Equality and Illusion: Gender and Tenure in Art History Careers

Using a national survey of 508 art history Ph.D.s including data on graduate school performance and careers 10 – 15 years post-Ph.D., this study investigates gender, family, and academic tenure in art history, the humanities field with the highest proportion of women. Alternative hypotheses derived from three perspectives—termed here clockwork, two-body, and synergy—are evaluated with multivariate logistic regression. Analysis finds that marriage increases men’s tenure odds and decreases women’s, but that some types of marriages do not decrease women’s odds, and some types dramatically increase men’s. This study calls attention to male advantage in female-dominated academic disciplines and demonstrates the potential to better understand the interactions of gender, marriage, and careers by conceptualizing different types of marriages.

Studies of gender inequality in academia largely ignore disciplines in which women predominate; researchers have concentrated on science and engineering fields in which women are grossly underrepresented (Long, 2001). Yet significant gender inequality exists in fields in which women are the majority of students, Ph.D. recipients, and practitioners. Women have earned 65.5% of all U.S. doctorates in art history since 1969 (Survey of Earned Doctorates, n.d.) but in 1999 accounted for only 42.4% of tenured or tenure track art history faculty (U.S. Department of Education, n.d.). Using career path data from a national sample of 508 art historians with Ph.D.s awarded by U.S. universities between 1985 and 1991, this study shows that male advantage is not confined to traditionally masculine fields and contributes to understanding the association of marriage with academic careers by investigating spouse characteristics in relation to tenure attainment.

The analysis evaluates hypotheses drawn from three perspectives on marriage and academic careers, termed here clockwork, two-body, and synergy. The clockwork perspective, named after Hochschild’s (1975) essay “Inside the Clockwork of Male Careers,” views marriage as having different impacts on careers of men and women. Alternatively, marriage is seen as...
having essentially the same influences on men’s and women’s careers, whereby there are two opposing views: the two-body and the synergy perspectives. The clockwork perspective views the academic career as “founded on some peculiar assumptions about the relation between doing work . . . minimizing family life and leaving it to your wife.” (Hochschild, p. 49). Because men and women “do gender,” or act to fulfill cultural models of femininity and masculinity (West & Zimmerman, 1987), wives support the careers of husbands, and women’s family roles interfere with a career. But supporting a wife’s career does not enhance masculinity, and men’s family roles do not hinder careers. Notably, in Hochschild’s framework, the implied role complementarity between spouses is not assumed to maximize efficiency and utility as is the case in the home economics approach (Becker, 1981); instead the clockwork perspective posits marriage as structured by the enactment of strategies for fulfilling cultural models of masculinity and femininity (Brines, 1994).

All else equal, Hochschild hypothesized, among men the academic system rewards most highly those with a stay-at-home or part-time working wife. Supporting this view, Bellas (1992) found that, among male professors, when controlling for factors such as experience, field, and institution type, men with nonemployed wives earned more than men whose wives worked full time. Unmarried men earned less, published less, and held lower rank. Among women, other studies have found, the married are more likely to hold nontenure track or part-time positions, but the reverse is true for men. In addition, more successful women have fewer children than comparable men and than less successful women (Kulis & Sicotte, 2002; Mason & Goulden, 2004; Perna, 2001).

The assumption that marriage interferes with women’s academic careers because of women’s greater burden of domestic work is undermined by inconsistent findings on the effect of children. Mason and Goulden (2004) reported that married women who had children under 6 within 5 years of earning their Ph.D. were less likely to begin a tenure track position than comparable men, but once in a tenure track position, a woman’s tenure chances were not lessened by marriage or motherhood. Similarly, Kulis and Sicotte (2002) found that among science and engineering faculty, dependent children were associated with higher likelihood of tenure for both men and women. In a sample of junior faculty, Perna (2001) reported that parenthood was associated with a lower likelihood of holding a nontenure track job. Ginther and Hays (2003) found that having young children was not related to women’s tenure likelihood in a sample of humanities faculty, but had a negative effect for men.

