.71)
SAT math	044*	053*	025
	(.02)	(.02)	(.03)
SAT verbal	.024	.024	.026
	(.02)	(.02)	(.02)
Political conservatism	873	247	-1.784
	(1.11)	(1.25)	(1.42)
Religiosity	.288	385	1.088
,	(1.03)	(1.29)	(1.66)
Importance of being wealthy	-3.706**	-4.386**	-2.701
	(1.30)	(1.54)	(1.89)
Entered graduate school	-5.941*	-7.556**	-2.888
	(2.27)	(2.74)	(3.85)
Constant	65.421***	91.744***	40.931+
	(16.57)	(21.54)	(22.21)
<i>F</i> -value	9.22***	6.03***	1.39
Adjusted $R^2$	.300	.255	.128

Note.—UMass is the comparison category for school, and white is the comparison category for race/ethnicity. Entries are unstandardized coefficients; SEs are in parentheses.

to enter more "male" fields than their peers who go directly into the workforce. Finally, women—but not men—who value being well off financially enter fields with significantly lower concentrations of women than those for whom wealth is less important. Since political conservatism and religiosity are not significant in any of these models, I removed them from subsequent analyses.

 $<sup>^{+}</sup>$  P < .10 (two-tailed test).

<sup>\*</sup> P < .05.

<sup>\*\*</sup> *P* < .01.

<sup>\*\*\*</sup> P < .001.

## Self-Conceptions and %women at Career Launch

In order to determine whether self-conceptions influence occupational sex segregation, I use year-2 measures of the three self-conceptions to predict the percent women in respondents' career launch field. To capture potential differences in how self-conception measures influence career decisions for men and women, I run models separately by gender. Table 4 presents the unstandardized estimates and standard errors for the OLS models predicting percent women in respondents' career launch fields, including the three self-conception measures one at a time, and then, in the final model, all together. The first pair of columns in table 4 indicate that, net of controls, emotional self-conceptions are significant and positive predictors of sex composition for women and marginally for men. Put another way, for every point more emotional women and men consider themselves to be on a seven-point scale, the representation of women in their career launch activity is about two percentage points higher. Inversely, men and women who perceive themselves as less emotional are more likely to enter careers with a higher proportion of men.

For both men and women, unsystematic self-conceptions are related to a greater likelihood of entering a field with a higher proportion of women. Net of controls, for every point more unsystematic men and women perceive themselves to be, the proportion of women in their career launch activity is higher by about three percentage points. Finally, women (but not men) who perceive themselves as people oriented are more likely to enter female-dominated fields than those who perceive themselves as more things oriented. To test whether any of the self-conceptions would lose significance in a combined model, I also ran all three self-conception measures together in a model (see the final model in table 4); I found no change in this regard. Thus, for both men and women, some of their self-conceptions predict their contribution to occupational sex segregation net of school, race/ethnicity, SAT, importance of being wealthy, and their career launch activity.<sup>27</sup>

Self-conceptions also appear to act similarly for students across the different institutions. In a supplemental analysis using interactions between school and the self-conception measures (not shown), none of the

<sup>&</sup>lt;sup>27</sup> As a sensitivity test, I recoded the continuous dependent variable into a three-category ordinal measure, where 0 = male-dominated field (less than 30% women), 1 = gender-balanced field (between 30% and 70% women), and 2 = female-dominated field (greater than 70% women). I reran the models in table 3 as ordered logistic regressions using this three-category measure and found similar substantive results: net of other measures in the model, women with emotional and unsystematic self-conceptions were marginally more likely to enter a female-dominated field, and women with people-oriented self-conceptions were significantly more likely to enter a female-dominated field than other women. Men with unsystematic self-conceptions were also marginally more likely to enter a female-dominated field than other men.

TABLE 4 OLS REGRESSIONS PREDICTING PERCENT WOMEN IN RESPONDENTS' CAREER LAUNCH FIELD WITH SELF-CONCEPTION MEASURES

	WITH EMOTIONAL SELF-CONCEPTION	OTIONAL CEPTION	WITH UNSYSTEMATIC SELF-CONCEPTION	STEMATIC	WITH PEOPLE-ORIENTEL SELF-CONCEPTION	5-ORIENTED CEPTION	ALL SELF-CONCEPTION MEASURES	ONCEPTION
	Women	Men	Women	Men	Women	Men	Women	Men
Self-conceptions:	2.606*	2,485					2.279*	2.261+
	(1.03)	(1.27)					(1.04)	(1.26)
Unsystematic			2.261*	2.776*			2.344*	2.735*
			(1.07)	(1.30)			(1.01)	(1.23)
People oriented					2.287**	1.603	1.778*	1.005
					(.83)	(1.06)	(98.)	(1.06)
Controls:								
MIT	-17.359**	-9.222	-17.837**	-7.643	-18.765**	-8.148	-18.532**	-8.314
	(5.34)	(5.50)	(5.51)	(5.31)	(5.20)	(5.21)	(5.26)	(5.46)
Olin	-34.406***	-21.269**	-34.893***	-18.859**	-31.302***	-18.284**	-33.418***	-19.086**
	(6.48)	(09.9)	(6.62)	(09.9)	(6.52)	(6.61)	(6.65)	(6.83)
Smith	-1.607		-2.987		-1.948		-2.532	
	(4.34)		(4.46)		(4.44)		(4.42)	
African-American	4.555	3.536	4.443	2.731	5.580	3.499	135	3.767
	(6.07)	(8.34)	(6.61)	(8.77)	(80.9)	(8.61)	(5.03)	(8.29)
Hispanic or Latino	-1.303	1.256	1.183	5.805	.518	4.315	5.595	3.869
	(4.88)	(5.55)	(4.92)	(5.28)	(4.88)	(5.05)	(6.44)	(5.55)

