Assortative Mating in Remarriage: Homogamy and Tradeoffs in Second Marriages by Age and Education

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Abstract

Assortative mating has important implications for social stratification and the outcomes of individual marriages. Yet, as divorce and remarriage have become increasingly commonplace in the United States, we have little empirical evidence of how marital sorting takes place in remarriage. Previous research has indicated that martial heterogamy is more likely in second marriages, both by age and educational attainment, but these studies are limited in scope and has failed to consider multiple characteristics in assortative mating. Using the National Longitudinal Survey of Youth, 1979 cohort (NLSY79), I look at the likelihood of age and educational homogamy in second marriages among the divorce. Specifically, I focus on assortative mating in remarriage by age and education, the likelihood of entering a homogamous union based on the respondent's characteristics, and potential age-education tradeoffs in remarriage, which may lead to higher rates of heterogamy on one or both of these characteristics. Preferences on one characteristic may lead to a mismatch on another and gender differences in these patterns are considered.

I. Introduction and Previous Research

Mate selection patterns reflect and influence the social stratification system of a society (Blau, Blum, and Schwartz 1982; Kalmijn 1998). The attributes of marriage partners, such as educational attainment or age, affect the intra- and inter-generational transmission of socioeconomic standing and social mobility (Kremer 1997; Fernandez and Rogerson 2001). Furthermore, a comprehensive understanding of assortative mating patterns helps clarify distinctions between social strata and the plasticity of social boundaries across socioeconomic, racial, ethnic, religious, and other categories (Blau 1977; Smits, Utless, and Lammers 1998; Blossfield and Timms 2003). However, our knowledge of how individuals re-enter the institution of marriage after divorce is limited. Indeed, while remarriage has become increasingly normative in the United States (Bumpass et al. 1990), we know little about marital sorting among the remaried. Studying assortative mating in remarriage is important for several reasons. First, our knowledge of assortative mating in marriage is constricted to first marriages or prevailing marriages (e.g. Mare 1991; Qian and Preston 1993; Lichter et al. 1995; Qian 1998; Schwartz and Mare 2005) —few researchers have looked at mate selection in remarriage. Second, remarrying can reestablish households which provide economic security, reducing the risk of poverty or the duration of poverty for individuals (Smock 1990). This may be particularly important if children are present in the household, but may be contingent on the types of marriages formed through assortative mating. Third, remarriage canoffset economic and mental well-being decline after divorce and both outcomes are positively effected by homogamy (Amato 2000). Finally, remarriage is more selective than first marriage and allows us to empirically test economic hypotheses regarding marriage, which are contingent on assortative mating (Oppenheimer 1997; DeGraaf and Kalmijn 2003).

In 2001, more than 20 percent of 40-49 year old men and women had been married at least twice (US Census Bureau 2005). Annually, nearly 50 percent of all marriages in the United States involve at least one person who has been previously divorced (Ozawa and Yoon 2002). However, the few studies conducted on remarriage have primarily focused on stepfamilies, the consequences of remarriage for children, or the psychological and economic benefits of marrying again (Cherlin 1978; Cherlin and

Furstenberg 1994; Coleman, Gangong, and Fine 2000). Little empirical evidence exists on the determinants of remarriage or focuses on who remarries (but see Spanier and Glick 1980; Smock 1990; Sweeney 1997; Lampard and Peggs 1999; DeGraaf and Kalmijn 2003). The previous work that has been done has highlighted sociodemographic factors as strong predictors of remarriage. People who divorce or first marry at older age and children in the household are less likely to remarry. Studies focusing on educational attainment and women's labor force participation tend to show mixed results toward remarriage while income and other socioeconomic attributes positively affect men's chances for remarriage.

My study uses the National Longitudinal Survey of Youth, 1979 cohort (henceforth NLSY79) to look at assortative mating in remarriage. Specifically, I have three research questions. First, how do education and age affect the likelihood of remarriage for men and women? Second, what is the degree of age and education homogamy in second marriages? Third, do previously divorced men and women make age-education tradeoffs, leading to heterogamy on one or both characteristics over the other when remarrying?