The two-body explanation for women’s lower tenure rates focuses on the difficulty of coordinating two professional careers in labor markets that demand geographic mobility. Because a spouse’s career may limit the geographic mobility often required to pursue a faculty career (Kulis & Sicotte, 2002), those partnered with a professional or academic spouse may be less competitive in the academic labor market. Although two-career families place constraints on both partners, this “marital condition [is] more common among professional women than professional men” (Marwell, Rosenfeld, & Spilerman, 1979, p. 1226). Unequal career outcomes by gender, then, emanate from the fact that married or partnered female Ph.D.s are more likely than male peers to have partners who are highly educated and with relatively earlier career initiation. Female Ph.D. recipients are much more likely to have partners with professional or other graduate degrees, faculty women are more likely to be married to another academic (Astin & Milem, 1997; Finkelstein, 1984; Fox, 2005), and women more often indicate a spouse’s career as a major reason for moves or job changes, which, in turn, are associated with decreased tenure odds (Ginther & Hays, 2003; McElrath, 1992; Perna, 2001; Rosenfeld & Jones, 1987).

In contrast to the clockwork perspective, which sees doing gender as part of the explanation for women’s lower tenure rates, the two-body explanation posits that high spousal career commitment handicaps men and women similarly. Because highly educated men and women have different types of spouses on average, however, it is difficult to distinguish empirically between the clockwork and two-body perspectives. Even if women were always the trailing spouse in two-career marriages in earlier times, things could be changing. Although institutional practices such as antinepotism regulations disadvantaged women in the era before the Civil Rights Act (Rossiter, 1995), these powerful barriers to women weakened (Kulis & Sicotte, 2002; Rosenfeld & Jones, 1987). Moreover, educational homogamy appears to be increasing (Schwartz & Mare, 2005).
In the synergy perspective, marriage in general, and especially marriage to another academic, should increase tenure odds. A spouse may offer useful access to social networks, group memberships, and informal information flows (Bellas, 1997), as well as cultural capital (Bourdieu, 1986). The finding that married women in science are more productive than unmarried women has been seen as partly a result of access to a male partner’s informal and collegial networks, which are critical resources for productivity (Astin & Milem, 1997; Finkelstein, 1984; Fox, 2005; Simon, Clark, & Galway, 1967). Academic spouses could enhance each other’s careers through exchange of ideas, critical response to work at early stages, discussion of career strategies, and so on.

A positive association between marriage and productivity, and marriage and tenure, among male faculty has been confirmed repeatedly (Bellas, 1992, 1997; Long, Allison, & McGinnis, 1993). It has also been shown—even in the pre-affirmative-action period when women faced particularly high institutional constraints—that married women performed better than single women in academia by a variety of measures (Finkelstein, 1984; Long et al.; Morlock, 1973; Simon et al., 1967). More recent studies have also found that married women faculty publish more than unmarried peers (Astin & Milem, 1997; Bellas & Toutkoushian, 1999; Fox, 2005).

**HYPOTHESES**

The clockwork perspective suggests an interaction between marriage and gender such that being married at Ph.D. should be associated with decreased tenure odds for women but increased odds for men. Because conventional family roles and the associated dynamics of doing gender should tend to override any differences between types of spouses, a logistic regression model with an interaction term of gender and marriage will predict tenure outcomes better than a simpler, additive model. Further, children should be an added hindrance to women’s careers, but should have no effect or a positive effect on men’s careers.

The two-body perspective suggests that, when controlling for relevant spousal characteristics, a logistic regression model predicting tenure outcomes will find the direction of effects of marriage to be the same, and the size of effects similar, for men and women. On average, however, men and women have different types of spouses: Because women’s partners are more highly educated and more often work full time, it is difficult to distinguish clockwork and two-body effects empirically. By controlling for spouse characteristics statistically, multivariate analysis can help discern whether a two-body mechanism that affects men and women similarly contributes to women’s lower tenure rates. The presence of such a mechanism would be indicated by finding that marriage to a highly educated and full-time working spouse decreases tenure odds for both men and women. An alternative synergy perspective views marriage to a spouse with social and cultural capital useful in academic careers as potentially increasing tenure odds for both men and women.