$\begin{array}{cccccccccccccccccccccccccccccccccccc$	Asian or Asian American	6.083*	3.117	5.772+	2.522	5.823+	2.374	6.177*	3.436
$\begin{array}{cccccccccccccccccccccccccccccccccccc$		(5.07) 054*	(3.91) 024	(5.14) 048*	(5.7 <i>8</i> ) 018	(5.t.5) 048*	(5.81) 025	(5.05) 047*	(5.83) 024
$\begin{array}{cccccccccccccccccccccccccccccccccccc$		(.02)	(.03)	(.02)	(.03)	(.02)	(.03)	(.02)	(.03)
$\begin{array}{cccccccccccccccccccccccccccccccccccc$		.034	.035	.028	.021	.027	.026	.033	.032
$\begin{array}{cccccccccccccccccccccccccccccccccccc$		(.02)	(.02)	(.02)	(.02)	(.02)	(.02)	(.02)	(.02)
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	1	-3.719**	-2.142	-3.401*	-1.737	-3.507**	-1.571	-3.580**	-1.921
-3.976     -6.838**     -2.475     -7.629**     -3.129       (3.50)     (2.61)     (3.52)     (2.76)     (3.43)       27.420     75.947*     22.058     74.330***     27.539       (18.86)     (18.06)     (19.78)     (17.36)     (19.11)     (19.11)       .130     .276     .131     .287     .117       2.23*     9.41***     2.26*     9.96***     1.98*	_	(1.29)	(1.69)	(1.35)	(1.69)	(1.26)	(1.67)	(1.30)	(1.70)
(3.50) (2.61) (3.52) (2.76) (3.43) 27.420 75.947* 22.058 74.330*** 27.539 (18.86) (18.06) (19.78) (17.36) (19.11) ( .130 .276 .131 .287 .117 2.23* 9.41*** 2.26* 9.96*** 1.98*	-	7.907**	-3.976	-6.838**	-2.475	-7.629**	-3.129	-7.526**	-3.163
27.420     75.947*     22.058     74.330***     27.539       (18.86)     (18.06)     (19.78)     (17.36)     (19.11)     (19.11)       .130     .276     .131     .287     .117       2.23*     9.41***     2.26*     9.96***     1.98*	_	(2.76)	(3.50)	(2.61)	(3.52)	(2.76)	(3.43)	(2.70)	(3.62)
(18.86) (18.06) (19.78) (17.36) (19.11) ( .130 .276 .131 .287 .117 2.23* 9.41*** 2.26* 9.96*** 1.98*	1~	5.393***	27.420	75.947*	22.058	74.330***	27.539	55.956**	10.630
.130 .276 .131 .287 .117 2.23* 9.41*** 2.26* 9.96*** 1.98*	$\Box$	[7.84]	(18.86)	(18.06)	(19.78)	(17.36)	(19.11)	(18.12)	(19.53)
2.23* 9.41*** 2.26* 9.96*** 1.98*		.281	.130	.276	.131	.287	.117	.275	.177
		9.83***	2.23*	9.41***	2.26*	9.96***	1.98*	6.05	2.38**

interaction terms were significant. Furthermore, the emotional and unsystematic self-conceptions do not seem to operate differently for men and women. In the supplemental analysis, an interaction term between female and the people-oriented self-conception was significant and positive, however; people-oriented self-conceptions are more important for women's career launch outcome than for men's. As I discuss in the next section, this may indicate a gender difference in the salience—as well as the content—of self-conceptions in men's and women's career launch decisions.

## Gender Schemas and %women at Career Launch

The next table presents models that include measures of gender role beliefs, gender essentialist beliefs, and gender category beliefs. Because I use latent measures for two of the gender schema dimensions, I use structural equation models for this analysis. Table 5 presents the SEMs predicting percent women with all gender schema measures and the three self-conceptions one by one. The final set of models in table 5 combines all self-conception and gender schema measures together.

