Educational Assortative Mating and Homogamy among New Legal Immigrants to the United States

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Abstract

This paper uses data from the first wave of the New Immigrant Survey to analyze assortative marriage among immigrants recently admitted to legal permanent residence (LPR) in the U.S. We selected currently married respondents and estimated the probabilities that they will be married to spouses who have the same or higher levels of education. We distinguish between marriages that happened before and after arrival in the U.S. and marriages to U.S.-born spouses. Our models control characteristics like education, age at marriage, number of marriages, skin color, region of origin, religion, and basis for obtaining LPR. Preliminary results show that education has a strong positive effect on educational homogamy. We find that the likelihood of educational homogamy for women and men differs significantly by region of origin, religion, type of green card sponsorship, having married before migration, and being married to a U.S. Citizen.

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Analyzing patterns of marriage among immigrants has important implications for our understanding of the process of immigrant assimilation and incorporation. In the case of immigrant societies, the degree to which immigrants mate assortatively with regard to education and other socioeconomic characteristics –instead that by ethnic or national origin- can reflect the degree of social openness in the destination society which has important implications for their assimilation to the host society and a decreased socioeconomic inequality across generations (Chiswick and Houseworth 2011; Celikaskoy, et al. 2010). In general, a positive correlation in the education of two spouses is expected to have positive impacts on the socioeconomic status of families (Celikaskoy, et al. 2006). In the large body of literature on marriage patterns of immigrants, most studies document the degree to which immigrants marry within their ethnic or national group, a different literature explores assortative mating by education, and in the cases where they have explored educational assortative mating among immigrants, they have found educational homogamy to be correlated with years of schooling and immigrant generation (Celikaskoy, et al. 2010).

This paper uses data from the first wave of the New Immigrant Survey to analyze patterns of assortative marriage among immigrants who have recently obtained legal permanent residence (LPR) in the United States. The New Immigrant Survey (NIS) collects data on a nationally representative cohort of new legal immigrants to the U.S. The sampling frame for this study is based on the electronic administrative records compiled for new immigrants by the U.S. government. The NIS survey collected information on adult and child immigrants admitted to LPR in 2003, and it includes both newly-arrived immigrants with documents acquired abroad, and immigrants who were already in the U.S. but have adjusted their status to LPR. Interviews were conducted with adult immigrants and their spouses as well as the sponsor-parents of child immigrants. The data includes information on demographic background, family information, health and economic measures, housing environment and assistance received from others.¹ The adult sample frame consisted of 12,500 individuals, from which 8,573 interviews were completed, giving a response rate of 68.6%. For the analysis in this paper, we further limited the adult sample to currently married immigrants, excluding those marriages that did not survive due to death or divorce. And we distinguish between marriages that happened before and after arrival in the U.S. This gives us a final sample of 4,146 marriages.

Our main outcome of interest is educational assortative mating, so the dependent variable is a dichotomous measure that equals 0 if the spouse has lower education than the respondent, and it equals 1 if the respondent is married to someone with the same or more years of schooling. We control for respondent characteristics like, sex, education in years and whether they speak English well, age at marriage, total number of marriages, and skin color.² Given that we have some missing information for skin color we included a dummy variable that indicates whether skin color information is missing. We also include information on whether the couple married before migration and if the spouse is U.S. born. In addition to these controls, we include controls for the immigrant's region of origin and religion. And lastly, immigrants in the study have obtained LPR for a variety of reasons, our models include indicators for each one of them, the possible categories are: spouses of U.S. citizens or permanent residents, family sponsorship,

¹ For more information on the design and New Immigrant Survey design please refer to the project's website: nis.princeton.edu

 $^{^{2}}$ The skin color scale ranges from 0 to 10 with 0 representing albinism or the total absence of color and 10 representing the darkest possible skin.

employment, diversity, legalization, and refugee or asylum seeker status. Some descriptive statistics on these variables are presented in table 1 below.

We estimate logistic regression models for the probability of marrying someone of same or higher schooling controlling for the factors described above. Given the strong and highly significant coefficient for the sex variable in this model, we decided that in addition to the main model we would estimate separate models by sex in order to better understand the sources of sex differences in assortative mating among these recent legal immigrants. Results for the preliminary models are presented in tables 2 and 3 below. Our preliminary results suggest a positive association of education, measured as years of schooling with the probability of marrying a more educated spouse, which is consistent with existing findings. However speaking English well or very well is negatively associated -but this association disappears in our models with split samples by sex. In the pooled sample models it appears that females are less likely to marry a partner that is better educated, this effect is strong in magnitude and highly significant. In the pooled models we also find that those who married before migrating were more likely to marry someone of same or higher schooling than themselves, while marrying a spouse born in the U.S. has the opposite effect. Regarding region of origin, the pooled sample shows no significant relationships. And, only a couple of the religion variables had significant effects, being catholic is associated with a higher likelihood of marrying a better educated spouse, while the opposite is true for Hindus.