The following hypotheses are derived from the three perspectives: **Clockwork:** (a) Married male Ph.D. recipients have higher odds of becoming tenured faculty than unmarried male Ph.D. recipients, (b) married female Ph.D. recipients have lower odds of becoming tenured faculty than unmarried female Ph.D. recipients, and (c) female Ph.D. recipients with children have lower odds of becoming tenured faculty than female Ph.D. recipients without children. **Two-body:** All Ph.D. recipients (regardless of gender) with a career spouse have lower odds of becoming tenured faculty than those who do not have a career spouse. **Synergy:** As the educational level of a spouse increases, the odds of becoming tenured faculty increase for all Ph.D. recipients (regardless of gender).

**CONTROL VARIABLES AND CASES USED**

Variables central in debates about the influence of graduate school performance on post-Ph.D. careers are controlled for, including years spent in graduate study (time to degree), prestige of the Ph.D.-granting department, productivity during graduate school, and age at Ph.D. award (Nerad, 2004). Years between Ph.D. award and survey completion are controlled for because the sample includes people who earned their Ph.D.s from 1985 to 1991. Having a parent with a Ph.D. is controlled for because this indicates the cultural capital (Bourdieu, 1986) most likely to be convertible into a tenured position. The cultural capital acquired at home is the “best hidden and socially most determinant educational investment” (p. 244) and parents’ education influences occupational attainment. The interaction of
gender and a Ph.D. parent is tested because “female faculty defy the law of the positive influence of social class on academic careers” (Finkelstein, 1984, p. 236).

Family aspirations are also relevant. Some argue that more family-oriented women opt out of faculty careers, thus causing women’s lower tenure rates. Yet this approach assumes that women are either work or family oriented (Gerson, 1985) and there is no association between motherhood and tenure odds in the multivariate analysis here. Instead, this analysis investigates how different types of marriages are associated with tenure odds and how this differs for men and women.

Everyone in the sample is considered to be at risk of tenure. Those who indicated a nonacademic career goal are not excluded; instead, the analysis controls for differences in career goals. The analysis is not restricted to those who ever held a tenure track job. Rather than ask whether women are as successful as men in achieving tenure after beginning a tenure track position, we ask whether men and women with doctorates have a similar likelihood of obtaining tenure and how marriage affects this likelihood.

**METHOD**

**Data**

*PhDs in Art History—Over a Decade Later* is a national career path study fielded in 2001 that asked art history Ph.D. recipients from academic years 1985 to 1991 to retrospectively evaluate their graduate training and reconstruct family histories and career experiences. The types of information in this survey can be recalled retrospectively with reasonable consistency (Dex, 1995). The Survey of Earned Doctorates identifies a population of 746 potential respondents. Of these 746 individuals, 508 (68%) responded (Sadrozinski, Nerad, Cerny, & La, 2003).

The data set is unique in that it includes information about graduate school achievement and spouse characteristics of doctorate holders at the time of the critical transition to professional employment and data on employment outcomes 10 to 14 years later. It provides a unique opportunity to test theories about how spouse characteristics lead to differences in academic careers. Although it is common to group disciplines for analysis into broad fields such as the humanities and social sciences, doing so lumps together male-dominated disciplines such as philosophy and economics with female-dominated ones such as art history and psychology. The art history survey provides a sample from one discipline that is large enough to analyze statistically, allowing examination of gender inequality in a discipline in which women earn most of the Ph.D.s.

**Measures of Dependent and Independent Variables**

The dependent variable is ever getting academic tenure versus never having gotten tenure at the time of the survey, which was 10 or more years after earning the Ph.D. The focal independent variables are marital status, spouse characteristics—including employment status and educational attainment—and presence of minor children in the household at the time the Ph.D. was earned. Table 1 shows definitions for each of the focal independent variables and the control variables.

Respondents who were involved in a committed partnership were included with the ever married, as were the small number who were divorced, separated, or widowed. Alternative specifications were analyzed in modeling: The previously married were treated, first, as an independent group and, second, were grouped with the singles. Empirically the previously married behaved like the married with regard to the focal relationships under investigation.

**Missing Values**

Thirteen cases (2.5%) were dropped because of missing information on the dependent variable. For the remaining cases, multiple imputation with chained equations is used in the multivariate analyses to preserve cases that otherwise would have been eliminated because of missing values (Acock, 2005; Royston, 2004). Estimates aggregate information from 10 imputations. Prior to imputation, approximately 3 out of 4 cases had full information on all variables. About 10% of cases were missing values on three or more independent variables.

