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Pathways to Educational Homogamy in Marital and Cohabiting Unions

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ABSTRACT

Cohabitors tend to be less homogamous than married couples with respect to ascribed characteristics such as race/ethnicity, religion, and age, and more homogamous than married couples with respect to achieved characteristics such as earnings and employment. But there is considerable theoretical and empirical disagreement about differences in educational homogamy by union type. I use data from the National Longitudinal Survey of Youth (NLSY79) and the June Current Population Survey (CPS) to illustrate how estimates of educational homogamy vary depending on the sample used and the point in couples' relationships when homogamy is measured. I find that cohabitors are less likely to be educationally homogamous than married couples overall, but these differences are not apparent when cohabiting and marital unions begin. Instead, the results suggest that differences in educational homogamy by union type are driven by selective exits from marriage and cohabitation rather than by differences in partner choice. Marriages that cross educational boundaries are particularly likely to end. These findings suggest that cohabitors' greater emphasis on egalitarianism and economic equality do not translate into greater educational homogamy, and that education behaves more like an ascribed characteristic than an achieved characteristic with respect to differences in couple resemblance by union type.

INTRODUCTION

The dramatic increase of cohabitation in the United States has inspired much interest in what cohabitation "is" and where it fits into the American family system (Smock 2000). Many studies have attempted to better understand the nature of cohabitation by comparing cohabitors and married couples on characteristics such as gender role attitudes, differences in time spent on housework and paid work, and fertility behavior (e.g., Clarkberg, Stolzenberg, and Waite 1995; Raley 2001; South and Spitze 1994). Still another way to illuminate differences is to examine differences in partner choice. If cohabitation and marriage have different institutional characteristics, then people may choose their partners differently depending on the type of relationship sought (Schoen and Weinick 1993).

Because cohabitation in the United States lacks the norms, expectations, and long-term commitment of marriage, cohabitors may be more likely to live with partners that they are less sure about, that they do not intend to marry, or those for which there are normative pressures against marrying, e.g., persons of a different race/ethnicity, religion, or age or those with poor earnings potential (e.g., Blackwell and Lichter 2000, 2004; Schoen and Weinick 1993; Seltzer 2004). In other words, cohabiting couples may be less alike, or less apt to be *homogamous*, than married couples. At the same time, because cohabitation lacks the legal protections of marriage, cohabitors may also be less likely to specialize economically than married couples (Brines and Joyner 1999; Schoen and Weinick 1993). Empirical research is consistent with both claims—cohabitors tend to resemble one another less than married couples on ascribed characteristics such as race/ethnicity, religion, and age (Blackwell and Lichter 2000, 2004; Jepsen and Jepsen 2002; Joyner and Kao 2005; Schoen and Weinick 1993), whereas they tend to be more alike on

achieved characteristics such as earnings and employment (Casper and Bianchi 2002; Brines and Joyner 1999).

Although theory and evidence are consistent with respect to differences in couple resemblance on many characteristics, there is considerable disagreement with respect to education. Hypotheses drawing on economic theory, which emphasize the gains to specialization in marriage, suggest that cohabitors will be more educationally homogamous than married couples (e.g., Brines and Joyner 1999; Schoen and Weinick 1993), but hypotheses emphasizing the strength of educational homogamy in marriage predict that cohabitors will be less educationally homogamous than married couples (e.g., Blackwell and Lichter 2000, 2004). Empirical evidence also varies widely. Using data from the late 1980s and early 1990s, one study found that cohabiting couples are more educationally homogamous than married couples (Schoen and Weinick 1993), whereas another found the opposite (Blackwell and Lichter 2000), and still others have found no difference (Jepsen and Jepsen 2002; Qian 1998), or that the results vary by educational level (Blackwell and Lichter 2004).

Reconciling these findings is of interest to family demographers and stratification researchers alike. For family demographers, reconciling these findings helps adjudicate between competing hypotheses about differences in couple resemblance between cohabitors and married couples. For stratification researchers, educational homogamy has long been of interest as a measure of the social distance between groups and because of the potential implications of assortative mating for inequality between families and across generations (e.g., Mare 1991; Schwartz and Mare 2005; Smits, Ultee, and Lammers 1998). Despite the increasing prevalence and acceptability of cohabitation, however, few studies of trends in educational assortative mating have included cohabitors (but see Qian 1998; Qian and Preston 1993). In so doing, these

studies neglect a potentially important stage in the mate selection process, especially if cohabitation affects who marries whom. Studies of trends in the educational resemblance of spouses have generally found an increase in the association since the 1960s (e.g., Kalmijn 1991; Qian and Preston 1993; Schwartz and Mare 2005). Increases in cohabitation may explain part of this trend if cohabitation functions as a trial marriage that "weeds out" educationally dissimilar couples before marriage (Blackwell and Lichter 2000, 2004).

The first step toward answering these complex questions is to begin to untangle the sources of the discrepancies in past research and to develop a better understanding of the mechanisms that produce differences in the educational resemblance of cohabiting and marital unions. Previous literature has often compared the educational resemblance of cohabitors and married couples using cross-sectional data (e.g., Blackwell and Lichter 2000; Jepsen and Jepsen 2002; Qian 1998; Schoen and Weinick 1993), but these data do not allow researchers to identify the mechanisms through which differences in couple resemblance arise. In this paper, I use log-linear models and data from the National Longitudinal Survey of Youth (NLYS79) and the June Current Population Survey (CPS) to examine how educational homogamy varies as couples move into and out of cohabitation and marriage. I adopt a "stock and flow" framework to examine (1) the basic question of whether the "stock" of all married couples or cohabitors is more likely to be homogamous, and (2) which transitions, or "flows", are responsible for these differences. Using this framework, I show how some of the disparate findings of past research are, in fact, coherent pieces of a larger process of assortative entry and exits from unions. In so doing, this study generates new insights into differences in couple resemblance among cohabitors and married couples.

THEORY AND PERSPECTIVES

There are compelling reasons to expect that cohabitors will either be more or less educationally homogamous than married couples. Economic theory suggests that cohabitors may be more educationally homogamous than married couples (Brines and Joyner 1999; Schoen and Weinick 1993). Becker (1973, 1981) argued that couples maximize the gains to marriage by specializing in realms in which they have a comparative advantage. According to Becker, biology and socialization give women a comparative advantage in housework and childbearing and men the advantage in the labor market. Because cohabitation lacks the long-term commitment of marriage, male and female cohabitors may be less likely to specialize economically than married couples. Instead, both partners are likely to contribute economically to the relationship and thus both may emphasize achieved characteristics in partner selection, such as earnings potential and education. According to this hypothesis, then, those entering cohabiting unions should be more likely to choose partners who share their educational background than those entering marriage (Schoen and Weinick 1993).

Extending this perspective, Brines and Joyner (1999) have argued that different principles of cohesion bind cohabitors and married couples. Cohabitors tend to be more egalitarian, individualistic, and less religious than married couples (Clarkberg, Stolzenberg, and Waite 1995; Surkyn and Lesthaeghe 2004). Brines and Joyner (1999) hypothesize that the lack of institutional and legal protections in cohabitation fosters relationships based on "equal power" rather than on specialization. Indeed, they found that cohabitors with more similar earnings were *less* likely to split up whereas married couples with more similar earnings were *more* likely to split up (Brines and Joyner 1999; also see Kalmijn, Loeve, and Manting 2007). To the extent that education also confers power to individuals in relationships, this hypothesis suggests that those entering

cohabiting unions will be more likely to choose and remain with educationally similar partners than those transitioning to marriage.

By contrast to hypotheses grounded in economic theory, scholars who emphasize that educational homogamy is the statistical if not the cultural norm in marriage have argued that cohabitors will be less educationally homogamous than married couples (Blackwell and Lichter 2000, 2004). This may arise through a variety of mechanisms. Perhaps the most common hypothesis is that cohabitation functions as a "trial marriage" that provides an additional selection venue to gain knowledge about and screen potential mates. Blackwell and Lichter (2004) coined this the "winnowing" hypothesis, but it is found elsewhere in the literature as well (e.g., Blackwell and Lichter 2000; Gwartney-Gibbs 1986; Sahib and Gu 2002). According to the winnowing hypothesis, as couples move from dating to cohabitation to marriage, the "bad matches" (in this case, the dissimilar couples) split up and the educationally homogamous couples marry. Alternatively, couples in relationships that cross educational lines may choose to cohabit because of social pressures from their families or friends against marriage (Casper and Bianchi 2002). In either case, as couples move up the "commitment continuum" these hypotheses imply that they will become increasingly homogamous on education.