As table 5 shows, the self-conception findings from above largely hold for both men and women: even net of their gender role, gender category, and gender essentialist beliefs, women with emotional, unsystematic, and people-oriented self-conceptions, and men with unsystematic selfconceptions, are likely to enter fields with a higher proportion of women. (The last set of models in table 5 combines all the self-conception and gender schema measures together; in this combined model, unsystematic is a fully significant predictor of women's outcome measures, but emotional self-conception is no longer significant.) Once gender schemas are included in the model, men's emotional self-conception is no longer significant, possibly because of the connection of self-conceptions with men's gender role beliefs or gender category beliefs, which are not controlled for in the model. In contrast to the self-conception measures, only one gender schema measure is significant in any of these models: men who believe their own gender category to be people oriented are more likely to enter fields with more women (the third set of columns in table 5). However, this gender category belief is no longer significant in the full model in the last column of table 5.28 The general lack of influence of gender schemas on respondents' contributions to occupational sex segregation supports my

<sup>&</sup>lt;sup>28</sup> To conduct a formal test of the null hypotheses for the effects of self-conceptions and gender schemas on %women in respondents' career launch fields, I set the regression paths of interest to zero and noted the change in the chi-squared and degrees of freedom between the restricted and unrestricted models. The null hypothesis regarding the effect

assertion that young men's and women's career decision-making logic relies little on their conscious beliefs about the roles prescribed by their gender, or along essentialist beliefs about what they are "hardwired" to do.<sup>29</sup>

In addition to the analysis above, I am interested in whether self-conceptions predict whether respondents enter career launch fields with higher (or lower) concentrations of women than the academic fields in which they earned their undergraduate degrees. Examining whether self-conceptions predict the change in the percent women between respondents' college major and their career launch path might suggest whether self-conceptions matter at decision junctures throughout men's and women's careers, not just at the start of their professional lives.<sup>30</sup>

To predict this change in percent women, table 6 replicates the analysis in table 5 and adds a measure of the percent women in respondents' detailed college degree field.<sup>31</sup> The addition of the college major percent women measure means that the dependent variable now indexes the change in percent women between respondents' college major and career launch field. I find that the same self-conceptions that were related to career launch fields in table 5 are also related to whether men and women enter even more "female" or more "male" fields than their undergraduate degree fields: women with unsystematic and people-oriented self-conceptions and men with unsystematic self-conceptions are more likely to enter career launch fields with a higher proportion of women than the fields in which they earned their degree.

of self-conceptions on percent female can be rejected for both men and women: the change in chi-squared and degrees of freedom for women is 16.2 and 3, respectively (P < .005), and the change in chi-squared and degrees of freedom for men is 10.4 and 3, respectively (P < .05). In contrast, the null hypothesis for the gender schema measures cannot be rejected: the changes in chi-squared were not significant for women's or men's models between the restricted and unrestricted models.

<sup>&</sup>lt;sup>29</sup> The effects of gender schemas on occupational sex segregation are likely more complex than what can be captured by the time horizon of these data. Gender schemas may influence individuals' development of their self-conceptions, particularly during primary and secondary school. Thus, a longer-term longitudinal investigation of the interrelationships between gender schemas and self-conceptions is needed to parse out these complex relationships.

<sup>&</sup>lt;sup>30</sup> Ideally, I would have liked to predict students' college major selection as well, but I do not have self-conceptions data prior to students' entrance into college. I hope that future research will use precollege self-conceptions data to predict the majors students choose as freshmen.

<sup>&</sup>lt;sup>31</sup>As with career launch activity, I assigned each respondent a score for the percent women in their detailed college degree field. I consulted the NSF's 2008 Science Resource Statistics data for the percentage of women in science and engineering-related majors and the 2009 *Digest of Educational Statistics* for other degree fields. I averaged these scores for respondents who double or triple majored.

TABLE 5 SEMS PREDICTING % Women in Respondents' Career Launch Field with Self-Conception and Gender Schema Measures

Self-conceptions: Emotional	Men 1.893 (1.299)	Women	Men	***			
				Women	Men	Women	Men
						1.698	1.994
						(1.19)	(1.30)
		$2.191^{+}$	4.798***			2.293*	4.335**
		(1.17)	(1.38)			(1.14)	(1.49)
People oriented				3.209***	.236	2.854**	106
				(.90)	(1.01)	(.92)	(86.)
Gender schemas:							
Traditional gender role beliefs4.319	3.413	-3.519	2.602	-4.565	3.574	-2.683	.150
	(6.871)	(5.96)	(6.37)	(5.76)	(6.95)	(6.07)	(7.07)
Gender essentialist beliefs	-6.810	1.322	-2.509	2.454	7.048	.275	6.262
(10.12)	(6.568)	(10.14)	(5.85)	(10.24)	(09.9)	(10.14)	(6.84)
Emotional gender category516	.858					319	1.364
	(1.996)					(1.41)	(1.89)
Unsystematic gender category		09	.053			.157	867
		(1.34)	(1.36)			(1.30)	(1.46)
People-oriented gender category				-1.593	3.124*	-1.219	2.251
				(1.28)	(1.47)	(1.30)	(1.71)
Controls:							
MIT17.359**		-24.253***	3.002	-26.176***	848	-25.724***	1.853
(5.34)		(5.99)	(4.48)2	(00.9)	(4.47)	(2.96)	(4.58)
Olin40.667***		-42.256***	-5.998	-37.234***	$-13.006^{+}$	-38.743***	-9.036
(7.50)	(7.342)	(7.62)	(7.23)	(7.43)	(2.08)	(7.47)	(7.65)