Despite evidence which predicts who remarries, a select few studies have focused on who marries whom when at least one partner is experiencing a second marriage. Studies looking at assortative mating in remarriage and have generally focused on educational, socioeconomic, and age matching. Research on educational assortative mating tend to be the most prevalent in the literature, but the empirical evidence is inconclusive on whether second marriages are more or less homogamous than first marriages. Gelissen (2004) shows that the likelihood men marry homogamously in their second marriages increases, while women are no more or less likely to be better matched to their new spouses on education. Dean and Gurak (1978) argue that remarried women experience low homogamy in both first and subsequent marriages. Others show no difference in educational assortative mating from first to second marriages (Whyte 1990). Ni Brolchain (1988) shows that less educated individuals are more likely to marry up in remarriage than first marriage and that the highly educated are more likely to marry down. The odds of marrying homogamously tend to stay static between first and second marriages in other forms of socioeconomic

assortative mating. For example, matching on social class is no more or less likely in remarriage than in first marriage (Jacobs and Furstenberg 1986; Ni Brolchain 1988; Gelissen 2004). Remarriages, however, do tend to be more heterogamous with respect to age (Jacobs and Furstenberg 1986; Ni Brolchain 1988; Bumpass et al. 1990). Men are particularly likely to marry younger spouses in second marriages then in first marriages. However, the salience of age in choosing a spouse may decrease as people get older (Jacobs and Furstenberg 1986).

People tend to have a homogamy preference in marriage, choosing partners with similar social, economic, and demographic characteristics as themselves (England and Farkas 1986; Oppenheimer 1988; Lichter 1990; Bergstron and Bagnoli 1993; Lichter et al. 1995; Loughran 2002). Preferences in remarriage may differ from those in first marriage due to increased selectivity by those seeking a second marriage. In particular, individuals in heterogamous first marriages may seek homogamous second marriages because they see increased benefits in marrying someone similar to themselves or have adjusted to potential problems caused by marrying heterogamously. Men and women who marry homogamously in first marriages are likely to prefer similar partners in second marriages as well (Dean and Gurak 1978; Whyte 1990; Gelissen 2004). Gelissen (2004) contributes his finding that men marry more homogamously in second marriages to changing preferences. Despite mixed empirical results for the effects of education (Thornton 1977; Wolf and McDonald 1979; Koo et al. 1984; Smock 1990), labor force participation (Wolf and McDonald 1979), and earnings (Mott and Moore 1983), the emphasis on socioeconomic preferences may be stronger in second marriages than in first marriages because the proportion of divorcees remarrying is smaller than the proportion ever-marrying (DeGraaf and Kalmijn 2003). The importance of some characteristics may change from first to second marriages. For example, the presence of children in the household can greatly reduce the chances for remarriage, especially for women (Lampard and Peggs 1999; DeGraaf and Kalmijn 2003).

While preferences play an important role in remarriage, partner preferences are often shaped and changed by marriage market factors (e.g., Lichter et al. 1995; Kalmijn and Flapp 2001). As a result, older men and women are more likely to redefine their preferences to include heterogamous marriages or to

forgo marriage all together (Lichter 1990; Mare 1991). A similar process may take place in the remarriage market as well. Marital homogamy may be less likely in remarriage for several reasons. First, the age at which an individual enters the remarriage market effects their prospects of forming a second marriage. Men and women who divorce at later ages have a lower probability of remarrying (Goldman, Westoff, and Hammerslough 1984). Similarly, people who delay their first marriages are less likely to experience a second marriage if they get divorced. Bumpass et al. (1990) found that women who married for the first time after age 22 had a 38% lower remarriage rate than those that married at younger ages. The remarriage market tends to be particularly limiting for older women because men, on average, marry younger women and there are more single women than men in older age groups (White and Rogers 2000). Second, remarriages are more likely to be heterogamous than first marriages because remarriage markets are smaller and more heterogeneous than the first marriage market (Dean and Gurak 1978). Highly educated men and women may be particularly likely to marry heterogamously in second marriages because lower educated people tend to have higher divorce rates than average (White and Rogers 2000). Third, because remarriage markets are restricted, matching on multiple characteristics may be difficult. This is less problematic in first marriages, where men and women can match with spouses across numerous characteristics. For example, Qian (1998) finds that age and education homogamy in first marriage increased over time for both men and women. However, remarriage is more likely to lead to matching on some characteristics may lead to mismatches on others. Men may have a preference for second spouses younger than themselves (Jacobs and Furstenberg 1986; Ni Borchlain 1988; Bumpass et al. 1990), but this preference may also lead to a mismatched marriage on education. Similarly, women may be more likely to make education-age mismatches in order to maximize their preferences, especially when they experience more market restrictions in remarriage than men.