A final possibility is that there may be no difference in educational homogamy between cohabitors and married couples. Education is multi-faceted, signaling economic potential as well as differences in life styles, values, and beliefs. Cohabitors may be more likely to emphasize equal earnings power and educational attainment in their selection of partners, but may also be more tolerant of educational differences in their mates (Seltzer 2004). These countervailing factors may result in no difference in educational resemblance by union type. Another possibility is that educational dissimilarity may not be highly non-normative or may be similarly non-

normative for both cohabitors and married couples. Sorting may take place before couples' entry into cohabitation or marriage (Blackwell and Lichter 2004), or differences may be simply a reflection of the availability of mates on the marriage/partner market. Finally, some of the hypotheses discussed above focus on differences in partner choice (e.g., Schoen and Weinick 1993), whereas others focus on the selective dissolution of cohabiting relationships (e.g., Blackwell and Lichter 2000, 2004). It is possible that partner choice and selective dissolution work in different and potentially offsetting ways. The stock and flow perspective adopted here allows for the investigation of multiple pathways that may affect the resemblance of couples.

PATHWAYS TO EDUCATIONAL HOMOGAMY

A potential explanation for the contradictory findings in previous research is that past studies have examined very different samples of cohabitors and married couples at very different points in their relationship trajectories. Many previous studies have relied on various samples of cross-sectional of data (e.g., Blackwell and Lichter 2000; Jepsen and Jepsen 2002; Spanier 1983). Because these data do not contain information on transitions into and out of unions, however, they cannot identify the mechanisms through which differences in resemblance are generated. There is a growing body of literature on homogamy and transitions into and out of cohabitation and marriage (Blackwell and Lichter 2004; Goldstein and Harknett 2006; Sassler and McNally 2003), but no study has systematically examined how theses transitions work together to affect overall differences in educational resemblance by union type.

Figure 1 outlines the different flows into and out of cohabitation and marriage that may affect educational resemblance in the stock of cohabiting and marital unions (Boxes A and B). Most studies of the stock of cohabiting and marital unions have found that cohabitors are less

likely to resemble one another on education than are married couples (Blackwell and Lichter 2000; Casper and Bianchi 2002; Spanier 1983; but see Jepsen and Jepsen 2002), but these differences may arise in several ways. First, cohabitors may be less likely to be homogamous than married couples when they begin their unions (transition 1 and transitions 3+4). However, the evidence for this hypothesis is mixed. Some scholars have found that recently formed cohabiting unions are more educational similar than new marriages (Schoen and Weinick 1993) whereas others have found the reverse pattern (Qian 1998).

Second, differences in educational homogamy by union type may be generated by selective exits from cohabitation. According to the winnowing hypothesis, marriages are more educationally homogamous than cohabiting unions in part because homogamous cohabitors are more likely to proceed to marriage (transition 3), whereas dissimilar cohabitors are more likely to split up (transition 2). Empirical evidence, however, also casts doubt on the winnowing hypothesis. Of the studies that have examined the joint education characteristics of cohabitors, one found that only cohabiting couples with large educational differences are more likely to separate than marry (Smock and Manning 1997), while three others found no significant effect of educational differences on the likelihood of splitting up or marrying (Goldstein and Harknett 2006; Oppenheimer 2003; Sassler and McNally 2003). Alternatively, it may be that differences in the odds of homogamy between married couples who do not cohabit with their spouses prior to marriage (transition 4) and those who do (transition 3) play an important role in explaining differences in the odds of homogamy in the stock of unions.

Finally, differences in educational homogamy by union type may be generated by selective exits from marriage (transition 5). Heterogamous couples have a higher likelihood of marital dissolution than homogamous couples, which would tend to increase the odds of

homogamy of marriages as dissimilar couples leave the stock of marriages (Goldstein and Harknett 2006; Kalmijn 1991). In sum, previous literature suggests that married couples are more likely to be educationally homogamous than cohabiting couples, but whether this is the result of differences in partner choice or selective exits from unions remains unclear. [1]

This paper brings data from the NLSY79 to bear on the basic question of whether cohabiting or marital unions are more likely to be educationally homogamous. Next, I examine the odds of homogamy among couples making transitions into and out of marriage and cohabitation to determine the likely sources of differences in the stock of unions. In addition, because some previous studies have examined patterns of assortative mating in prevailing unions controlling for differences in their age distributions (Goldstein and Harknett 2006; Qian 1998; Schoen and Weinick 1993) whereas others have not (Blackwell and Lichter 2000, 2004), I examine the effects of controlling for differences in age by union type throughout.

DATA

Overview

I use data from the National Longitudinal Survey of Youth (NLSY79) to examine differences in educational homogamy by union type and corroborate my results with the June Current Population Survey (CPS) where possible. The NLSY79 is a nationally representative sample of 12,686 American youth aged 14 to 21 as of December 31, 1978. Sample members in this cohort

[1] I focus on the five transitions in Figure 1, but educational upgrading after union formation may also contribute to differences in couple resemblance. Sensitivity tests assuming that partners maintain the same education throughout their relationships show that the results presented here are robust to educational upgrades after union formation.

were interviewed yearly beginning in 1979 through 1994 and then every other year since then. This paper focuses on interviews from 1979 to 2002.

The NLSY79 consists of three subsamples: a cross-sectional sample designed to be representative of American youth aged 14-21 as of December 31, 1978, an oversample of Hispanic, black, and poor non-black, non-Hispanic youths, and a military oversample. I exclude the poor non-black, non-Hispanic subsample and the military subsample from the analysis because they were not interviewed after 1990 and 1985, respectively, and thus their marital histories are truncated. There are 9,763 respondents in the cross-sectional sample and the black and Hispanic oversamples. Throughout the analysis, I weight the data using the 1979 sample weights to correct for oversampling and non-response.

Advantages and Limitations of the NLSY79

The NLSY79 contains rich information on respondent's cohabitation and marital histories as well as spouse's and partner's educational characteristics throughout the interview period. Moreover, the NLSY79 contains identifier variables for partners and spouses based on the names of partners and spouses, which makes it possible to follow couples through multiple cohabitation and marital transitions over more than 20 years, even for respondents who otherwise appear to have cohabited or remained married continuously but have changed partners between interviews. Other commonly used data sets with rich cohabitation and marriage histories are either not nationally representative, gather retrospective relationship histories, or have a shorter follow-up period. Furthermore, the NLSY79 cohabitation data has been found to correspond well to data from other sources (Haurin 1994; Oppenheimer 2003).

A disadvantage of the NLSY79 is that marriages and cohabiting unions that begin and end between interview years are missed because data on spouse's and partner's education and on respondent's cohabitation status are only consistently available at the time of the interview. Although short-term cohabiting and marital unions are present in the data if they correspond with the survey date, they will be underrepresented relative to cohabitations and marriages of longer duration. This problem is likely to be more severe for cohabiting than marital unions as they are typically of shorter duration. I investigate the extent to which the NLSY79 underestimates the prevalence of cohabiting unions relative to other data sources with more detailed cohabitation histories below and test the sensitivity of my results to their exclusion where possible.

Sample Selection and Measurement

NLSY79. To estimate differences in educational homogamy in the stock of unions by union type, I select a sample of marriages and cohabiting unions in which both partners are between 18 and 37 years of age at the time of the interview.[2] I examine all cohabiting and marital unions regardless of their parity for comparability with previous research (e.g., Blackwell and Lichter 2000; Jepsen and Jepsen 2002). The units of observation are couple-years, with one observation

[2] Restricting the sample to cases in which both partners are between 18 and 37 years of age effectively doubles my sample size and allows me to pool the female-respondent and male-respondent samples. Thus, this sample is representative of couples in which one partner was between the ages of 14 and 22 in 1979 and in which both partners are between the ages of 18 and 37 between 1979 and 2002. Restricting the age of both partners to between the ages of 18 and 37 increases the odds of homogamy among the oldest and youngest couples somewhat, but does not affect the interpretation of the results.

per interview year that respondents are in cohabiting or marital unions. This results in a sample of 60,086 married couple-years and 9,534 cohabiting couple-years. I classify education into four categories according to the number of years of schooling completed (< 12, 12, 13 -15, and ≥ 16 years of schooling). Missing and invalid information on respondent's and partner's education were imputed from information in adjacent interview years where possible. I drop couple-years in which either the respondent's or partner's education could not be imputed. The final sample consists of 59,902 married couple-years and 9,353 cohabiting couple-years.