Smith	-7.608		-9.77*		$-8.693^{+}$		-9.149*	
	(4.66)		(4.67)		(4.61)		(4.62)	
African American	7.837	10.998	7.106	-23.769**	8.613	-2.198	8.681	9.053
	(6.30)	(14.045)	(6.30)	(10.95)	(6.35)	(9.84)	(6.28)	(13.89)
Hispanic or Latino	-2.014	3.986	546	12.707*	-1.695	6.626	-1.206	9.590+
	(5.03)	(5.347)	(5.05)	(5.14)	(4.99)	(5.18)	(5.02)	(5.51)
Asian or Asian American	7.763*	-1.352	7.543*	-1.157	7.467*	-2.251	7.222*	-1.835
	(3.58)	(4.226)	(3.58)	(3.97)	(3.54)	(4.20)	(3.51)	(4.17)
SAT math	046	022	044	022	036	027	035	042
	(.03)	(.027)	(.03)	(.03)	(.03)	(.03)	(.02)	(.03)
SAT verbal	.016	.031	.014	.016	.015	.022	.016	.028
	(.02)	(.024)	(.02)	(.02)	(.02)	(.02)	(.02)	(.02)
Importance of wealth	-3.657**	-1.609	-3.712**	-1.307	-3.902**	-1.674	-3.811**	-2.265
	(1.42)	(1.7)	(1.41)	(1.61)	(1.39)	(1.70)	(1.39)	(1.65)
Entered graduate school	-8.682**	828	-7.975**	1.674	-9.316***	.930	-8.873**	2.098
	(2.76)	(3.587)	(2.77)	(3.27)	(2.75)	(3.37)	(2.73)	(3.49)
$\chi^2$ $(df)$	173.4	121.1	167.3	129.3	160.9	126.0	186.1	149.2
	(62)	(91)	(62)	(91)	(62)	(91)	(121)	(115)
RMSEA	.041	.035	.040	.040	.038	.928	.034	.034
CFI	.941	.940	.955	.955	626.	.038	626.	.939
$R^2$	.325	.127	.323	.323	.352	.129	.325	.251

Nore.—Entries are unstandardized estimates; SEs are in parentheses.  $^+$  P < .10 (two-tailed test). \* P < .05. \*\* P < .01. \*\*\* P < .001.

TABLE 6 SEMS PREDICTING CHANGE IN PERCENT % WOMEN (COLLEGE DEGREE TO CAREER LAUNCH FIELD) WITH SELF-CONCEPTIONS AND GENDER SCHEMAS

	With Emotional Self-Conception	OTIONAL	WITH UNSYSTEMATIC SELF-CONCEPTION	STEMATIC	WITH PEOPLE-ORIENTEL SELF-CONCEPTION	S-ORIENTED CEPTION	ALL SELF-CONCEPTIONS	NCEPTIONS
	Women	Men	Women	Men	Women	Men	Women	Men
Self-conceptions: Emotional	1.694+	756.					974	1.119
	(1.01)	(1.13)					(1.02)	(1.17)
Unsystematic			2.029*	3.083*			2.080*	2.851*
			(66.)	(1.26)			(86.)	(1.32)
People oriented					2.347**	565	2.176**	908.—
					(64.)	(.87)	(.80)	(88)
Gender schemas:								
Traditional gender role beliefs	-2.378	2.894	-1.457	6.295	-2.604		871	5.427
	(5.24)	(6.24)	(5.09)	(5.87)	(4.97)		(5.24)	(0.70)
Gender essentialist beliefs	2.085	957	3.346	-4.640	3.877		2.593	-3.135
	(8.72)	(1.13)	(8.74)	(5.80)	(8.89)	(6.25)	(8.79)	(7.00)
Emotional gender category	-1.144	245					-1.001	.040
	(1.22)	(1.76)					(1.21)	(1.73)
Unsystematic gender category			.050	.499			.207	2.851*
			(1.14)	(1.22)			(1.12)	(1.32)
People-oriented gender category					-1.061	2.608*	617	908.—
					(1.09)	(1.26)	(1.11)	(88)
Degree %women	.584***	.572***	.590***	.543***	.562***	.577***	.559***	.529***
		(.10)	(90.)	(60.)	(90.)	(60.)	(90.)	(.10)
Controls:								
MIT	-14.962**	.374	-16.049***	3.397	-17.752***	364	-17.846**	2.882
		(3.90)	(5.13)	(4.01)	(5.21)	(8.36)	(5.18)	(4.08)