II. Data and Methods

In this paper I will use the National Longitudinal Survey of Youth, 1979 cohort (NLSY79). NLSY79 is a panel survey of 12,686 men and women between the ages of 14 and 22 as of January 1, 1979. These data are unique because they are presented in an event-history format, allowing researchers to follow an individual's union formation and dissolution activity and other important life-history events. The data are in person-year format where every year the respondent is not married after divorce is considered a separate observation because the individual remains at risk of experiencing a second marriage. Once having experienced a second marriage, the respondent is no longer in the risk set and is right-censored from the data.

I study assortative mating in remarriage by focusing on the level of educational and age homogamy in second marriages. I examine how educational and age assortative mating varies in terms of the likelihood of remarriage and how homogamous second marriages are in terms of education and age. I also look at whether men and women make education-age homogamy tradeoffs in second marriages. Specifically, I analyze the level of homogamy in both characteristics to see if individuals match heterogamously on both, one, or none of these characteristics. This study is limited to individuals who have been previously married and ended their first marriage in divorce. Previous research has shown that widowers have different mate selection patterns in subsequent marriages than do the divorced and are more likely to forgo second marriage (Wu and Schimmele 2005). As a result, I limit this sample to those who have divorced. Because previous research has shown that men and women have different patterns of remarriage (e.g., DeGraaf and Kalmijn 2003; Gelissen 2004), I run my models separately by gender of the respondent.

III. Dependent Variable

The dependent variable is an event variable that specifies if remarriage took place at a given point in time and whether the respondent entered a marriage which was homogamous on both age and education, homogamous on one characteristic, or heterogamous on both characteristics. A marriage is defined as educationally homogamous if the respondent and their spouse have the same level of educational attainment at the time of first marriage: less than high school (<12 years of schooling), high school graduate (12 years of schooling), some college (13-15 years of schooling), and college degree or more (16+ years of schooling). A respondent experiences age homogamy if they marry within their same age category, following Geliseen (2004): 20 years old and younger, 21-25 years old, 26-30 years old, 31-

35 years old, 31-35 years old, 36-40 years old, and over 40 years old¹. A marriage is considered educationally heterogamous if the respondent and their spouse have different levels of educational attainment at the time of remarriage and age heterogamous if the respondent and spouse are in different age categories when remarried.

IV. Independent Variables

I will control for a variety of characteristics which have been linked to the chances of marriage and remarriage: first marriage homogamy or heterogamy on age and educational attainment; family structure; religion; race/ethnicity; number of siblings; mother's education; and residential status; educational attainment; employment status; poverty status; cohabitation status (lagged); and the presence of children in the household.

V. Expected Findings

My first research question looks at the impact of educational attainment and age on the likelihood of remarriage. I expect that educational attainment will have a strong, positive effect on the odds of entering a second marriage, especially for men. Previous studies have shown that well-educated, well-socioeconomically positioned men are more likely to remarry (e.g., DeGraaf and Kalmijn 2003) and that the results for women tend to be mixed (Thornton 1977; Wolf and McDonald 1979; Koo et al. 1984). However, Smock (1990) shows a positive effect of education on remarriage. Age, however, has less ambiguous effects. Due to a more constricted marriage market at later ages, I expect that men and women who divorce or experience first marriage at earlier ages are less likely to remarry than those who do so earlier. Furthermore, I expect that older individuals who do marry are more likely to do so heterogamously by age and educational attainment.