Next, to examine differences in transitions into and out of cohabitation and marriage, I identify the five transitions shown in Figure 1. Because both partner's and respondent's education information are available only at the interview date, the joint education characteristics of couples who transition into cohabitation and marriage are measured during the first interview year in which a new relationship is observed. Similarly, the joint education characteristics of those transitioning out of cohabitation and marriage are measured in the last interview year the relationship is observed. Appendix Table 1 gives details on the identification of these transitions and NLSY79 sample sizes.

June CPS. I use data from the June Supplement of the CPS to corroborate results from the NLSY79 analysis. To do this, I select a sample that matches the NLSY79 sample as closely as possible. I use June CPS data from the period for which NLSY79 sample members were interviewed (data are available in 1979-1988, 1990-1992, 1994-1995, 1998, 2000, and 2002) and select cohabiting and married couples in which both partners are between the ages of 18 and 37 and in which either the male or the female partner was 14 to 22 in 1979. Cohabitation must be inferred from individuals' marital status and living arrangements prior to 1995, which was the first year that the CPS directly identified "unmarried partners." For consistency, I identify

cohabitors using POSSLQ methods ("Partners of the Opposite Sex Sharing Living Quarters") as outlined by Casper and Cohen (2000) across the entire period. The final sample of prevailing unions contains 81,812 married couple-years and 10,086 cohabiting couple-years.

To identify recently formed unions from the June CPS, I follow a procedure similar to that used by Qian (1998). The June CPS contains date of first marriage information with which to identify newly formed first marriages through the 1995 survey. For consistency with the sample of newlyweds, I restrict the sample of cohabitors to those in which the female partner has never been married. Unfortunately, start dates for cohabiting unions are unavailable and therefore I use all never-married cohabiting couples to approximate new never-married cohabiting couples. Although this approximation is rough, cohabiting unions tend to be short-lived and thus a large proportion of prevailing cohabiting unions will have been formed in the past year (Qian 1998). Because information with which to identify newlyweds is only available through 1995, I restrict the sample to the 1979 to 1995 interview years. Doing so produces a sample of "new" unions consisting of 6,868 new first marriages and 6,705 never-married cohabitors. Appendix Table 1 also includes details about the variable definitions and samples sizes for analyses using the June CPS.

DESCRIPTIVE RESULTS

To provide context for the results to come and to assess the comparability of NLSY79 estimates with those from other sources, I use life-table methods to describe the cohabitation and marriage experiences of women in the NLSY79. Overall, results from Figure 2 indicate that a significant proportion of women experience each of the five transitions outlined in Figure 1. This is of particular importance for this analysis because the volume of transitions into and out of

cohabitation and marriage affect the extent to which particular transitions can affect differences in the resemblance between cohabitors and married couples. For instance, if very few divorces occur, then selective marital dissolution is unlikely to have a large effect on differences in the resemblance of married and cohabiting couples. The NLSY79 cohort, however, came of age during a time of rapid growth in cohabitation and high divorce rates. The relatively high volume of exits and entries from cohabitation and marriage are reflected in Figure 2.[3]

Panel A of Figure 2 shows that by age 37, a large proportion (46%) of women in the NLSY79 had ever cohabited. These estimates are very similar to those reported by Bumpass and Lu (2000) who found that 48% of women aged 35 to 39 had ever cohabited in 1995 using data from the National Survey of Family Growth (NSFG). Thus, despite missing short-term cohabiting unions that begin and end between interview years, the NLSY79 produces estimates that are comparable to those from surveys with more detailed cohabitation information. Panel B of Figure 2 also shows that the vast majority (88%) of women married for the first time by age 37, and that over one-third of women cohabited with their spouse prior to their first marriage (31%).[4] Here, the NLSY79 almost certainly underestimates the proportion of first marriages preceded by cohabitation with a spouse. A commonly cited statistic is that over half of women who married in the early 1990s cohabited with their spouse prior to marriage (Bumpass and Lu 2000), an estimate much higher than that from the NLSY79. I return to the potential consequences of the underestimation of these transitions below.

[3] The format of the panels in Figure 2 is adapted from Oppenheimer (2003).

[4] Remarriages are somewhat more likely to be preceded by cohabitation than first marriages; 43% of couples entering remarriages cohabited with their partners in the interview year prior to their remarriage.

Like other studies, NLSY79 data indicate that cohabiting unions are short-lived (Bumpass and Lu 2000), with most cohabiting couples either splitting up or marrying within about one year (Panel C). When cohabiting unions end, about half the time they end as a result of a separation and half the time they end because of a transition to marriage. By contrast to exits from cohabitation, a much smaller proportion of marriages dissolve (Panel D). After 10 years of marriage, 35% of first marriages had ended, an estimate close to those from other surveys fielded around this time (Martin 2006). The high rate of union dissolution and marriage among cohabitors compared with rates of dissolution among married couples results in large differences in the duration of unions, with the median cohabiting union lasting about 1 year and the median marital union lasting about 15 years. Overall, the magnitude of entries and exits from cohabitation and marriage point to the potential importance of any of these mechanisms in accounting for differences in the odds of homogamy by union type.

Table 1 presents descriptive statistics for prevailing unions and new unions by couple type using data from the NLSY79. Results are similar using data from the June CPS (not shown). Consistent with previous research, results using data on prevailing unions show that male and female cohabitors have less education than married persons, and that female cohabitors also tend to be younger than married women (Bumpass and Lu 2000; Casper and Bianchi 2002). Cohabitors also tend to have less education than married persons when they begin their relationships, but women entering cohabiting unions are somewhat older than those entering marriage. This is largely because women enter marriage earlier than cohabiting unions on average, as can be seen by comparing the steepness of the age pattern of entry into first marriage in Figure 2 (Panel B) with the gradual increase in the age pattern of entry into cohabitation (Panel A).

Table 1 also shows that married couples are more likely to resemble one another on education than are cohabitors. Married couples are more likely to be educationally homogamous than cohabitors and the correlation between their educational attainments is higher. The higher resemblance of married couples is also apparent when couples begin their unions, but the differences are somewhat smaller. These results provide initial support for hypotheses emphasizing the strength of educational resemblance in marriage, but they should be treated with caution as percentages and correlations may be affected by differences in the education and age profiles of cohabitors and married couples. For example, if college graduates are more likely to be homogamous than non-college graduates, then the higher proportion of married couples who are college graduates could explain the observed differences in educational resemblance by union type. I control for differences in the education and age profiles of cohabitors and married couples by employing log-linear models as described below.

METHODS

I use log-linear homogamy models to describe differences in the educational resemblance of couples by union type. Homogamy models describe the association between couples' education in terms of the odds that male and female partners have the same rather than different education levels, controlling for differences in the education and age distributions of partners. In separate analyses, I examined other single-parameter models of assortative mating as well as more complex models that take into account gender asymmetries in matching and differences in couple resemblance by educational level. Other single-parameter models, such as uniform association and fixed distance models (Goodman 1979), do not fit the data as well as homogamy models but give similar results. Results from more complex models indicate that homogamy is a

good summary measure of differences in the resemblance of cohabitors and married couples (results available upon request).

The data for the analysis are the cell counts of a contingency table produced by cross-classifying couple-years by male and female partner's education (<12, 12, 13-15, ≥16), female partner's age (18-21, 22-25, 26-29, 30-33, 34-37), and union type (marriage, cohabitation), which results in a 4 X 4 X 5 X 2 = 160 cell table. To model differences by union transition, I select couple-years in which a transition occurs and cross-classify couple years by male and female partner's education and female partner's age for each of the five transition types shown in Figure 1.

I estimate three sets of models to describe patterns of couple resemblance. The first estimates differences in the odds of homogamy by union type without controlling for differences in female partner's age by union type. The second controls for age to determine whether differences in the ages of cohabitors and married couples account for some of the differences in educational homogamy by union type. The third examines differences in the odds of homogamy by union type and female partner's age. Readers interested in the details of these models may consult Appendix A.

LOG-LINEAR MODEL RESULTS

Table 2 presents the odds ratios of educational homogamy for different samples estimated from log-linear models. It shows the ratio of the odds of homogamy for married couples relative to the odds of homogamy for cohabitors for the three sets of models used here, (1) models that do not control the age of female partners (gross estimates), (2) models net of female partner's age, and (3) models by female partner's age.