Olin	-20.815***	-2.904	-22.077***	2.835	-19.082**	-1.769	-20.603**	1.337
Smith	(6.66) -4.961 (4.00)	(7.10)	(6.73) $-6.657$ $(3.99)$	(6.81)	(6.59) -5.743 (3.97)	(6.49)	(6.62) $-6.407$ $(3.98)$	(7.43)
African-American	11.154*	7.192	10.591*	-13.826	11.321*	-2.198	11.566*	2.885
	(5.37)	(12.08)	(5.35)	(06.6)	(5.42)	(9.84)	(5.36)	(12.53)
Hispanic or Latino	-6.198	4.819	-5.498	9.805*	-6.229	5.127	-5.393	7.307
	(4.31)	(4.59)	(4.32)	(4.64)	(4.28)	(4.45)	(4.31)	(4.93)
Asian or Asian American	$5.616^{+}$	-1.935	5.587+	-1.845	$5.626^{+}$	-2.412	5.224+	-1.707
	(3.06)	(3.60)	(3.05)	(3.54)	(3.03)	(3.55)	(3.01)	(3.70)
SAT math	010	.015	007	.010	004	800.	002	003
	(.02)	(.02)	(.02)	(.02)	(.02)	(.02)	(.02)	(.03)
SAT verbal	.001	.027	000.	.020	.001	.024	.002	.028
	(.02)	(.02)	(.02)	(.02)	(.02)	(.02)	(.02)	(.02)
Importance of wealth	-3.266**	579	-3.447**	406	-3.575**	898.—	-3.391**	-1.332
	(1.21)	(1.46)	(1.19)	(1.44)	(1.19)	(1.44)	(1.19)	(1.47)
Entered graduate school	-9.255***	-1.716	-8.814***	.292	-9.719***	474	-9.333***	.200
	(2.35)	(3.07)	(2.36)	(2.96)	(2.35)	(2.87)	(2.33)	(3.13)
$\chi^2$ $(df)$	174.7	122.9	169.0	131.3	162.7	128.3	187.4	151.6
	(103)	(62)	(103)	(62)	(103)	(62)	(127)	(121)
RMSEA	.039	.032	.037	.037	.035	.035	.032	.031
CFI	656.	.955	.962	.940	996.	.944	996.	.951
$R^2$	.511	.345	.517	.395	.528	.367	.545	.414

NoTE.—Entries are unstandardized estimates; SEs are in parentheses.  $^+$  P < .10 (two-tailed test). \* P < .05. \*\* P < .01. \*\*\* P < .001.

#### Limitations

This study was based on longitudinal data of graduates from four colleges. The sample is relatively small, geographically homogeneous, and not representative of graduates from all U.S. institutions. Nonetheless, the rich measures of self-conceptions and gender schemas allowed me to empirically investigate the relationship between self-conceptions and occupational sex segregation. This is a place to start; I hope future research on self-conceptions and sex segregation will utilize data with a more representative sample.

Second, I focus on men and women who are expected to enter—or remain firmly embedded in—the middle class.<sup>32</sup> I am primarily concerned with sex segregation as it manifests in high-skilled professional occupations. Low-skilled and manual work is highly sex segregated, and I recognize that workers in low-skilled jobs face tremendous constraints in their choice of employment.<sup>33</sup> However, as I note in the next section, the role (if any) of self-expression in these employment decisions is an open empirical question.

#### DISCUSSION

This article argues that an important but understudied individual-level factor in the reproduction of occupational sex segregation among college-educated men and women is self-expression. I hypothesized that, through a self-expressive process of selecting occupations that fit their self-conceptions, individuals with more stereotypically female-typed self-conceptions would be more likely than their peers to enter a career launch field with a higher proportion of women (and those with more stereotypically male-typed self-conceptions would be likely to enter fields with more men). Net of respondents' gender schemas and controls, I found that women who perceive themselves as emotional, unsystematic, and people oriented and men who

<sup>&</sup>lt;sup>32</sup>Additionally, there remains tremendous vertical segregation—and some horizontal segregation—by race/ethnicity (Tomaskovic-Devey 1993a). African-American, Native American, and Hispanic men and women are less likely to occupy the top rungs of organizational hierarchies, and they also tend to be underrepresented in traditionally maledominated fields such as science and engineering (Tomaskovic-Devey 1993b; Maume 1999). I control for the race/ethnicity of respondents in all models, but my sample does not allow for systematic analysis of racial or ethnic differences in the role of gendered self-expression in the reproduction of horizontal segregation.

<sup>&</sup>lt;sup>33</sup> Low-skilled work did not experience the levels of desegregation that high-skilled occupations enjoyed in the 1960s and 1970s. England (2010) argues that the reason is that women who had the potential to increase their earnings also might have had the opportunity to enter into higher-status, female-dominated occupations. As such, fewer women became plumbers and mechanics in the 1970s and 1980s than lawyers and doctors.

perceived themselves as unsystematic were more likely to enter career fields with a higher concentration of women.

