Gender Differentials in Intermarriage Among Sixteen Race and Ethnic Groups

Jerry A. Jacobs¹,² and Teresa G. Labov¹

This paper examines gender differences in out-marriage rates in the United States among 16 race and ethnic groups. Among most groups of Asian Americans, females are more likely to marry whites than are their male counterparts, the reverse of the pattern among African Americans discussed by Merton (1941). We find some Hispanic-American groups in both camps. We explore whether the greater contact between white U.S. military personnel in Asian countries explains the pattern of Asian white marriages. We also introduce a new statistical approach that facilitates comparisons across multiple race and ethnic groups. Data from the 1% sample of the 1990 Census are analyzed in this study.

KEY WORDS: intermarriage; gender; theory; minority groups.

Marriages between Asian-American women and white men are quite common in the United States, more common than marriages between Asian-American men and white women. However, the opposite pattern—disproportionate out-marriage by men—is characteristic of African Americans. This paper seeks to assess commonalities by gender in the intermarriage experiences of 16 groups, including African Americans, four groups of Hispanic Americans, and six groups of Asian Americans with data from the 1990 Census. By simultaneously examining intermarriage patterns among many groups, we are able to assess whether the predictions of specific theories are common to most, if not all, minority groups.

¹Department of Sociology, University of Pennsylvania, Philadelphia, Pennsylvania.
²To whom correspondence should be addressed at Department of Sociology, University of Pennsylvania, 3718 Locust Walk, Philadelphia, Pennsylvania 19104-6299; e-mail: jjacobs@sas.upenn.edu.
It is clear that the historical, economic, and cultural experiences of minority groups differ widely, and that no single theory is capable of accounting for all features of the intermarriage patterns of all groups. A comprehensive appraisal of intermarriage in the United States would have to draw on a wide range of sociological perspectives as well as insights from other disciplines. Nonetheless, it is important to assess whether the sociological theories most commonly discussed are general theories that apply widely across race and ethnic groups, even if important unique features of the experiences of individual groups remain unaccounted for.

This paper has three specific objectives. First, we test Merton's explanation for gender differentials in intermarriage simultaneously across 16 race and ethnic groups. Second, we develop and test two predictions derived from Wilson's discussion of race and class. And third, we adjust for the potentially confounding effects of the war-bride experience especially as it affects Asian white intermarriages.

### MERTON'S EXCHANGE THESIS

Even after 60 years, Merton's thesis remains a central point of debate among students of intermarriage (Kalmijn, 1998). It is a testament to the power and clarity of Merton's insights that they continue to stimulate research in this area. A number of recent studies indeed claim to reaffirm Merton's conclusions, although they do so only by considering one minority group (e.g. Kalmijn, 1993) or by ignoring the issue of gender disparities (Qian, 1997).

Merton (1941) used the case of gender differences in African American/white intermarriage rates in order to develop a theory of intergroup marriage processes. While interracial marriages were rare, marriages involving African-American grooms and white brides were more frequent than were marriages between African-American brides and white grooms. Merton explained this difference by noting that an African-American man could offset a lower racial caste position by obtaining a relatively high status occupation, and as a result increase his marriageability to a white woman. Even those with adequate resources found this option severely limited by the personal, institutional, and legal racism of the day. Yet this possibility was even less available to an African-American woman because of the limits on women's career options. Marriage was viewed as an exchange, and some African-American men were in a position to offer an advantageous exchange with white women because of their income and occupation, advantages rare at the time for African-American men but rarer still for African-American women. Thus, "marrying up" was more socially feasible for African-American men than for their female counterparts (see also Davis, 1941). The surplus out-marriage of African American men has persisted during the 60 years since Merton analyzed this phenomenon (Heaton and Albrecht, 1995; Heer, 1974; Monahan, 1976; Porterfield, 1978; Roberts, 1994; Schoen, 1995; Spickard, 1989; Tucker and Mitchell-Kernan, 1990), despite major changes in American race relations and the role of women in society.

However, among most Asian-American groups, Asian women are more likely than men to marry outside their group, as shown in studies of both marriage records and census data (Glenn, 1986; Labov and Jacobs, 1986; Kitano et al., 1984; Kitano and Yeung, 1982; Kitano and Chai, 1982; Kikumura and Kitano, 1973; Lee and Fernandez, 1998; Leon et al., 1995; Spickard and Fong, 1995; Sung, 1990). A second notable feature of Asian-American marriages is that both men and women marry out of their group at a remarkably high rate. In both respects, Asian Americans differ markedly from African Americans.