My second research question focuses on the degree of educational and age homogamy in second marriages. I expect that the level of heterogamy in second marriages will be higher than that in first marriage and will vary across several characteristics. Specifically, I hypothesize that the most and least

¹ Janssen (2002) defends this age categorization by arguing that, on average, people in one age group will be more homogeneous whereas age differences increase when age categories are further apart. Thus, this roughly approximates selection on age in marriage.

educated men and women (e.g., Gelissen 2004), older individuals (e.g., Bumpass et al. 1990), and people with children (e.g., Petronio and Endres 1985) are more likely to enter age and educationally heterogamous second marriages.

My third research question emphasizes potential education-age tradeoffs in remarriage. Here, the effect of restricted remarriage markets may be most poignant. Specifically, I expect that men and women who remarry and do not form both educationally and age homogamous second marriages are likely to have heterogamous marriages on both characteristics. Thus, I expect that men and women who do not marry someone similar to themselves by age and education are likely to marry down in age and education in order to form a remarriage.

VI. Conclusion

Divorce and remarriage have become increasingly commonplace in the United States, yet our knowledge about who remarries and how they remarry remains incomplete. This is unfortunate, considering the importance of assortative mating in stratification, martial satisfaction, martial stability, and other outcomes. Several researchers have indicated that the characteristics of marriage markets and preferences can have a substantial impact on partnering (e.g. Lichter et al. 1991, 1992, 1995; Lloyd and South 1996; Blau et al. 2000), but how these factors affect partner choice in second marriages remains unknown. In this study, I consider this question by concentrating on age and educational assortative mating in second marriages and marital sorting across both characteristics. This paper addresses a major hole in an important aspect of family formation by focusing on who marries whom in second marriages.

VII. References

- Amato, Paul R. 2000. "The Consequences of Divorce for Adults and Children." *Journal of Mariage and the Family*. 62: 1269-1287.
- Bergstrom, Theodore C. and Mark Bagnoli. 1993. "Courtship as a Waiting Game." *Journal of Political Economy*. 101: 185-202.
- Blau, Peter M. 1977. Inequality and Heterogeneity. New York: Free Press.
- Blau, Peter M., Terry C. Blum and Joseph E. Schwartz. 1982. "Heterogeneity and Intermarriage." *American Sociological Review*. 47: 45-62.
- Blossfeld, Hans-Peter and Andreas Timms, eds. 2003. *Who Marries Whom? Educational Systems as Marriage Markets in Modern Societies*. Dordrecht. The Netherlands: Kluwer Academic Publishers.
- Bumpass, Larry J., James A. Sweet, and Teresa Martin. 1990. "Changing Patterns of Remarriage." Journal of Mariage and the Family. 52: 747-756.
- Cherlin, Andrew J. 1978. "Remarriage as an Incomplete Institution." *American Journal of Sociology*. 84: 634-651.
- Cherlin, Andrew J. and Frank F. Furstenberg. 1994. "Stepfamilies in the United States: A Reconsideration." *Annual Review of Sociology*. 20: 359-381.
- Coleman, Marilyn, Lawrence Ganong, Mark Fine. 2000. "Reinvesting Remarriage: Another Decade of Progress." *Journal of Marriage and the Family*. 62: 1288-1307.
- Dean G. and D.T. Gurak. 1978. "Marital Homogamy the Second Time Around." *Journal of Marriage and the Family*. 40: 559-570.
- DeGraaf, Paul M. and Matthijs Kalmijn. 2003. "Alternative Routes in the Remarriage Market: Competing-Risk Analyses of Union Formation after Divorce." *Social Forces*. 81: 1459-1498.
- England, Paula and George Farkas. 1986. Households, Employment and Gender. New York: Aldine.
- Fernandez, Raquel and Richard Rogerson. 2001. "Sorting and Long-Run Inequality." *Quarterly Journal of Economics*. 116: 1305-1341.
- Gelissen, John. 2004. "Assortative Mating after Divorce: A Test of Two Competing Hypotheses Using Marginal Models." *Social Science Research*. 33: 361-384.
- Jacobs, J.A. and F.F. Furstenberg. 1986. "Changing Places: Conjugal Careers and Women's Marital Mobility." *Social Forces*. 64: 714-732.
- Kalmijn, Matthijs. 1998. "Intermarriage and Homogamy: Causes, Patterns, Trends." *Annual Review of Sociology*. 24: 495-421.
- Kalmijn, Matthijs and Henk Flapp. 2001. "Assortative Meeting and Mating: Unintended Consequences of Organized Settings for Partner Choices." *Social Forces*. 79: 1289-1312.
 Koo, Helen, C.M. Suchindran, and Janet D. Griffith. 1984. "The Effects of Children on Divorce and

Remarriage: A Mulitivariate Analysis of Life Table Probabilities." *Population Studies*. 38: 451-471.