This self-expressive process is important sociologically because cultural gender ideologies and institutions inform the development of self-conceptions that then become the basis of self-expressive decision making: when men and women choose careers that "fit them," they often reproduce the gender structure. Gender scholars have recently suggested that self-expressive career decisions are relevant to sex segregation (e.g., Charles and Bradley 2009; England 2010; Cotter et al. 2011), but the contexts and consequences of a self-expressive edge of sex segregation have not been given sufficient theoretical attention. To advance the conceptualization of this mechanism, I now discuss the implications of my particular analysis, theorize the cultural and structural underpinnings of the self-expression mechanism more broadly, and ask whether self-expression might contribute to gender inequality beyond occupational sex segregation.

First, the relationship of self-conceptions to respondents' career outcomes suggests not only that women qua women (and men qua men) help reproduce occupational sex segregation by entering fields with more women (or fields with more men) but also that respondents—men and women—with the most stereotypically female-typed self-conceptions are likely to enter career domains with the highest concentrations of women. Thus, not only are men and women with self-conceptions stereotypical of their gender categories more likely to reinforce the demographic imbalance of genderskewed occupational fields, they also help reproduce the cultural gender typing of these occupations as culturally masculine and feminine domains where people with those characteristics crowd. For example, men with unsystematic self-conceptions are more likely than other men to enter occupations with more women, such as elementary education. This reinforces the cultural perception that elementary education is a location for people who are unsystematic, even as men's entrance into this field challenges its demographic gender imbalance.

I also found that respondents' gender schemas have little direct effect on their selection of career launch fields. This suggests the need for a shift in thinking about individual-level cultural processes that reproduce sex segregation. Much of the individual-level literature attempts to explain how and why men and women make career decisions as men or as women—contemplating which occupations serve their interests as a member of one gender category or the other. Human capital (e.g., Becker 1993) and role expectancy (e.g., Eccles 1987, 1994) literature, for example, posits that many women make career decisions on the basis of the careers they believe will be well suited for their anticipated roles as primary caregivers. These traditional and essentialist gender role beliefs fly in the face of liberal feminist ideals of equality and choice and thus provide clear targets for research

and activism. Much of the recent policy and social action seeks to break down traditional and essentialist assumptions about the work men and women "can" and "should" do. This is the spirit in which, for example, toy companies introduce "computer scientist" dolls and pastel-colored interlocking blocks.

However, the lack of direct influence of gender schemas on respondents' career launch outcomes suggests that this might not be the most effective approach. In my sample, even men and women with the most progressive gender schemas-those who consciously reject traditional gender roles, envision their gender category with neutral or gender-atypical traits, and reject essentialism—still reproduce occupational sex segregation if they hold gender-typical understandings of themselves. It is, in other words, not necessary for young men and women to consciously endorse traditional gender beliefs in order for those beliefs to influence their career decisions via their gendered self-conceptions. Thus, changing young people's minds about gender roles and characteristics alone would seem to have little effect on the prevalence of segregation-reproducing career choices. The promotion of egalitarian and anti-essentialist perspectives in education and policy may influence how children's self-conceptions develop, how adults' selfconceptions slowly change over time, and the types of career advice and encouragement adolescents receive, but this approach may have little impact on the career decisions of current generations of young adults.

Third, although far from conclusive, my results hint that self-expression may be a stronger determinant of career outcomes for women than for men.<sup>34</sup> This is unlikely to be the result of men's expectations of fulfilling breadwinner roles by seeking lucrative rather than self-expressive fields: in my sample, traditional gender role beliefs were not significant predictors of men's career outcomes, and desires to be wealthy were significant for women's, but not men's, career launch outcomes. Compared to men, women may have more cultural latitude to express a more extensive range of selfconceptions, whereas men's self-conceptions may be more policed to fall in line with hegemonic masculinity (Schippers 2007). Women may also value intrinsic rewards in general more than men (Johnson 2001). Furthermore, women may enjoy more interpersonal encouragement and structural support to pursue male-dominated fields such as science, whereas men may have less encouragement to pursue female-dominated occupations such as nursing. This is consistent with England's (2010) findings that the desegregation of occupations in the last several decades is primarily the result of women's movements into male-dominated fields. Thus, the relative salience of self-expression between men and women—not just the gendering

<sup>&</sup>lt;sup>34</sup> Weisgram, Dinella, and Fulcher (2011) similarly found that women's—but not men's—self-perceived femininity predicted their anticipated occupations.

of what is expressed—may reinforce occupational sex segregation by encouraging women to base their decisions on self-expression rather than on monetary or prestige factors. More research is needed to parse out the ways men and women may face different cultural expectations for self-expression and the circumstances under which more instrumental concerns overshadow self-expression in men's versus women's decision making.