The intermarriage patterns of various Asian-American groups appear to conflict with Merton's thesis as a general explanation that applies across all minority groups. Kalmijn (1993) adduced evidence in support of Merton's exchange explanation of marriages between African Americans and whites, while others question its usefulness, even for the African American experience (Heaton and Albrecht, 1996). Some have explored the exchange perspective and found it useful among Hispanics (Anderson and Saenz, 1994; Cready and Saenz, 1997; Gilbertson et al., 1996; Schoen et al., 1989), Native Americans (Sandefur and McKinnell, 1986) and Asian Americans (Hwang et al., 1995).

Qian (1997) finds that the exchange pattern is consistent with the data on intermarriages among African Americans, Hispanic, and Asian Americans (each considered as a single group), but does not attempt to explain the divergent gender patterns across these groups. In other words, the exchange thesis predicts a male surplus among those who intermarry, yet among Asian Americans, women are more likely to marry out. Qian does not address this puzzle. Moreover, Hwang et al. (1995) showed that key aspects of Merton's thesis do not hold for Asian Americans.

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3For example, the human capital theory of wage differentials has been applied to many race and ethnic groups, although it by no means accounts for all of the differences across groups. We seek to assess whether theories of intermarriage are similarly general.

4It is a testament to the power and clarity of Merton's insights that his ideas continue to stimulate research in this area.
New concepts of status resources have developed since Merton wrote his essay on intermarriage, but these do not necessarily lead to different predictions. Access to cultural capital (Bourdieu, 1985) varies across groups, reflecting different successes of ethnic groups in accumulating economic capital and translating it into education and its cultural and social correlates (Coleman, 1990; Portes, 1998). While the substantive meaning of education has been broadened by Bourdieu, and to a lesser extent by Coleman, the implications of these new perspectives on education do not alter the fundamental premise of Merton’s thesis.

In its most general terms, Merton’s exchange thesis holds that social and economic resources are needed to trade off against the social disadvantages of race and ethnicity. In other words, those minority group members with significant economic or cultural resources are more likely to marry their way into white society, since these resources allow them to compensate for the social disadvantage that race or ethnicity represents to many in the dominant group. These resources also place people in the same physical locations, whether board room or locker room or class room, so that people can meet each other, a necessary precursor to marriage of any sort. Merton’s thesis should hold just as well whether it is economic resources or social resources (such as cultural capital) that are used in the exchange. Thus, we posit that cultural capital does not lead to different predictions regarding the rate of intermarriage unless there are sharp differences between the economic and cultural capital of men and women in a group.

Differences across minority groups in middle-class membership, with its acquisition and use of cultural capital, may explain some of the differences in the rates of African-American and Asian-American intermarriage with the majority group. But why are there also gender differences across groups, since women hold fewer economic resources than men in each case? Indeed, compared to their male counterparts, African-American women hold a relatively favorable economic position and earn more college degrees, which would lead to the expectation that their relative out-marriage chances would be among the highest of any minority group. Yet in fact African-American women have the lowest rate of out-marriage, in both absolute terms and relative terms, compared to their male counterparts, of any of the groups we examine.

In this paper, we test the generality of Merton’s explanation of gender differences in intermarriage. Merton’s thesis predicts disproporionate male intermarriages for all minority groups in which men have more economic resources than women. Since men earn more than women in all minority groups, Merton’s thesis should apply across the board.

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various race and ethnic groups show less evidence of a racial and ethnic divide than those involving individuals with fewer social resources.

WAR BRIDES

Gender differentials in intermarriage may reflect unique aspects of the immigration experiences of particular groups. We believe that it is important to distinguish the war-bride experience from other patterns of intermarriage. A number of analysts have examined intermarriages involving Asian brides and U.S. military personnel. Tinker (1982) suggests war brides may account for the “disproportion of females among the Japanese who intermarried in the 1940s, 1950s, and 1960s (for the continental United States, 72.2%, 94%, and 75.3%)” (Tinker, 1982:71). However, he does not try to estimate directly the size of the war-bride population but rather tries to infer it by examining time trend data.