**RESULTS**

Table 2 displays univariate distributions of the study variables by gender. Among male doctoral recipients in art history, 71% achieve tenure,
compared to 44% percent of women. This difference is substantial and significant.

Female and male art historians differ in ways that may influence tenure odds. Women have nonacademic career goals more often; women, on average, come from less prestigious doctoral programs, publish less, take longer to complete, and are older when the Ph.D. is awarded. These differences are statistically significant, but as will be shown below, do not explain gender disparity in achievement of tenure.

Turning to the focal variables of marriage and family status, men are more likely to be never married at the time of their Ph.D. (though few of either gender fall into this category), less likely to be married to a full-time working spouse, and more likely to be married to a spouse not working full time. Men and women have similar rates of marriage to another Ph.D. holder and having a minor child in the household. Overall, family status is more similar for men and women among these art historians than is typical among Ph.D. recipients (Long, 2001).

Results of Multivariate Analyses

Hypotheses associated with the clockwork, twobody, and synergy perspectives on marriage and careers are empirically examined with four logistic regression models that predict the likelihood of tenure; results are displayed in Table 3. Model 1 tests whether the effects of marriage and parental status on tenure outcomes differ significantly by gender. Model 2 adds measures of spouse employment status and educational attainment. Model 2 is then estimated separately for women (Model 3) and men (Model 4) to examine gender differences in the relationships of marital, graduate school, and background factors with academic tenure.

Model 1 shows that the effect of marriage on the odds of tenure are very different for men and women. The interaction term for single and female is very large (3.81) and statistically significant (p < .05). The estimation of this interaction effect is even larger in Model 2, where spouse characteristics are controlled, suggesting that gender differences in the effects of marriage do not result from differences in marriage partners. As can be seen in Model 3 (women only), never-married women have much higher odds of tenure compared to those with full-time working spouses, whereas for men the opposite is true (as seen in Model 4). This pattern fits the expectations of the clockwork perspective.

The analysis, however, finds no gender differences in the effect of parental status on tenure.
odds, as shown by the lack of an interaction effect in Model 1. Parental status also has no first order effect on the odds of tenure (whether or not a Gender \times Parental Status interaction is included). In Models 3 and 4, the insignificant point estimate for effect of parental status on tenure odds is weaker for women than men. This finding is robust to alternative specifications of parental status (e.g., varying the age of the child in the household). Moreover, Model 1 stays substantively the same when terms for children at Ph.D. and the interaction of Children at Ph.D. \times Gender are removed. Thus, the analysis provides some support for the clockwork perspective, which posits that both marriage and parenthood have different effects on the careers of men and women. For this sample, only the effect of marriage differs by gender.

Spouse’s employment has a strong effect on tenure odds. Model 2 shows that among people married at the time of Ph.D. award, those whose spouses were not working full time are more than 3 times as likely to obtain tenure as those with full-time working spouses (the reference category). The effect exists for both men and women, but is much stronger for men (see Models 3 and 4). Because a spouse working full time is associated with decreased tenure odds among married women and married men, this pattern partly fits the expectations of the two-body perspective. Men gain more than women do, however, by having a partner with low career engagement.

The point estimates of the effect of having a spouse with a Ph.D. are not statistically significant, but they are intriguing. For this sample, the model estimates that art historians with a Ph.D. spouse have 82% better odds of obtaining tenure than those with a less-educated full-time working spouse. The point estimate is larger for men than women (see Models 3 and 4). The failure of these effects to achieve significance is partly a consequence of the small proportion (16%) of respondents married to a Ph.D. spouse at the time their Ph.D. was awarded. Thus, the analysis offers weak support for the synergy perspective, which suggests that marriage to a spouse with relevant social and cultural capital should increase tenure odds for both men and women.