## Theorizing Self-Expression and Sex Segregation More Broadly

In a society in which male-dominated and female-dominated occupations were equally rewarded and respected, and in which the cultural ideologies that informed career choices were not gender biased, self-expressive career decisions would be interesting sociologically but would not play a role in reproducing gender inequality. The reasons such gendered self-expression is an issue of inequality are that the more macrolevel structural contexts and cultural ideologies that inform the development of self-conceptions are biased and that the fields that value feminine-typed self-conceptions tend to have lower prestige, pay, and power. As a result, such gendered self-expression can reproduce the unequal status of women. In an attempt to advance the theory of this mechanism, I offer several broader arguments about self-expression and occupational sex segregation.

First, the connection between self-expression and the ideology of individualism in postindustrial societies may make this mechanism particularly potent. The self, conceptualized as a unique entity with qualities separate from the characteristics of collective groupings, is now the primary unit of social life. The "cult of the individual" (Durkheim [1893] 1984) has intensified over the last century: "World War II and its aftermath sharply shifted the balance of legitimated actorhood ... [advancing] the individual as the legitimate actor, as the main element of reality and thus the primary repository of legitimate roles and identities" (Frank and Meyer 2002, p. 87).<sup>35</sup> This expansion of the individual self as the master human identity, rather than one's gender, religion or class, buttresses an "enormous cultural expansion in the legitimate range of free personal tastes and preferences" (p. 90). As the individual became the focal unit of social life, self-expression became synonymous with individualism. In this "search for the true self" (Bellah et al. 1985, p. 55), "one's idiosyncratic preferences are their own justifications, because they define the true self" (p. 75). The edge of this

<sup>&</sup>lt;sup>35</sup> The cult of the individual is the intense focus on the rights and dignities of the individual, over and above that of the group, nation, religion, etc. (Marske 1987). The object of self-expression is rarely one's group identity (although that is sometimes the case) since the cult of the individual has long superseded group membership as Americans' defining identity feature (Durkheim [1893] 1984).

mechanism is, in other words, its cultural exaltation through its connection to the ideology of individualism.

Second, the self-expressive edge of sex segregation does not have an immediately apparent "oppressor," no clear prejudicial motivations, and no overt coercion. Although oppression, prejudice, and coercion certainly shape the development of gendered selves, societal pressure to express oneself, and the legitimation of certain expressions and not others, means that the cultural act of self-expression is a degree removed from the social processes that gender these self-conceptions. This degree of separation makes it difficult conceptually and practically to connect self-expressive decision making back to the biased social structures that helped construct self-conceptions in the first place. As such, to the holders of gendered selfconceptions, those self-conceptions may not feel gendered; they may simply feel individualistic. There is little indication that gendered decision making has declined (Lueptow et al. 2001), just that it has become encoded as personal expression of self-conceptions. Without a clear connection to coercive or prejudicial action, it becomes difficult—and perhaps politically fraught—to frame self-expression as a locus of inequality.

Third, because of the cultural exaltation of self-expression, the sacredness of individualism, and its degree of separation from the biased gendered structures that inform it, this self-expressive mechanism may be particularly resistant to social change. The most obvious solution—to limit people's freedoms to choose occupational paths they find self-expressive or to change people's self-conceptions—is culturally untenable. It is one thing to rally against practices of inequality based on gender essentialist notions of "women's work" and "men's work." It is quite another to challenge a person's claim that a certain occupation is his or her "passion." "We believe in the dignity, indeed the sacredness, of the individual. Anything that would violate our right to think for ourselves, make our own decisions, live our lives as we see fit, is not only morally wrong, it is sacrilegious" (Bellah et al. 1985, p. 142). Because these self-expressive career decisions are protected and legitimated by the cultural exaltation of such expression, they are resultantly off-limits to policy regulation and feminist social action.

This is also a conundrum for educators. Many subscribe to this self-expression narrative, advising students to "follow their heart" and "do what they love," even if it means that students will exit their discipline. Are we, then, to direct students to occupational paths that challenge cultural structures like gender?<sup>36</sup> The most viable reaction to this mechanism for current generations of young adults may not be to abandon the narrative of

<sup>&</sup>lt;sup>36</sup> Neo-Marxist and postmodern theorists might also argue that seeking out self-expressive work only embeds men and women more firmly in the capitalist mode of production, as their work gives them a sense of fulfillment that would quiet tendencies for uprising (Horkheimer and Adorno 1987; Baudrillard 2001).

self-expression but to address the structural and cultural contexts in which men and women make these self-expressive decisions. For example, high school and college curricular committees could institute more prerequisites that expose students to a broader range of subjects (e.g., auto mechanics and child development courses). Similarly, career counseling practices and occupational interest tests meant to help students identify career avenues that match their self-conceptions should be critically examined to ensure that they are not artificially limiting individuals' possible choices on the basis of their gender. For young and adolescent boys and girls first developing self-conceptions, more can be done to challenge the dominant structural and cultural contexts that restrict in gendered ways the spectrum of self-beliefs they find acceptable and desirable.