Kim (1972) reports there were 55,456 Japanese and 13,904 Korean war-brides from 1945 to 1970 using data from the annual reports of the Department of Immigration and Naturalization. Lee and Yamanaka (1990) using 1980 PUMS data find over 60% of foreign-born Japanese-American women are intermarried, compared to only 25% among their U.S. born counterparts. Saenz et al. (1994) also examined the war-bride group, but did not consider the impact of excluding this group on the sex ratio of the remaining intermarriages. In another paper (Hwang et al., 1997) they showed that contextual features (group size and sex ratio) influence marital choice, but they do not explain the gender differentials in intermarriage.

This study seeks to ascertain whether there is more consistency in the sex differential in intermarriage once the war-bride experience is taken into account. The war-bride pattern is clearly more significant for some Asian groups, such as Koreans, than for others, such as Chinese. This is another reason for considering each of the Asian groups separately.

DATA AND METHODS

The data consisted of a 1% sample of the 1990 Census. We selected all married heads of households and their spouses, which yielded 532,985 marriages. We also added 6294 marriages involving no household head in cases of multiple family households. We matched individuals based on their subfamily membership, marital status and age. For example, if a subfamily included a married man and a married woman and their ages were similar, we classified these individuals as married to each other. We believe these matches were as accurate as possible given the data limitations of the census. The inclusion of these couples makes little difference for our analysis, because of the small number of multiple family households (representing 1.2% of marriages in our sample). Moreover, intermarriage rates in single-family households were similar to those in multiple-family households, and did not differ for members of subfamilies.

We constructed a data file that included the attributes of both partners in the marriage on each record. Thus, each of the respondent’s characteristics as well as all of his or her partner’s attributes are available for analysis. We excluded “unmarried partners” of the head of household so that our data set consists of legally sanctioned marriages. We excluded cases of single sex couples who were listed as married. (Although this is not currently a legal status, it nonetheless was reported by some individuals.)

In this paper, we follow Merton’s dictum that intermarriage consists of marriage across any socially salient boundary (Merton, 1941). Our objective was to compare the experiences of diverse groups in order to test the generality of Merton’s theory of intermarriage. We used data on race and Hispanic origin to classify individuals. Assignments were made on the basis of race except in the case of Hispanics, where Hispanic origin is the decisive criterion. For example, individuals were classified as Puerto Rican regardless of whether they indicated their race as white, black or any other. Individuals classified as “white” represent non-Hispanic whites.

The following Asian/Pacific Island groups were included in the study: Chinese, Filipinos, Asian-Indians, Japanese, Korean, Pacific Islanders, Vietnamese, and Other South-East Asians (see Appendix Table A1 for details on the criteria used to classify individuals into these categories).6 We grouped Hispanics into four groups: Puerto Ricans, Cubans, Mexicans, and Other Hispanics. The other race and ethnic categories include: Non-Hispanic White, African American, Native American, and Other.

We defined “war brides” as the set of foreign born women married to U.S. born veterans or active military personnel. This definition includes some women who met and married military spouses after living in the United States, and U.S. born female veterans (such as nurses). For this reason, we refer to this group as “possible” war brides. The 1990 Census no longer includes data on age at marriage, so that it is not possible to determine whether a given marriage predates immigration.

Some studies of intermarriage have used log-linear models to adjust for the size of groups, and to control for imbalances in the sex ratio (for

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6We use the generic terms “Asian” and “Asian American” to include Pacific Islanders. This helps us avoid impossibly awkward sentences. Moreover, since data on Pacific Islanders is specifically presented, any generalization about the larger group can be considered for this specific ethnic group.
example, Kalmijn, 1993; Qian, 1997). The evidence does suggest that
imbalanced sex ratios do influence the tendency to marry outside one's group
(for example, McCaa, 1993). We focus on the substantive reasons why the
sex ratio is imbalanced by examining the effect of the war-bride population
on intermarriage. The motives and constraints facing couples who marry
abroad (Hwang and Saenz, 1990), or who immigrate because of marriage,
are likely to differ from other cases of intermarriage. Thus, in our analyses
we separate marriages involving U.S. born brides and grooms from other
marriages.

We estimate logistic regression equations for each minority group which
predict the odds of marrying a white partner, relative to marrying an individual
within one's own race or ethnic group. This analysis allows us to determine
whether minority men and women have the same chances of marrying
whites when relevant factors, such as country of birth, military service status,
age and education, are taken into account. Logistic regression controls for
the distribution of the “marginals” in the intermarriage table, and thus for
the relative size of each group.