Another way to visualize the findings vis-à-vis the motivating hypotheses is to compare the

<table>
<thead>
<tr>
<th></th>
<th>Women (n = 348)</th>
<th>Men (n = 147)</th>
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<tr>
<td></td>
<td>M (SD)</td>
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<tr>
<td>Ever tenured</td>
<td>0.44 (0.50)</td>
<td>0</td>
</tr>
<tr>
<td>Never married</td>
<td>0.25 (0.43)</td>
<td>57</td>
</tr>
<tr>
<td>Spouse not full time</td>
<td>0.18 (0.38)</td>
<td>57</td>
</tr>
<tr>
<td>Spouse full time</td>
<td>0.41 (0.49)</td>
<td>57</td>
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<tr>
<td>Spouse Ph.D.</td>
<td>0.16 (0.37)</td>
<td>57</td>
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<tr>
<td>Children at Ph.D.</td>
<td>0.22 (0.41)</td>
<td>11</td>
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<tr>
<td>Nonacademic career goal</td>
<td>0.27 (0.44)</td>
<td>35</td>
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<tr>
<td>Ph.D. dept. rank</td>
<td>25.13 (11.83)</td>
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<tr>
<td>Book publication</td>
<td>0.32 (0.85)</td>
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<td>Article publication</td>
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<tr>
<td>Time to degree (years)</td>
<td>2.46 (0.36)</td>
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<tr>
<td>Age at Ph.D. (years)</td>
<td>37.64 (6.88)</td>
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<tr>
<td>Ph.D. parent</td>
<td>0.24 (0.43)</td>
<td>0</td>
</tr>
<tr>
<td>Years out from Ph.D. at Survey</td>
<td>13.05 (1.74)</td>
<td>56</td>
</tr>
</tbody>
</table>

Note: Significance levels from \( \chi^2 \) tests for dichotomous variables and \( t \) tests for interval level variables.

\*p < .05. **p < .01.
predicted probabilities of obtaining tenure for men and women by marital status and spouse characteristics, measured at the time of the Ph.D. Table 4 displays the probabilities of obtaining tenure predicted by Model 2, that is, when controlling for presence of children at Ph.D., graduate school goals and performance, age at Ph.D., and having a Ph.D. parent.

Among women, those married to someone not working full time when the respondent earned her doctorate have a 59% probability of obtaining tenure, the highest probability achieved among the women. With a 52% chance of obtaining tenure, single women are not statistically different. Women who were single at the time of the Ph.D., however, are statistically much more likely to obtain academic tenure than women with full-time working partners, who have only a 32% probability of obtaining tenure, much lower than each of the other marriage by gender classifications. Table 4, then, shows that not all marriages, but only certain kinds of marriages are associated with decreased tenure odds for women.

Single men’s 55% chance of obtaining tenure is not significantly different from single women’s 52% probability, but it is the lowest probability among the men. Irrespective of spouse’s employment status, married men have significantly higher chances of obtaining tenure than single men. Yet there are significant differences among the married men. Most dramatically, having a partner who works less than full time or is out of the labor force at the time a man earns his Ph.D. is associated with an 88% chance of tenure, but men married to women who work full time have a significantly lower chance of 70%. Thus, Table 4 shows that marriage in general improves men’s tenure chances, and that some types of marriages dramatically increase men’s tenure chances.

The pattern in Table 4 also suggests that men’s careers, like women’s, may be constrained by a two-career marriage. Among married men,
those with full-time working partners have lower tenure chances, which suggests that a spouse’s greater career engagement works against the positive effect of marriage on men’s tenure odds. Similarly, the fact that women with part-time or not working spouses have tenure chances equivalent to (or greater than) those of single women suggests that it is easier for married women to pursue a faculty career when their partners are less engaged, or less well established, in their own careers. The less-than-full-time employment status of a woman’s spouse neutralizes the negative influence of marriage on her tenure odds. These findings are consistent with the two-body thesis that married women’s lower tenure odds are partly a result of factors that would constrain both men and women in dual-career marriages.

As noted, the findings with regard to the effect of Ph.D. spouse on tenure odds are merely suggestive. Table 4 shows that for both men and women the predicted probabilities of obtaining tenure are higher for those with a Ph.D. spouse than for those with a full-time working non-Ph.D. spouse. These differences are not statistically significant.