There is much to be explored in the self-expressive edge of occupational sex segregation: Does self-expression continue to be salient once men and women have been in the workforce for many years? Do similar processes exist among community college students? Does the tremendous cultural value put on self-expression mean that even low-income, working-class men and women use self-expression as a metric for employment decisions? It is an important question whether external constraints among a less privileged population than the one I study here completely overwhelm the ability for self-expressive decision making or whether there are instances in which, given the choice between two equally low-paying or low-skilled jobs, individuals make choices about which work "fits" them best in ways that reproduce sex segregation. Future research that addresses these questions would help us understand the extent and operation of gendered self-expression in occupational sex segregation.

## A Self-Expressive Edge of Gender Inequality?

I focus here on the relationship between self-conceptions and occupational sex segregation, but there may exist self-expressive mechanisms in the reproduction of other forms of gender inequality. Self-conceptions and self-expression may interact with institutional- and interactional-level factors to reproduce other inequalities in salary, advancement, and leadership. For example, whether women negotiate for salary raises or confront colleagues who treat them unfairly may depend as much on the structural environment of their workplaces as on whether they believe that negotiation and confrontation are consistent with the "kind of person" they believe themselves to be. This creates a particular challenge for those trying to solve the discrepancy between men's and women's negotiation strategies through workshops or courses for women: it is likely not enough to point out that women tend to negotiate less forcefully than men. If such behaviors go against their self-conceptions because they have internalized

cultural beliefs that women are not to be "pushy" or "immodest," such training will have limited success.

A similar process may occur when the daily activities of occupational or organizational settings are discordant with women's or men's self-conceptions, leading them to consider leaving. Constantly being expected to act in ways that contradict one's self-conceptions (e.g., being an aggressive sales representative) may increase the likelihood that an individual will leave for an environment that allows her or him to act in ways more consistent with her or his self-beliefs (Swann 1987).

This attention to self-expression suggests the need to understand more broadly the role individual identities play in the reproduction of inequality. Inequalities can be perpetuated even when those who are disadvantaged do not recognize that disadvantage, and the beliefs and actions of members of disadvantaged groups can reproduce that disadvantage for themselves and other members of their group (Jost, Banaji, and Nosek 2004; Cech and Blair-Loy 2010). But examining individual-level mechanisms of inequality such as these is delicate business. How do we discuss actions of individuals that reproduce their own or others' unequal status without "blaming the victim"? Avoiding blaming the victim requires diligence in stressing the socially constructed nature of self-beliefs and identities and suggesting policy actions that do not put the burden on the disadvantaged individuals to simply "change."

#### CONCLUSION

This article sought to advance our understanding of how occupational sex segregation is reproduced at the individual level through self-expression. Much progress has been made in understanding the institutional- and interactional-level factors that shape and constrain men's and women's career opportunities. But college-educated men and women in the United States are often encouraged and expected to choose careers that are consistent with their self-beliefs. Self-expression is an important issue in occupational sex segregation because when men and women choose careers that "fit them," they often reproduce the gender structure.

Drawing on the insights from my empirical analysis of a longitudinal sample of college students, I proposed several theoretical implications that expand the foundation for thinking about the relationship between self-expression and occupational sex segregation. I argued that self-expression is tied to individualism in such a way that self-conceptions, while deeply gendered, may not appear gendered to those who express them. However, the very cultural exaltation of self-expression makes this a particularly intractable mechanism in the reproduction of sex segregation. The cultural

meanings surrounding self-conceptions and their connection to individuality mask the gendering of self-conceptions. Self-expressive career decision making is thus encouraged and exalted without appearing as a mechanism of inequality reproduction.

The cultural mandate for self-expression in most arenas of individual action in the United States is hard to ignore (e.g., Baudrillard 2001). How might self-expressive action, which is socially and culturally constraining as well as enabling, reproduce social inequalities, and what would that mean for our attempts to undermine that inequality? I hope that these arguments serve as a catalyst for dialogue about the role of culturally and structurally informed self-expression in maintaining—and possibly undermining—gender inequality.

# APPENDIX

TABLE A1
Univariate and Bivariate Statistics for % Women in Career Launch Field,
by Gender, Career Launch Activity, and School

	Aı	L	Won	MEN	Mı	EN	P-VALUE (Men vs.
	Mean	SE	Mean	SE	Mean	SE	Women)
All	38.086	1.167	44.053	1.500	27.659	1.360	< .001
Workforce entrance	38.703	1.448	45.951	1.833	25.774	1.800	< .001
Entered graduate school	32.121	1.506	34.886	1.963	26.664	2.006	< .001
UMass	44.117	2.451	54.377	3.371	36.459	2.952	< .001
MIT	29.715	1.540	33.727	2.243	26.079	1.781	< .01
Olin	17.917	1.921	19.210	2.377	17.030	2.782	
<u>Smith</u>			50.417	1.921			

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# Occupational Sex Segregation

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