This analytic strategy is useful in several respects. First, it enables us to
examine the experiences of a large number of groups. Most log-linear studies
group all Hispanics into a single group and all Asians into a single group
because there are not enough out-group marriages between all combinations
of minority groups to allow for an analysis of more detailed groups. For
example, in the full cross-tabulation of husbands and wives in a 16 × 16
intermarriage table, there are not enough marriages between Puerto-Ricans
and Vietnamese for each combination of educational levels to make such an
analysis feasible.

Our strategy is to focus on marriages between each minority group and
whites. Since whites make up such a large fraction of the population, each
group contracted enough marriages to whites to make it possible to include
it in the analysis.

A second advantage of this approach is that we can add a relatively
large number of independent variables to the logistic-regression analysis.
Here again, log-linear models have been limited in the substantive detail by
the rapidly dwindling number of cases. Most focus on the education of the
partners, but do not explore a range of predictor variables. We are thus able
to broaden the substantive value of the results by increasing the number of
groups considered in the analysis, and also by extending the number and
scope of predictor variables.

Finally, focusing on marriages between minorities and whites enables
a clearer test of the Merton exchange thesis. If marriages among minority
groups are included, one must decide the rank-ordering of each group. By

focusing on whites versus minority groups taken one at a time, the issue of
exchange is simplified into a minority versus white exchange situation.

Education is probably the clearest case of a resource that spouses bring
with them to marriage, since educational attainment is often complete before
a marriage begins. We conducted analyses to determine whether the gender
differences in intermarriage are accounted for by the educational levels of
men and women within particular minority groups. For example, if Korean
women are more likely to marry whites than are Korean men, is this due to
relatively high educational attainment on the part of Korean women? We
also take into account the respondent's country of birth (U.S. or foreign
born), their veteran's status, and their age. Descriptive statistics for each
group are available as Appendix Table A11.

We also explored the exchange thesis in more detail by sex, again using a
multivariate logistic analysis. This approach allows us to examine whether in-
terramarriage patterns conform to the exchange model from the point of view
of each side of the exchange. For example, we can assess whether Japanese
women who marry white men are more educated than Japanese women in
homogamous marriages. We can also assess whether their white husbands
have lower education than those in homogamous marriages. This same
approach can be applied to Japanese husbands, and to white husbands and
wives. We will thus obtain a rich assessment of the exchange thesis, from
multiple viewpoints, for marriages between non-Hispanic whites and each
of the 15 minority groups included in this study.

The analyses presented here suffer from all of the limitations inher-
ent in studies that rely on census data. It is a study of prevalence, not in-
cidence. Divorce, remarriage, and death affect the number of marriages
and intermarriage observed at any one point in time (Aguirre et al., 1995).
However, we feel that these commonly recognized issues may be some-
what less problematic in our study than for other analyses. Our focus is on
the pattern of gender differences within groups rather than disparities be-
tween groups. Consequently, while divorce is more common in intergroup
marriages, this pattern should affect marriages on both sides of the gen-
der differential, and thus may tend to have offsetting effects. For exam-
ple, the number of marriages involving African-American men and white
women is surely affected by divorce, but so too is the number involving
African-American women and white men. In short, the gender differential
is somewhat less vulnerable to this difficulty than is the estimate of the true
rate of intermarriage for each group. Nonetheless, the advantages of the
Census data—a nationally representative sample, a large number of cases,
and the ability to compare many groups—outweigh the limitations of this
approach.
RESULTS

Our analysis focuses on gender differences in the proportion out-marrying for each race and ethnic group. Table I presents out-marriage rates for each of the 16 groups for men and women, and indicates the percentage-point difference between the sexes. These data document some of the remarkable variation in intermarriage rates observed across groups in the United States. Native Americans have the highest out-marriage rate, one that exceeds 56% for both men and women. The high intermarriage rate among Native Americans no doubt reflects the prevalence of multiple ancestry among this group that facilitates marriages between groups. Census data that classify individuals into single race or ethnic categories suppress evidence of mixed ancestry (Labov and Jacobs, 1998).