Prevailing Marriages and Cohabiting Unions. To examine the basic question of whether cohabitors or married couples are more likely to be educationally homogamous, I compare the odds of homogamy in prevailing marriages versus cohabiting unions (Boxes A and B in Figure 1). Figure 3 displays the results from the log-linear models using NLSY79 data and the odds ratios are given in Table 2. Panel A of Figure 3 shows that both cohabiting and married couples are quite likely to be educationally homogamous, but married couples are more likely to be educationally homogamous than cohabitors. Table 2 shows that the odds of homogamy among married couples are 14% higher than the odds among cohabitors ($p < .05$). This ratio is robust to controls for differences in female partner's age by union type. At every age, the odds of homogamy among married couples are higher than for cohabitors, although many of these differences are not statistically significant largely because of relatively small sample sizes within age groups. These results are consistent with previous studies that have used Census and CPS data on prevailing unions (Blackwell and Lichter 2000; Casper and Bianchi 2002; Spanier 1983).

As discussed above, a limitation of the NLSY79 data is that information on cohabiting unions that begin and end between interviews is not consistently available through the follow-up period. Beginning in 1990, however, married respondents were asked whether they had cohabited with their current spouse prior to marriage. I use this information to test the sensitivity of these results to the exclusion of short-term cohabiting unions that end in marriage. Because these relationships are short, I assume that both partners had the same age and education when they were cohabiting as when they married. Thus, I add one observation to the data with values identical to those for newly married couples who report having cohabited prior to marriage with their spouse but for whom I do not observe a prior cohabitation. I classify these new observations as cohabiting unions and re-estimate the odds of homogamy in the stock of cohabiting and

marital unions. The results of these analyses are almost identical to those presented here (results available upon request). Unfortunately, these sensitivity tests are only possible for cohabiting unions that end in marriage; no information is available on cohabiting unions that begin and end between interviews but do not end in marriage.

Data from the June CPS also show that married couples are more likely to be homogamous than cohabitors. For example, Table 2 shows that, controlling for age differences between the two union types, the odds of homogamy among married couples are 23% higher than among cohabitors. Although the ratio of the odds of homogamy for married couples relative to cohabitors are larger in the June CPS than in the NLSY79, the age patterns of homogamy estimated from both data sources are quite similar (not shown).[5] Together, the evidence from both data sources strongly suggests that married couples in this cohort are more likely to be educationally homogamous than cohabitors, a finding that is consistent with perspectives emphasizing the strength of educational homogamy in marriage (Blackwell and Lichter 2000, 2004). Nevertheless, both cohabitors and married couples show a strong tendency toward educational homogamy and the absolute magnitude of these differences are modest.

[5] The larger odds ratios in the June CPS are most likely due the use of POSSLQ methods to identify cohabitors. Using data from 1995 through 2002 (years in which cohabitors can both be identified directly as "unmarried partners" and indirectly using POSSLQ methods), I find that the odds ratio of homogamy for married couples versus POSSLQs is 7% larger than the odds ratio for married couples versus directly identified cohabitors. Applying this "deflation factor" to the gross and net results for prevailing marriages from the June CPS yields odds ratios of 1.16 and 1.14, respectively (1.25*.93 and 1.23*.93), estimates that are much closer to those for prevailing unions in the NLSY79.

New Marriages and Cohabiting Unions. Are differences in the odds of homogamy for cohabiting and married couples generated by differences in partner choice? If couples in relationships that cross educational boundaries choose to cohabit rather than marry or if people use "looser" criteria for choosing cohabiting than marital partners, we would expect these differences to be reflected in differences in homogamy at the time of union formation. To investigate this hypothesis, I compare the odds of homogamy among newly formed marriages and cohabiting unions following Schoen and Weinick (1993) (transitions 1 and 3+4 in Figure 1). Panel B of Figure 3 shows that there are few differences in the odds of homogamy at the start of marital and cohabiting unions. The odds of homogamy among married couples are only 2% higher than among cohabitors controlling for age. Furthermore, none of the odds ratios by age are statistically significant. Couples marrying in the oldest age category (34 to 37 years of age) are more likely to be homogamous than cohabitors, but a small proportion marriages in the sample began at this age (5%) and thus this odds ratio is not statistically significant.

Data from the June CPS tell a similar story. The odds of homogamy among newlyweds in their first marriages are somewhat higher than those for never-married cohabitors (by 8%), but once age differences by union type are accounted for, the odds ratios become small and statistically insignificant. First marriages that begin between the ages of 18 and 21 are more likely to be homogamous than cohabiting unions that begin at these ages, but overall, there is little evidence of differences in partner choice among cohabitors and married couples in either data set. The general correspondence between the results from the two data sets is reassuring given the limitations of the NLSY79.[6] These results are consistent with Goldstein and Harknett's

[6] To replicate the June CPS sample of "new" unions, I compared the odds of homogamy among newlyweds in their first marriages and never-married cohabitors in the NLSY79. Results using

(2006) finding that educational differences do not appear to be a barrier to marriage among cohabiting and dating couples, but are inconsistent with Schoen and Weinick's (1993) finding that newly formed cohabiting unions are more likely to be educationally homogamous than newlyweds. Moreover, they suggest that differences in the odds of homogamy in prevailing marriages and cohabiting unions are not attributable to differences in partner selection.

Cohabitation Exits and Marriage Entries. Although differences in the odds of homogamy do not appear to be generated by differences in partner selection, a demographic "winnowing" process may still lead to the greater resemblance of married couples if heterogamous cohabitors are more likely to split up than marry. Likewise, if married couples who do not cohabit with their spouse prior to marriage are more homogamous than those who do, then these differences may also contribute to the greater likelihood of resemblance among married couples. Panel C of Figure 3 compares the odds of homogamy among (1) cohabiting couples in the interview year before the dissolution of their relationship ("cohabitation dissolution," transition 2 in Figure 1) (2) married couples in their first year of marriage who were cohabiting with their spouse in the previous interview year ("cohabitation to marriage," transition 3 in Figure 1), and (3) married couples in the first year of marriage who were not cohabiting with their spouse in the prior interview year ("marriage without cohabitation," transition 4 in Figure 1). Information to make these comparisons is not available in the June CPS.

Both the gross estimates and those net of age reveal few differences in the odds of homogamy across these three transitions. The odds of homogamy among cohabitors who transition to marriage are slightly higher than for those who split up, but these odds ratios are not

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this sample also show that differences in homogamy by union type are small and statistically insignificant.

statistically significant. Similarly, the odds ratios of homogamy for married couples that transition from cohabitation versus those that did not cohabit with their spouse are small and are not statistically significant. Thus, like other studies (Goldstein and Harknett 2006; Oppenheimer 2003; Sassler and McNally 2003), I find little support for the winnowing hypothesis.

Marriage and Cohabitation Exits. Thus far, results from the NLSY79 and June CPS suggest that differences in the odds of homogamy by union type in prevailing unions are not due to (1) differences in partner choice between cohabitors and married couples, (2) differences between cohabitors who split up and those who marry, (3) differences between married couples who do and do not cohabit with their spouses prior to marriage. What factors, then, do generate differences in the odds of homogamy by union type observed in prevailing unions? There are two remaining possibilities. First, previous research shows that heterogamous married couples are more likely to divorce than homogamous couples (e.g., Goldstein and Harknett 2006, Tzeng 1992), which implies that, as heterogamous marriages dissolve, homogamous marriages may accumulate in the stock of marriages resulting in higher odds of homogamy in marriages than in cohabiting unions. Second, although there is little evidence of a difference in the odds of homogamy between cohabitors who marry and those who split up, it is possible that cohabitors who end their unions by marrying or splitting up are more homogamous than those who stay together. Thus, as homogamous cohabitors exit cohabitation (either to marriage or to singlehood), heterogamous cohabiting unions may accumulate in the stock of cohabiting unions thereby producing lower odds of homogamy in cohabitation than in marriage.

To investigate these hypotheses, I compare the odds of homogamy among cohabitors in the last year of their unions (transitions 2 and 3 in Figure 1) and married couples in the last year of their unions (transition 5 in Figure 1) to cohabitors and married couples who are not in the last

year of their unions, that is, couples in persisting unions. Panel D of Figure 3 shows that couples whose marriages are about to dissolve are less likely to be homogamous than those in persisting marriages (estimates from gross models). For both the gross estimates and those net of age, Table 2 shows that the odds of homogamy among marriages about to dissolve are 86% of the odds of homogamy among those that persist. By contrast, cohabitors who are about to exit their unions (either to marriage or singlehood) are more likely to be homogamous than those in persisting cohabiting unions, although Table 2 shows that these odds ratios are small and are not statistically significant.[7] These results are consistent with the hypothesis that selective exits out of marriage and cohabitation contribute to differences in educational resemblance by union type.