**Summary of Results**

The clockwork perspective receives the most overall support, but with modifications. Single men and women have equivalent tenure odds, and marriage interacts with gender such that marriage increases men’s, but decreases women’s, odds of tenure. Results also suggest that the influence of marriage on women’s careers is more important than children. In favor of the two-body perspective, the probabilities predicted on the basis of Model 2 (see Table 4) show that among married men, a full-time working spouse decreases tenure odds, and among women, marriage does not decrease tenure odds if the spouse does not work full time at the time of Ph.D. award. Among the married in this sample, although not significant, a spouse’s Ph.D. is associated with increased tenure odds for both men and women, a finding that supports the synergy perspective. The associations between gender, marriage, and tenure odds are found when controlling for career goals, graduate school performance, and family background. Large gender differences in tenure odds remain after marriage and gender by marriage interactions are controlled, as do gender differences in the effect on tenure odds of graduate school performance and class background.
et al., 1967) and higher rank achievement among faculty women with academic spouses (Astin & Milem, 1997). Future research might test the synergy perspective with better measures of spouse’s social and cultural capital.

In light of findings that offer support for each alternative, one way to reconcile the competing perspectives is to posit different types of marriages with different effects on women’s careers in general and, in particular, on tenure odds. Given that “contemporary gender relations ... enable diverse family and work forms” (Montgomery, 2008), scholarship might fruitfully follow the example of this study and others (e.g., Astin & Milem, 1997; Fox, 2005) by distinguishing different types of marriage.

Despite controlling for career goals, graduate school performance, and family background, in this study a sizable male tenure advantage remains. Further, models estimated separately for men and women find that, even when controlling for marriage and parenthood, among women, publication productivity increases tenure odds, but among men, career goal and cultural capital from the family of origin mainly determine tenure odds. These differences are particularly intriguing in a female-dominated discipline and suggest the investigation of the effect of discipline-level gender ratios on gender differences in Ph.D. career processes (e.g., Aanerud et al., 2007).

This study’s findings about spouse characteristics and the gendering of Ph.D. careers are especially relevant at a time when marriage patterns and labor markets for Ph.D.s are both changing. We know that family patterns and career structures intersect to produce gender inequality. Further, the normative faculty career is structured by rigid expectations about timing and sequence, which often conflict with timing of family commitments (Jacobs & Winslow, 2004). The proportion of tenure track faculty careers within the overall labor market for Ph.D.s is being reduced, however, as nontenure track teaching and research positions increase (Glazer-Raymo, 1999) and interest in nonacademic careers for Ph.D.s intensifies (Trzyna, Nerad, & Hegelund, in press). There are also policy initiatives for adjusting graduate education and tenure track faculty careers to accommodate family roles (Jaschik, 2007). In this context, this study is instructive: Evaluations of the contributions of work and family intersections to gender inequality in emerging Ph.D. labor markets require attention not only to the role of marital status but also of spouse characteristics, such as educational attainment and employment status, in the careers of both male and female doctorate holders.

This analysis is limited by its small sample that is drawn from just one discipline and one specific time period. Further, it predicts tenure odds on a static conception of marriage, using spouse characteristics when the Ph.D. was awarded. The data capture a critical transition period, but do not otherwise observe the influence of timing of different types of marriage. The ambiguity of the meaning of tenure odds for gender equality should also be considered. If the career goal of becoming a professor is systematically related to the independent variables, including gender, then findings might simply reflect female art historians’ avoidance of faculty careers. For reasons detailed above, this sample includes respondents who did not indicate the career goal of becoming a professor, and it is not restricted to those who ever held a tenure track position; the statistical models control for career aspirations. Thus, it demonstrates associations between gender, marital status and spouse characteristics, and tenure odds, but does not reveal how career aspirations develop that might contribute to gender inequality in tenure odds. To do so, future research could examine the sequencing of marriage and family variables in relation to career development beginning with graduate school.

To our knowledge, this is the only study that examines the effect of different types of marriages, defined in relation to theoretical constructs in the literature, on women’s tenure chances. It confirms that marriage enhances men’s and decreases women’s tenure odds, but also finds something new: Not all marriages decrease women’s tenure odds, and some marriages increase men’s much more than others. Among the married, both men and women have higher tenure odds if their spouse was not working full time when the Ph.D. was awarded. These findings demonstrate the need to look more closely at how different types of marriages shape men’s and women’s careers.

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REFERENCES