Non-Hispanic whites have the lowest rate of intermarriage, a pattern some have attributed to a strong preference for endogamy among whites (Schoen and Woldredge, 1989). In fact, a low rate of intermarriage among non-Hispanic whites is inevitable given that they constitute an overwhelming majority of the population. African-American women have the lowest out-marriage rate of any female minority group. Among minority-group males, only Korean-American men have a lower rate of out-marriage than do African-American men.

Gender differences in intermarriage across groups also exhibit remarkable variation. For most groups with Asian ancestry, women’s out-marriage far surpasses that of their male counterparts. Over one third of Korean women married non-Korean men, a rate almost 30% higher than was observed for Korean men. For Japanese, Vietnamese, and South East Asian women, a substantial surplus vis-a-vis their male counterparts is also evident. Chinese women’s excess out-marriage would have to be judged “modest,” while in one Asian case—Asian-Indians—men out-married more than do women. As we noted above, African American men are more likely to marry individuals from other race and ethnic groups than are African-American women (6.11% of married African American men versus 2.43% of married African-American women).

Among the four Hispanic groups presented in Table I, two—Mexican Americans and Puerto Ricans—exhibit almost no gender differential in intermarriage. The small male majority of intermarriages evident for Cuban Americans disappears in the subsequent analyses (see Table I, column 4), and later changes direction. For the heterogeneous case of “Other Hispanic Americans” there is greater intermarriage by females. The Hispanic case is complex because Hispanics share ethnic but not necessarily racial
for members of most minority groups. This generalization is supported in 12 of 15 cases for men and 11 of 15 cases for women. However, the gender differential by no means disappears among marriages involving college-educated minority group members. The gender gap in intermarriage remains statistically significant in 11 of the 15 cases for college educated, while for the non-college educated the gender gap was statistically significant in 12 of 15 cases. Nor is it the case that the gender gap narrows among the college educated. In 11 of the 15 cases, the gender gap in marriages to whites for college educated is larger than it is for those with less than a college degree.

Among Asian-American college graduates, women continue to comprise the majority of those married to non-Hispanic whites. For example, for Japanese males over 20 percent of college graduates marry non-Hispanic whites; for females, over 38 percent marry whites. Among African-American college graduates, in contrast, marriages to whites are more likely for men than for women (630% of men are married to non-Hispanic whites, versus 388% for African-American women). Thus, while higher socioeconomic status results in more intermarriages for most groups, the gender differentials remain. Among African Americans, the gender gap among the college educated continues to favor men and among Asian groups it continues to favor women.

Gender differences in marriages to non-Hispanic whites among minority groups in the United States do not fall into a common pattern, despite our best efforts to find consistency underlying the diversity that appears in overall rates of intermarriages. In general, Asian groups exhibit a female majority in marriages to non-Hispanic whites, African Americans exhibit a male majority, and Hispanic groups vary, depending on their country of origin and racial identification. Native-American women are slightly more likely to marry outside their group than are their male counterparts, but this differential disappears in marriages to non-Hispanic whites for individuals under age 40.

The results presented thus far control directly for foreign-born status and for whether one of the partners participated in the military. We conducted a multivariate analysis of intermarriage that enables us to see whether the female advantage in intermarriage can be accounted for by the attributes of brides and grooms in specific groups. As noted above, we simplify the intermarriage process by focusing on marriages between minority groups and whites. Marriages outside one's group to members of other minority groups are not included in this analysis. The analysis thus involves a dichotomous outcome: marriages to whites, coded as 1, and within group marriages, coded as 0.
identification, and thus the Hispanic case does not line up neatly with either the African-American or the Asian-American experience. The case of Native Americans also runs counter to the expectation that minority men predominate in marriages with the majority group. Native-American women marry outside the group at a slightly higher rate than do their male counterparts.

We narrow the focus in the fourth column of Table I by examining only marriages to non-Hispanic whites for each of the 15 other groups. Substantively, the results generally parallel those presented in the first panel, except for Puerto Ricans and Cuban Americans, where the small gender differential in intermarriage is reversed.

We should note the extent of marriages of Asian Americans to other Asian Americans of different ethnic backgrounds (results not reported in tabular form). Of all Asian Americans in our sample who married outside their group, 58.8% of men and 75.4% of women married non-Hispanic whites. The great majority of the rest married members of other Asian-American groups, which may represent the emergence of a "pan-Asian" ethnicity in the United States (Espiritu, 1992; Kibria, 1995). Among U.S. born individuals under age 40, 60.9% of Asian-American men who married outside their group, and 65.5% of women, married whites. Thus, the majority of Asian-American marriages are to whites, although the odds of intermarriage favor other Asian Americans (given the small fraction of the population these groups represent).