Figure 4 provides additional evidence about the impact of selective exits from marriage and cohabitation, showing the odds of homogamy by union duration (see Appendix A for model details). For new unions (those less than 1 year old), there is a small and statistically insignificant difference in the odds of homogamy by union type (these estimates are identical to the gross estimates for new unions shown in Figure 3). The odds of homogamy among cohabiting unions that have not dissolved after 1 interview year are somewhat lower than those for newly formed unions. This reflects the selection of homogamous cohabitors out of cohabitation (both to marriage and to singlehood). Likewise, at each subsequent duration, prevailing cohabiting unions are less likely to be homogamous as homogamous couples marry and split up. By contrast, the stock of marriages becomes somewhat more similar by duration as educationally dissimilar couples dissolve their marriages. Increases in the odds of educational homogamy in the stock of marriages by marriage duration are also evident using data from the June CPS (not shown).

[7] Discrete time hazard models of dissolution from marriage and cohabitation produce very similar results to those shown here (results available upon request).

Figure 4 also shows that the odds of homogamy decrease faster among cohabitors than they increase among married couples. Although cohabitors who end their unions are only slightly more likely to be homogamous than those who remain (Table 2 and Figure 3, Panel D), this result is not surprising given that the median duration of cohabiting unions is about 1 year whereas the median duration of marital unions is about 15 years. These duration differences mean that the "outflows" of cohabitors (to marriage or to singlehood) in durations less than four years are far larger than the "outflows" of marriages (to dissolution) (see Figure 2, Panels C and D). Because of the heavy volume of cohabitors exiting their unions, even a slight tendency for homogamous cohabitors to end their unions can have a non-trivial impact on the odds of homogamy among cohabitors. By contrast, fewer marriages dissolve than cohabiting unions, which dampens the impact of selective marital dissolution on the odds of homogamy in the stock of marriages.[8]

To summarize, although there are small and statistically insignificant differences in the odds of homogamy when cohabitors and married couples enter their unions, these initial differences are magnified by selective exits from marriage and cohabitation. For a given cohabiting couple, crossing an educational boundary makes little difference for whether or not

[8] The results shown in Figure 4 are not due to panel attrition. For these this to be the case, attrition would need to be correlated with both union type and homogamy. Specifically, attrition must be higher among homogamous than heterogamous cohabitors and higher among heterogamous than homogamous married couples. Logistic regression results show no evidence that panel attrition is differentially related to homogamy for cohabitors versus married couples, and results from analyses excluding relationship spells that are censored by panel attrition are very similar to those presented here.

they marry, split up, or remain cohabiting. But at the population level, the massive movement of cohabitors out of their unions combined with the slightly higher educational resemblance of cohabitors who marry or split up contributes to differences in the odds of homogamy by union type. By contrast, for a given married couple, crossing an educational boundary is associated with a higher likelihood of marital dissolution, a process that also contributes to differences in the odds of homogamy by union type by increasing the odds of marital homogamy as a result of the exit of heterogamous married couples from the stock of marriages.

DISCUSSION

This study has shown that married couples are somewhat more likely to resemble one another on education than cohabiting couples, but that these differences are not reflected in differences among newly formed cohabiting and marital unions. Instead, my findings suggest that selective transitions out of cohabitation and marriage account for these differences. Cohabiting couples who share the same educational attainment are slightly more likely to exit their unions (either by splitting up or marrying) and, as similar couples leave the stock of cohabiting unions, those that remain are increasingly likely to be educationally dissimilar. By contrast, marriages that cross educational boundaries are more likely to end and, as dissimilar couples leave the stock of marriages, those that remain are increasingly likely to be educationally similar. Thus, selective exits from both union types magnify the small and statistically insignificant initial differences in the odds of homogamy among newly formed cohabiting and marital unions.

Although a host of other data sources would be needed to pin down the precise reasons for disparate findings in past research, I show how using different samples of unions and examining couples at different points in their relationship trajectories produce different, yet

coherent, findings when the assortative mating process is viewed from a stock and flow perspective. Specifically, I show how studies that use data on the stock of unions, which have generally found that married couples are more likely to be homogamous than cohabitors (e.g., Blackwell and Lichter 2000), are consistent with other studies that have found no differences between recently formed marriages and cohabiting unions (Qian 1998), and studies that have found no differences between cohabitors who split up and those who marry (e.g., Goldstein and Harknett 2006; Sassler and McNally 2003). Results from this paper suggest that the small and statistically insignificant tendency for homogamous cohabitors to exit their unions combined with the more pronounced tendency for heterogamous married couples to split up largely accounts for differences in the odds of homogamy by union type. Additional research is needed to determine the sources of other discrepancies in the literature, for example, the finding that newly formed cohabiting couples are more likely to resemble one another on education than are newly married couples (Schoen and Weinick 1993).

There are several possible reasons for remaining discrepancies. Two in particular deserve further investigation. First, one limitation of the data used here is that short-term cohabiting unions that begin and end between interviews are not observed consistently through the follow-up period. Sensitivity tests suggest that the results are robust to the omission of short-term cohabiting unions that end in marriage, but the data do allow for similar sensitivity tests for the omission of short-term cohabitors who split up rather than marry. Future research should use more detailed data to examine how the resemblance of couples varies by the duration of cohabiting unions. Second, results may vary across studies to the extent that the relationship between union type and educational resemblance has changed over time and that different studies have used data from different time periods. As cohabitation has become more common,

differences between couple resemblance among cohabitors and married couples may have declined (Qian 1998). Thus, further investigation of the potentially shifting relationship between educational homogamy and union type is an important avenue for future research.

In addition to presenting new findings on an empirical question upon which there has been considerable disagreement, this study has implications for the competing hypotheses about differences in the educational resemblance of cohabitors and married couples. The findings are inconsistent with hypotheses drawn from economic theory, which predict that cohabitors will be more likely to be educationally homogamous than married couples (Schoen and Weinick 1993). Thus, it appears that cohabitors' greater emphasis on egalitarianism and economic equality (Brines and Joyner 1999) does not translate into greater educational homogamy in this cohort. Indeed, these results suggest that sorting on education is more similar to sorting on ascribed characteristics such as race/ethnicity, religious background, or age, characteristics for which married couples tend to be more alike than cohabitors (Blackwell and Lichter 2000, 2004; Schoen and Weinick 1993; Jepsen and Jepsen 2002) than to sorting on other achieved characteristics such as earnings and employment. One reason for this finding may be that education is more difficult to alter than earnings and employment. Couples who are both employed while dating or cohabiting often adopt a specialized division of labor upon marriage when wives scale back their labor force participation (Drobnič, Blossfeld, and Rohwer 1999). However, a similar mechanism is not possible for education; educationally homogamous couples cannot become heterogamous via the reduction of one partner's educational attainment.

Instead, these results are more consistent with hypotheses that emphasize the strength of homogamy in marriage and the difficulties of cross-class marriage, but not for the reasons that are commonly hypothesized. Scholars generally argue that because cohabitation is a "looser

bond" than marriage, cohabitors will be more likely to partner with dissimilar mates and split up with these partners prior to marriage (e.g., Blackwell and Lichter 2000, 2004). I find little evidence, however, that cohabitors choose less educationally similar partners or that educationally dissimilar couples avoid marriage in favor of cohabitation. One interpretation of these results is that relationships that cross educational lines are not particularly non-normative. Instead, the high levels of educational homogamy for both marriages and cohabitating unions may simply be a reflection of similar opportunities to meet potential mates in partner markets that are partly structured by education. Alternatively, it may be that heterogamy is equally non-normative for both those entering cohabiting and marital unions and that sorting occurs prior to entry into either of these relationships (Blackwell and Lichter 2004).