- Kremer, Michael. 1997. "How Much Does Sorting Increase Inequality?" *Quarterly Journal of Economics*. 112: 115-139.
- Lampard, Richard and Kay Peggs. 1999. "Repartnering: The Relevance of Parenthood and Gender to Cohabitation and Remarriage among the Formerly Married." *British Journal of Sociology*. 50: 443-465.
- Lichter, Daniel T. 1990. "Delayed Marriage, Marital Homogamy and the Mate Selection Process Among White Women." *Social Science Quarterly*. 71: 802-811.
- Lichter, Daniel T., Felicia B. LeClere and Diane K. McLaughlin. 1991. "Local Marriage Markets and the Marital Behavior of African American and White Women." *American Journal of Sociology*. 96: 843-867.
- Lichter, Daniel T., Diane K. McLaughlin, George Kephart and David J. Landry. 1992. "Race and the Retreat From Marriage: A Shortage of Marriageable Men?" *American Sociological Review*. 57: 781-799.
- Lichter, Daniel T., Robert N. Anderson and Mark D. Hayward. 1995. "Marriage Markets and Marital Choice." *Journal of Family Issues*. 16: 412-431.
- Lloyd, Kim M. and Scott J. South. 1996. "Contextual Influences on Young Men's Transition to 3 First Marriage." *Social Forces*. 74: 1097-1119.
- Loughran, David S. 2002. "The Effect of Male Wage Inequality on Female Age at First Marriage." *The Review of Economics and Statistics*.87: 237-250.
- Mare, Robert D. 1991. "Five Decades of Educational Assortative Mating." *American* Sociological Review. 56:15-32.
- Mott, Frank L. and Sylvia F. Moore. 1983. "The Tempo of Remarriage among Young American Women." *Journal of Marriage and the Family*. 41: 427-436.

Ni Brolchain, M. 1988. "Changing Partners: A Longitudinal Study of Remarriage." *Population Trends*. 54: 27-34.

Oppenheimer, Valerie K. 1988. "A Theory of Marriage Timing." *American Journal of Sociology*. 94: 563-591.

. 1997. "Women's Employment and the Gain to Marriage: the Specialization and Trading Model." *Annual Review of Sociology* 23:431-53.

Qian, Zhenchao. 1998. "Changes in Assortative Mating: The Impact of Age and Education, 1970-1990." *Demography*. 35: 279-292.

Qian, Zhenchao and Samuel H. Preston. 1993. "Changes in American Marriage, 1972 to 1987:

Availability and Forces of Attraction by Age and Education." *American Sociological Review*. 58: 482-495.

- Schwartz, Christine R. and Robert M. Mare. 2005. "Trends in Educational Assortative Marriage From 1940 to 2003." *Demography*. 42: 621-646.
- Smits, Jeroen, Wout Utless, and Jan Lammers. 1998. "Educational Homogamy in 65 Countries: An Explanation of Differences in Openness Using Country-Level Explanatory Variables." *American Sociological Review*. 63: 264-285.
- Smock, Pamela J. 1990. "Remarriage Patterns of Black and White Women: Reassessing the Role of Educational Attainment." *Demography*. 27: 467-473.
- Spanier, Graham B. and Paul C. Glick. 1980. "Paths to Remarriage." Journal of Divorce. 3: 283-298.
- Sweeney, Megan M. 1997. "Remarriage of Women after Divorce: The Role of Socioeconomic Prospects." *Journal of Family Issues*. 18: 479-502.

Whyte, M.K. 1990. Dating, Mating, and Marriage. Aldine de Gruyter: New York.

Wu, Zheng and Chritoph M. Schimmele. 2005. "Repartnering After First Union Disruption." *Journal of Marriage and Family*. 67: 27-36.