Our next step was to separate marriages possibly involving war brides and grooms from other marriages. The last column in Table I presents the percentages of marriages to non-Hispanic whites, excluding possible war marriages, for each of the 15 groups. Excluding marriages involving those with U.S. military experience and foreign spouses substantially reduces the female share of intermarriages previously observed among nearly all groups of Asian women, but still remains a majority. For Korean Americans, women are 6% more likely to intermarry (down from 30 previously). For the Vietnamese, the gender differential in intermarriage all but disappears. The remainder of the groups exhibit a small gender gap in intermarriage favoring females of between 2 and 7% points (with the Asian-Indians remaining an exception to this pattern).

For some Asian groups, a very substantial fraction of women who intermarried were probably war brides (results not reported in tabular form). Nearly three out of four Korean women who married a non-Korean man were born in Korea. It is therefore misleading to view the figures in previous columns in Table I as an "out-marriage rate" because the base really includes women born in Korea as well as Korean-American women. The fraction of all intermarriages involving possible war brides is also very high among the following groups: South East Asians (63.7%), Vietnamese (58.3%), Filipino (51.8%), Japanese (45.1%), Chinese (25.6%) and Asian-Indian (22.1%). The inclusion of these possible war brides in the calculation of gender differences clearly results in an inflated estimate of Asian women’s share of intermarriages.

The evidence gleaned from the fourth and fifth columns of Table I indicates that much of the distinctive pattern of Asian-American intermarriages involves specific immigration processes. Many Asian women came to the United States married, or having already established a relationship with a potential husband. In other cases, such as that of immigrants from India, men were more likely than women to immigrate to the United States and were subsequently more likely to intermarry. The differences between Asian groups in marriages to whites thus has much to do with the particular immigration history of each group.

We further specify the extent of gender differentials in intermarriage by focusing on U.S. born individuals under age 40. In this way we examine marriages that are relatively recent in origin, and we remove the complicating factor of immigration from the analysis. (Results not reported in tabular form.) The disproportionate female share of intermarriages among Asian American groups does not disappear in this analysis. The small numbers of cases suggest that caution is in order before making inferences about the magnitude of these differentials. Nonetheless, there is a consistent pattern of excess female marriages to non-Hispanic whites for the U.S. born under age 40 for Chinese, Filipino, Japanese, and Pacific Islanders—the same groups that exhibited greater female intermarriage in Table I. For several groups—Asian-Indians, Koreans, Vietnamese, South East Asians, and Other Non-Hispanics—there are too few U.S. born individuals for these data to be particularly meaningful.

Among U.S. born individuals, Mexican-American, Puerto Rican (born on the mainland) and especially Cuban-American men marry non-Hispanic whites at a higher rate than do women from these groups. In other analyses (not shown) we found that the disproportionate male share of intermarriages of Hispanics to non-Hispanic whites is concentrated among those Hispanics who report their race as "black" or "other." Among U.S. born Hispanics who identify themselves as whites, there was no male excess in intermarriage. The interaction of race and ethnicity among Hispanics makes this a complicated case that requires further attention.

We examine the Wilson thesis by separating marriages involving college graduates from other marriages. Results are presented in Table II. The evidence clearly indicates that education increases the chance of intermarriage
In Table III, we present the results of logistic regression equations predicting the log-odds of marriage to whites for each minority group. The key variable of interest is the gender difference in the odds of marriage to whites. The results indicate that female minority group members are more likely to marry whites than their male counterparts. Positive coefficients indicate that women are more likely to marry whites than men. The first model includes just the demographic variables; the second model includes the demographic variables and foreign-born status and military service, controlling for education. The third model includes all of the above controls. The pattern for African-American women is different from that for all other minority groups. For African-American women, men are three times as likely to marry a white partner than are women. The pattern is consistent across all minority groups. The exception is the Vietnamese American group, where women are more likely to marry a white partner. The results for this group are consistent with the results for Filipino men. The pattern for Filipino men is different from that for all other minority groups. For Filipino men, men are three times as likely to marry a white partner as are women. The pattern is consistent across all minority groups. The exception is the Vietnamese American group, where women are more likely to marry a white partner. The results for this group are consistent with the results for Filipino men.
Table IV. Summary of Logistic Regression Results for Effect of Education and Partner’s Education on Intermarriage