Where the potential difficulties associated with educational interrelationships may be evident, however, is in patterns of marital dissolution. I find that couples who marry across educational lines are significantly more likely to divorce than are those who do not, a result consistent with past research (Clarkwest 2007; Goldstein and Harknett 2006; Tzeng 1992; but see Tzeng and Mare 1995). The finding that educational differences are associated with the likelihood of union dissolution for married couples but not for cohabitors poses an interesting puzzle. Why would educational differences matter for the stability of marital unions but not for cohabiting unions? One explanation is that cohabitors are simply not in their relationships long enough for their educational differences to cause problems, but that the problems associated with educational differences develop over time (Goldstein and Harknett 2006). Another explanation points to the possible ineffectiveness of cohabitation as a "trial marriage." Educational differences may not become problematic until couples encounter the unique experiences and expectations associated with marriage. For example, conflict from educational differences may

arise from disagreements about raising children or the allocation of joint resources – issues that are more likely to arise in marriage than in cohabitation (Blumstein and Schwartz 1984; Raley 2001). Alternatively, educational differences may, in fact, be problematic for cohabitors, but because of relationship momentum and the accumulation of relationship-specific investments, cohabitors in these relationships may "slide" into marriage (Dush, Cohan, and Amato 2003; Stanley, Rhoades, and Markman 2006).

Finally, this study provides a basis for speculation about the implications of the rise of cohabitation for studies assortative mating that rely exclusively on marriage data. Research on trends in the educational resemblance of spouses have generally found that educational homogamy has increased since the 1960s (e.g., Kalmijn 1991; Qian and Preston 1993; Schwartz and Mare 2005; but see Rosenfeld forthcoming). Increases in cohabitation may have contributed to this trend if cohabitation "weeds out" educationally dissimilar couples before marriage (Blackwell and Lichter 2000, 2004). I find little evidence for this hypothesis, however, among a cohort of Americans forming unions largely in the 1980s and 1990s. Of course, this paper only examines these patterns for one cohort. Cohabitation may have performed more of a screening role in past whereby heterogamous couples split up and homogamous couples married. However, only 8% of marriages were preceded by cohabitation in the late 1960s (Bumpass 1990), which means that the potential impact of such a screening effect would most likely have been small. Moreover, past research on historical trends in the educational resemblance of pooled samples of cohabiting and marital unions differ little from trends in marital unions alone (Qian and Preston 1993:492). Taken together, this evidence suggests that cohabitation is unlikely to have been the driving force in the upward trend in the educational resemblance of spouses. Future research should investigate this question directly.

APPENDIX A

MODELS OF EDUCATIONAL HOMOGAMY

The dependent variable in the log-linear models estimated here is the weighted cell counts of the contingency tables described in the text. The first set of models estimates gross differences in the log odds of homogamy by union type:

$$\log(\mu_{ijkl}) = \lambda + \lambda_i^M + \lambda_j^F + \lambda_k^U + \lambda_{ik}^{MU} + \lambda_{jk}^{FU} + \lambda_{ij}^{MF} + \gamma_{kl}^{UH} \quad (1)$$

where *M* denotes male partner's education ($i = 1,\ldots,4$), *F* is female partner's education ($j = 1,\ldots,4$), and *U* is union type ($k = 1, 2$). Because the goal of this paper is to describe differences in the odds of homogamy by union type, the model contains a term for the difference in the log odds of educational homogamy and saturates the lower-order interactions (Raymo and Xie 2000; Xie 1998). Thus, the model contains a saturated term for the relationship between male and female partner's education that is common across union types (λ_{ij}^{MF}), and the parameter of interest is the γ_{kl}^{UH}, where $H = 1$ if male partner's education category equals female partner's education category and 0 otherwise. This parameter estimates the difference in the log odds of homogamy in union type *k* relative to the omitted union type (cohabitation). For transitions, I replace the union type terms in equation (1) ($\lambda_l^U, \lambda_{il}^{MU}, \lambda_{jl}^{FU}$) with terms for the transition type ($\lambda_t^T, \lambda_{it}^{MT}, \lambda_{jt}^{FT}$) where *t* indexes transition type. I also estimate equation (1) separately by the duration of unions to produce the estimates shown in Figure 4.

The second set of models estimate differences in the log odds of homogamy by union type controlling for differences in female partner's age. Formally, this equation is:

$$\begin{aligned}\log(\mu_{ijklm}) = \lambda + \lambda_i^M + \lambda_j^F + \lambda_k^U + \lambda_m^A + \lambda_{ik}^{MU} + \lambda_{jk}^{FU} + \lambda_{im}^{MA} + \lambda_{jm}^{FA} + \lambda_{km}^{UA} + \\ \lambda_{ikm}^{MUA} + \lambda_{jkm}^{FUA} + \lambda_{ijm}^{MFA} + \gamma_{kl}^{UH}\end{aligned} \quad (2)$$

where A is female partner's age (m = 1,…,5) and all other terms are as defined above. The third set of models estimates differences in educational homogamy by female partner's age and thus replaces γ_{kl}^{UH} with γ_{klm}^{UHA}.

The odds ratios shown in Table 2 and the odds shown in Figures 3 and 4 were estimated using the log-linear models above. These equations, however, do not produce interpretable coefficients for the odds of homogamy for the omitted union type (cohabitation) because of the inclusion of interaction terms for male and female partner's education (e.g., λ_{ij}^{MF}). Rather than choosing an arbitrary point of comparison, I first estimate the log odds of homogamy for cohabitors using modified versions of the equations above in which I replace the λ_{ij}^{MF} terms with a homogamy term (γ_{l}^{H}). Next, I calculate the log odds of homogamy for married couples by adding the difference in the log odds of homogamy for married couples versus cohabitors from the equations above (γ_{kl}^{UH}) to the log odds of homogamy for cohabiting unions estimated from the modified equations (γ_{l}^{H}).

Because the NLSY79 data contain multiple observations per respondent, test statistics assuming independence of observation are invalid. To correct for respondent-level clustering, it is necessary to use couple-level rather than grouped data. Thus, for hypothesis testing and the estimation of standard errors, I use binomial and multinomial logit models that are mathematically equivalent to the log-linear models above but in which the units are couple-years rather than cell frequencies (Agresti 2002:330). For example, equation (2) can be estimated using the following logit model with union type as the dependent variable:

$$\text{logit}[P(U = 1 \mid M = i, F = j, A = m, H = l)] = \alpha + \beta_i^M + \beta_j^F + \beta_m^A + \beta_{im}^{MA} + \beta_{jm}^{FA} + \delta_l^H \qquad (4)$$

where $\delta_l^H = \gamma_{kl}^{UH}$ from equation (2). Likewise, a multinomial logit model for transitions equivalent to equation (2) is:

$$\log \frac{\pi_t(x)}{\pi_T(x)} = \alpha_t + \beta_{ti}^M + \beta_{tj}^F + \beta_{tm}^A + \beta_{tim}^{MA} + \beta_{tjm}^{FA} + \delta_{tl}^H \quad (5)$$

where $\pi_t(x) = [P(T = t \mid M = i, F = j, A = m, H = l)]$ and all else is defined as above. To correct for respondent-level clustering, I use the robust cluster option in STATA. I weight the NLSY79 results using the 1979 weight and the June CPS results using the female partner's person weight.

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Table 1. Descriptive Statistics for Marital and Cohabiting Unions

	Prevailing Unions		New Unions	
	Married	Cohabiting	Married	Cohabiting
Male Partner's Years of Schooling (%)				
< 12	12.8	22.0	13.1	17.9
12	46.3	47.4	45.4	48.3
13-15	19.3	17.7	20.0	19.5
≥ 16	21.6	13.0	21.5	14.3
Female Partner's Years of Schooling (%)				
< 12	10.8	18.8	11.2	17.0
12	47.1	49.2	45.9	48.6
13-15	22.3	19.8	23.3	20.5
≥ 16	19.8	12.1	19.7	13.8
Female Partner's Age (%)				
18-21	10.3	16.4	28.8	22.0
22-25	23.8	29.5	33.7	33.3
26-29	29.5	27.3	21.2	24.7
30-33	25.3	18.3	11.0	13.2
34-37	11.1	8.6	5.3	6.9
Educational Resemblance				
Homogamous (%)	55.0	50.8	53.5	51.3
Correlation	0.60	0.56	0.59	0.55
Sample size	59,902	9,353	8,371	4,359

Note: Data are weighted.
Source National Longitudinal Survey of Youth (NLSY79).