<table>
<thead>
<tr>
<th>Minority group race</th>
<th>Education</th>
<th>White men</th>
<th>Education</th>
<th>White men</th>
<th>Education</th>
<th>White men</th>
<th>Education</th>
<th>White men</th>
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</thead>
<tbody>
<tr>
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<td>Parameter</td>
<td>Odds ratio</td>
<td>Parameter</td>
<td>Odds ratio</td>
<td>Parameter</td>
<td>Odds ratio</td>
<td>Parameter</td>
<td>Odds ratio</td>
</tr>
<tr>
<td>African American</td>
<td>0.328</td>
<td>1.39</td>
<td>0.505*</td>
<td>1.91</td>
<td>0.228**</td>
<td>1.56</td>
<td>0.324**</td>
<td>1.93</td>
</tr>
<tr>
<td></td>
<td>(0.07)</td>
<td>(0.07)</td>
<td>(0.07)</td>
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<td>(0.07)</td>
<td>(0.07)</td>
</tr>
<tr>
<td>Native American</td>
<td>0.169*</td>
<td>1.20</td>
<td>0.66**</td>
<td>1.63</td>
<td>0.26**</td>
<td>1.30</td>
<td>0.21</td>
<td>1.26*</td>
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<tr>
<td></td>
<td>(0.03)</td>
<td>(0.05)</td>
<td>(0.03)</td>
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<td>(0.03)</td>
<td>(0.03)</td>
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<tr>
<td>Other</td>
<td>0.799</td>
<td>2.07</td>
<td>0.469**</td>
<td>1.55</td>
<td>0.20**</td>
<td>1.31</td>
<td>0.859**</td>
<td>2.41</td>
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<td>(0.03)</td>
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</tr>
<tr>
<td>Asian American/</td>
<td>0.728</td>
<td>2.20</td>
<td>1.06**</td>
<td>1.64</td>
<td>0.76**</td>
<td>1.64</td>
<td>0.224**</td>
<td>1.23</td>
</tr>
<tr>
<td>Pacific Islander</td>
<td>(0.29)</td>
<td>(0.29)</td>
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<tr>
<td>Asian Indians</td>
<td>0.728</td>
<td>2.20</td>
<td>1.06**</td>
<td>1.64</td>
<td>0.76**</td>
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<td>0.75**</td>
<td>1.10</td>
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*p < .05 ** p < .01
CONCLUSIONS

Some Asian groups, such as Koreans, Japanese, Vietnamese, and Other South East Asians, exhibit extremely large female disproportion in out-marriage rates. These differentials are substantially inflated by the presence of war brides. When we removed marriages involving the foreign born and military spouses, the female share of intermarriages among Asian groups is substantially reduced. The same finding occurs when we restrict the analysis to marriages involving non-Hispanic white partners.

Yet even after this adjustment is made, Asian women typically continue to represent a majority of instances of intermarriage. This pattern remains the reverse of the African-American pattern, although the size of the gap between these two patterns is reduced. Thus our attempt at finding

commonalities in intermarriage patterns was not entirely successful. The Hispanic cases further complicate the search for a unifying principle for intermarriage. In the Cuban American case, women are more likely to marry non-Hispanic whites, while Mexican-American men are more likely to do so after immigration status has been controlled.

We introduced a logistic-regression approach to the study of intermarriage. By focusing on marriages to non-Hispanic whites, we dramatically simplify the intermarriage table, thus allowing for the inclusion of more groups and multiple independent variables. The standard log-linear models tend to be applied to highly aggregated groups and typically include only a single independent variable, such as education, in the analysis. The results presented here clearly indicate that within such diverse groups as Asians and Hispanics there are important variations in intermarriage patterns based on country of origin, immigration history and other factors. This approach also enables us to view intermarriage from the point of view of each party to the exchange.

We included immigration status, military service, education, and age in a multivariate analysis of marriages between minorities and whites. These results show that immigration status has a significance influence on the gender differential in intermarriage for a number of groups. However, the inclusion of education in the analysis does not significantly alter women's relative likelihood of marrying out for most groups.

Merton's exchange theory of intermarriage was developed to account for the fact that the majority of black-white intermarriages involved African-American men and white women. This pattern does not hold for the majority of Asian white marriages, even when appropriate adjustments are made. Nor do the experiences of the four Hispanic groups considered for this pattern. The case of Native Americans also fails to conform to the prediction of a male majority in out-marriage. We maintain that tests of Merton's thesis based solely on studies of marriages between African Americans and whites (e.g., Kalmijn, 1993; Schoen and Woolardge, 1989) must be weighed against the limited applicability of this pattern to most other minority groups, as our results, and those of others (e.g., Hwang et al., 1995), indicate. Nor does the exchange thesis perform well in identifying the subgroups among whites and minorities who are most likely to marry each other. Spouses tend to marry others with similar educational levels, whether they are marrying within or outside their group. Thus, educational homogamy (Kalmijn, 1998; Mare, 1991) is more consistent with the findings than is the exchange thesis.

The evidence indicates that intermarriage is more common among the middle class, as indexed by a college education. This finding is consistent

Schoen, Robert, John Wooldredge, and Barbara Thomas

Spickard, Paul R.

Spickard, Paul R., and Rowena Fong

Sung, Betty Lee

Tinker, John N.

Tucker, M. Belinda, and Claudia Mitchell-Kernan

Wilson, Thomas C.

Wilson, William J.
## APPENDIX

### Table AII. Characteristics of Race and Ethnic Groups by Gender

<table>
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<tr>
<th></th>
<th>Education</th>
<th>Male</th>
<th>Female</th>
<th>Male</th>
<th>Female</th>
<th>Male</th>
<th>Female</th>
<th>Male</th>
<th>Female</th>
<th>Male</th>
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<td></td>
<td>Foreign born</td>
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<td></td>
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<tr>
<td>Non-Hispanic White</td>
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<td>4.46</td>
<td>45.56</td>
<td>1.41</td>
<td>48.46</td>
<td>45.84</td>
<td>20.63</td>
<td>17.59</td>
<td>30.06</td>
<td>37.34</td>
<td>24.98</td>
<td>26.92</td>
<td>24.33</td>
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<td>5.75</td>
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<td>47.19</td>
<td>44.49</td>
<td>36.00</td>
<td>30.14</td>
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<td>29.42</td>
<td>23.66</td>
<td>26.02</td>
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<td>2.18</td>
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<td>2.61</td>
<td>44.17</td>
<td>41.19</td>
<td>33.12</td>
<td>32.29</td>
<td>29.76</td>
<td>33.15</td>
<td>26.96</td>
<td>27.17</td>
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<td>41.41</td>
<td>28.08</td>
<td>2.20</td>
<td>43.32</td>
<td>39.81</td>
<td>32.02</td>
<td>33.92</td>
<td>26.60</td>
<td>32.16</td>
<td>23.65</td>
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<td>37.88</td>
<td>9.79</td>
<td>14.46</td>
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<td>21.29</td>
<td>22.01</td>
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<td>40.15</td>
<td>29.23</td>
<td>30.12</td>
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<td>South East Asian</td>
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<td>99.85</td>
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<td>37.16</td>
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<td>2.51</td>
<td>2.53</td>
<td>41.93</td>
<td>39.98</td>
<td>31.30</td>
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<td>Cuban American</td>
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<td>89.48</td>
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<td>40.52</td>
<td>38.12</td>
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<td>Mexican American</td>
<td>48.21</td>
<td>45.95</td>
<td>28.28</td>
<td>0.69</td>
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<td>38.76</td>
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<td>30.94</td>
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<td>40.21</td>
<td>42.86</td>
<td>35.68</td>
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<td>39.90</td>
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With the view that college education promotes greater tolerance for differences in the workplace and family, this finding is also consistent with the view that education facilitates contact between members of different racial and ethnic groups in the United States (Wilson, 1994). We also found that educational differences reduce the impact of race on family outcomes, as well as the likelihood that African Americans remain isolated from other groups. This is consistent with the prediction we derived from Wilson's analysis, which is that educational attainment reduces the impact of race on family outcomes. We believe this analysis also provides important insight into the complex nature of the relationship between race and education. This is consistent with the view that education facilitates contact between members of different racial and ethnic groups in the United States (Wilson, 1994).
REFERENCES


Schoen, Robert, and John Woolfdrdgede 1989 “Marriage choice in North Carolina..”