Table 2. Odds Ratios of Educational Homogamy by Data Source and Sample

Data Source and Sample	Gross	Net of Age	By Female Partner's Age				
			18-21	22-25	26-29	30-33	34-37
NLSY79							
Prevailing Unions (n = 69,255)							
Marriage vs. Cohabitation	1.14 *	1.13 *	1.11	1.16 *	1.11	1.14	1.12
	(2.48)	(2.35)	(1.12)	(1.99)	(1.33)	(1.35)	(0.81)
New Unions (n = 12,730)							
Marriage vs. Cohabitation	1.06	1.02	0.98	1.06	1.01	0.92	1.28
	(1.29)	(0.53)	(0.25)	(0.82)	(0.09)	(-0.65)	(1.23)
Cohabitation Exits & Marriage Entries (n = 10,539)							
Cohab to Marriage vs. Cohab Dissolution	1.05	1.04	1.20	0.99	1.09	0.90	1.25
	(0.60)	(0.51)	(0.95)	(0.07)	(0.51)	(0.46)	(0.73)
Marriage w/out Cohab vs. Cohab to Marriage	1.00	0.95	0.77	0.98	1.00	1.06	0.92
	(0.02)	(0.78)	(1.68)	(0.18)	(0.03)	(0.30)	(0.32)
Marriage w/out Cohab vs. Cohab Dissolution	1.05	0.99	0.92	0.97	1.09	0.95	1.15
	(0.71)	(0.15)	(0.59)	(0.28)	(0.61)	(0.24)	(0.50)
Marriage Exits (n = 59,902)							
Marital Dissolution vs. Persisting Marriages	0.86 **	0.86 **	0.73 **	0.79 **	0.98	0.88	0.93
	(3.16)	(3.30)	(2.94)	(2.81)	(0.30)	(1.15)	(0.50)
Cohabitation Exits (n = 9,353)							
Cohab Dissolution vs. Persisting Cohab Unions	1.03	1.03	1.16	1.14	0.93	0.93	0.96
	(0.43)	(0.46)	(0.92)	(1.12)	(0.13)	(0.37)	(0.16)
Cohab to Marriage vs. Persisting Cohab Unions	1.04	1.02	1.17	1.10	1.07	0.71 *	1.13
	(0.52)	(0.28)	(0.95)	(0.72)	(0.46)	(2.01)	(0.38)
June CPS (NLSY79 Cohort)							
Prevailing Unions (n = 91,898)							
Marriage vs. Cohabitation	1.25 **	1.23 **	1.16 *	1.20 **	1.29 **	1.20 **	1.41 **
	(8.86)	(8.21)	(2.5)	(4.25)	(5.07)	(2.87)	(3.61)
"New" Unions (n = 13,573)							
New First Marriages vs. Prevailing Never-Married Cohabitors	1.08 *	1.04	1.15 †	1.01	1.05	0.87	0.76
	(2.00)	(0.96)	(1.82)	(0.14)	(0.50)	(0.91)	(0.77)

Notes: Cohab = Cohabitation. z statistics are in parentheses and are adjusted for respondent-level clustering when using data from the NLSY79. NLSY79 and June CPS data are weighted. Results are estimated from the models described in Appendix A. See Appendix Table 1 for variable definitions.

† $p \leq .10$; * $p \leq .05$; ** $p \leq .01$

Sources: National Longitudinal Survey of Youth (NLSY79) and June Supplement of the Current Populaton Survey (June CPS).

Figure 1. Stock and Flow Diagram of Transitions into and out of Cohabitation and Marriage

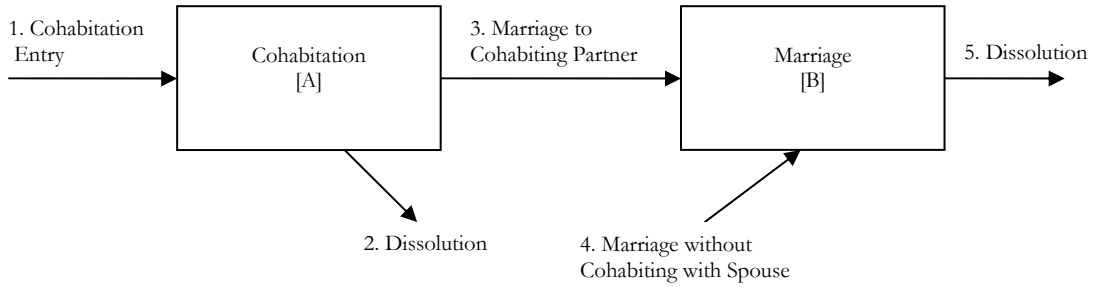
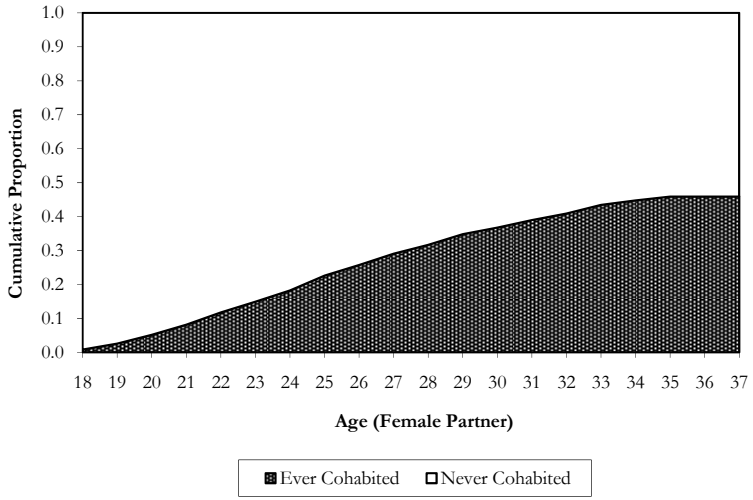
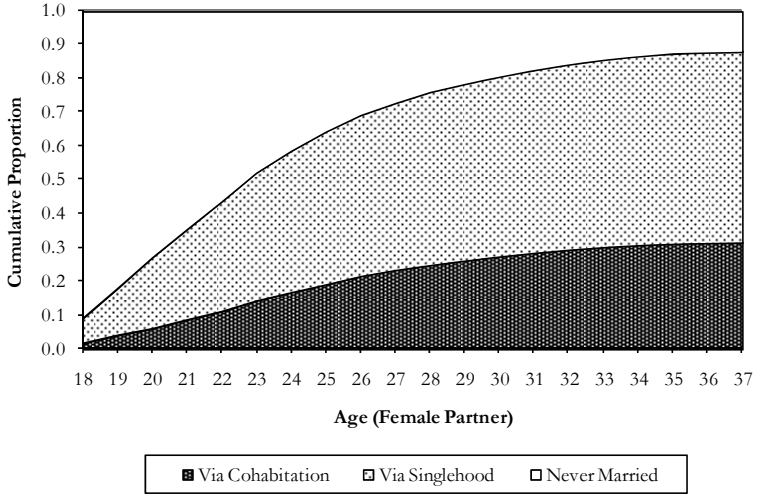


Figure 2. Transitions into and out of Cohabitation and Marriage

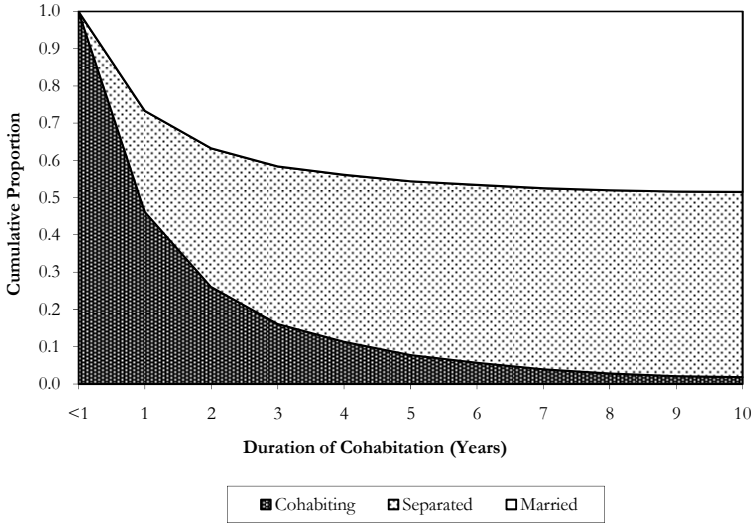
Panel A. Entry into Cohabitation



Panel B. Entry into First Marriage



Panel C. Exits from Cohabitation



Panel D. Exits from First Marriage

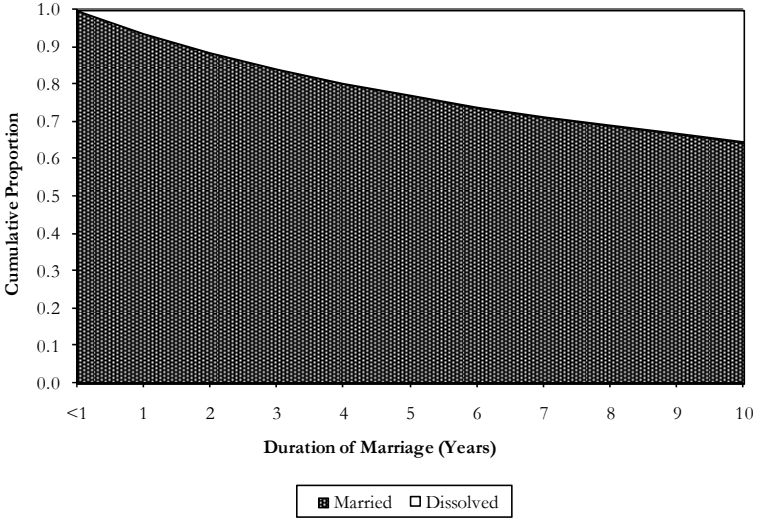


Figure 3. Odds of Educational Homogamy by Sample

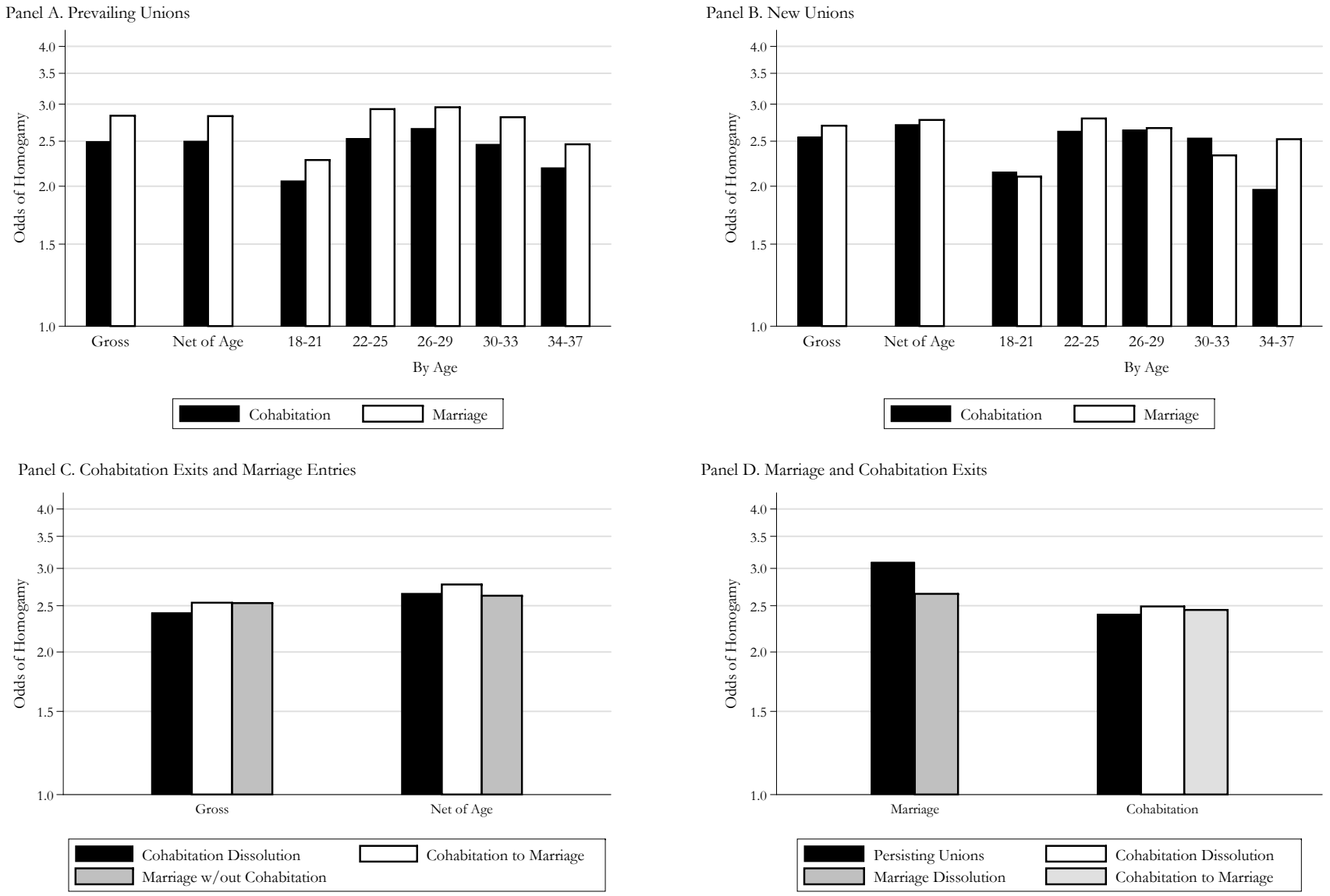
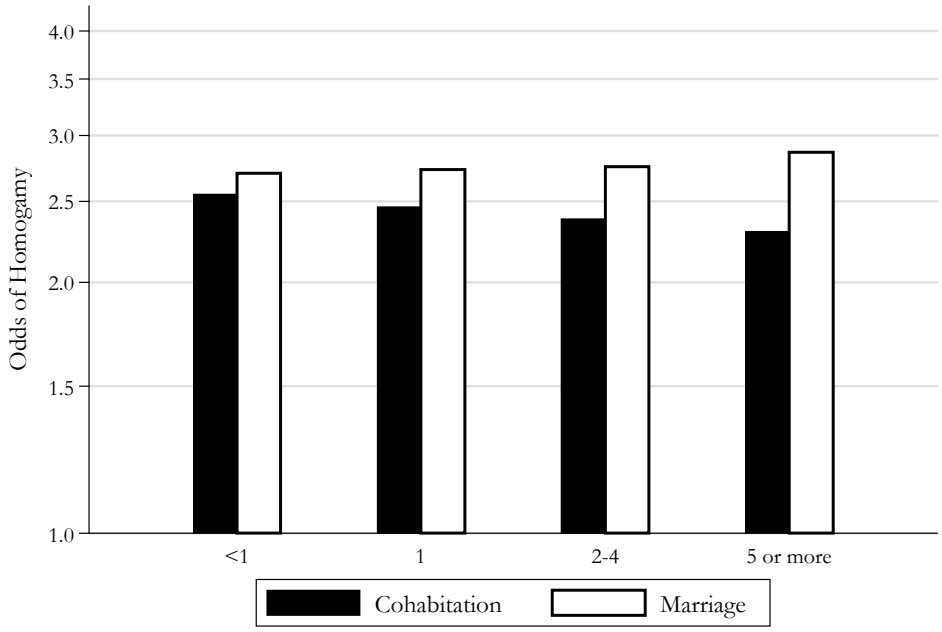


Figure 4. Odds of Educational Homogamy in Prevailing Unions by Union Type and Duration (Years)



Appendix Table 1. Variable Definitions and Sample Sizes

Data Source and Measure	Definition	*n*
NLSY79		
Prevailing marriage	Interview years in which respondents report being married.	59,902
Prevailing cohabiting union	Interview years in which respondents report cohabiting.	9,353
New cohabitation	Cohabiting unions formed within two years of the current interview. Measured in the interview year in which they first appear in the data.	4,359
Cohabitation dissolution	Cohabiting unions in which the respondent is not living with the current partner in the next interview year. Measured in the interview year in which the couple last appears in the data prior to separation.	2,168
Marriage to cohabiting partner	Marriages formed within two years of the current interview in which respondents were cohabiting with their current spouse in the previous interview year. Measured in the first interview year after marriage.	1,771
Marriage without cohabiting with spouse	Marriages formed within two years of the current interview in which respondents were not cohabiting with their spouse in the previous interview year. Measured in the first interview year in which they appear in the data.	6,600
Marital dissolution	Married couples who are separated, divorced, or widowed in the next interview year. Measured in the interview year in which they last appear in the data prior to marital dissolution.	3,739
June CPS (NLSY79 cohort)		
Prevailing marriage	Interview years in which respondents report being married.	81,812
Prevailing cohabitation	Interview years in which respondents report cohabiting.	10,086
New first marriage	Marriages in which the wife reports having first married within 24 months of the interview date.	6,868
Never-married cohabiting union	POSSLQs in which the female partner has never been married.	6,705

Sources: National Longitudinal Survey of Youth (NLSY79) and June Supplement of the Current Populaton Survey (June CPS).