When we consider the models by sex, we can immediately find important differences in determinants of assortative mating by gender, education is the only factor positively related to males' probabilities of marrying someone of same or higher education, while age at marriage, coming from Europe or Central Asia, being Hindu, and receiving either spouse or employment sponsorship to obtain a green card are all associated with a lower likelihood of educational homogamy. In contrast, for women, reasons for obtaining a green card had no significant effects. There were positive and significant effects for women associated to their education, having married before migration, coming from either Europe or Latin America, and being catholic; while the negative effects are associated to marrying a U.S. born spouse. Further research will attempt to further explain these differences.

Though some of the variation added by ethnicity should already be accounted for in our controls for region of origin, in continuing with this paper's analysis, we would like to also add controls for ethnic/racial homogamy in these marriages. We want to test whether the desire for an ethnically homogamous marriage would be ahead of the desire for an educationally homogamous one, so that immigrant's preferences regarding the educational characteristics of a potential spouse may be mediated by their preferences regarding partner's ethnicity. In addition, we will test for interaction effects between levels of education and region of origin/ethnicity.

| | | Standard | |
|---------------------------------|-------|-----------|--|
| | Mean | Deviation | |
| Educational homogamy | 0.67 | 0.469 | |
| Education in years | 13.28 | 4.623 | |
| Spouse's education in years | 12.93 | 4.679 | |
| Speaks English well | 0.49 | 0.500 | |
| Female | 0.51 | 0.499 | |
| Age at marriage | 26.55 | 6.457 | |
| Number of marriages | 1.07 | 0.274 | |
| Married before migration | 0.66 | 0.472 | |
| Spouse is U.S. Born | 0.10 | 0.307 | |
| Skin color | 2.90 | 2.911 | |
| Immigrant's Region of Origin | | | |
| Asia | 0.40 | 0.490 | |
| Europe and Central Asia | 0.17 | 0.377 | |
| Latin America and the Caribbean | 0.32 | 0.466 | |
| Other region | 0.10 | 0.301 | |
| Immigrant's Religion | | | |
| Catholic | 0.37 | 0.483 | |
| Protestant | 0.13 | 0.342 | |
| Orthodox Christian | 0.11 | 0.310 | |
| Hindu | 0.11 | 0.309 | |
| Muslim | 0.06 | 0.242 | |
| Buddhist | 0.04 | 0.200 | |
| Jewish and other religions | 0.04 | 0.207 | |
| No religion | 0.13 | 0.335 | |
| Reason for obtaining LPR | | | |
| Spouse sponsorship | 0.26 | 0.438 | |
| Family sponsorship | 0.17 | 0.379 | |
| Employment sponsorship | 0.23 | 0.419 | |
| Diversity | 0.16 | 0.367 | |
| Legalization | 0.06 | 0.232 | |
| Refugee or asylum seeker | 0.07 | 0.252 | |
| Other | 0.05 | 0.224 | |

Table 1. Descriptive Statistics for Variables Included in the Analysis, NIS, 2003

| | β | SE |
|---------------------------------|----------|---------|
| Control variables | - | |
| Respondent's education | 0.201** | (0.011) |
| Speaks English well | -0.207* | (0.092) |
| Female | -0.526** | (0.076) |
| Age at Marriage | -0.012 | (0.006) |
| Number of marriages | -0.030 | (0.144) |
| Married before Migration | 0.350** | (0.094) |
| Spouse is U.S. born | -0.554** | (0.136) |
| Skin color | -0.007 | (0.024) |
| Missing skin color | 0.142 | (0.140) |
| Immigrant's Region of Origin | | |
| Asia | -0.026 | (0.151) |
| Europe and Central Asia | -0.017 | (0.154) |
| Latin America and the Caribbean | 0.298 | (0.165) |
| (Ref.: other region) | | |
| Immigrant's Religion | | |
| Catholic | 0.311* | (0.127) |
| Protestant | 0.048 | (0.146) |
| Orthodox Christian | 0.101 | (0.163) |
| Hindu | -0.343* | (0.157) |
| Muslim | -0.130 | (0.179) |
| Buddhist | -0.109 | (0.200) |
| Jewish and other religions | -0.201 | (0.194) |
| (Ref.: No religion) | | |
| Reason for obtaining LPR | | |
| Spouse sponsorship | -0.245 | (0.185) |
| Family sponsorship | 0.236 | (0.185) |
| Employment sponsorship | -0.586** | (0.186) |
| Diversity | -0.097 | (0.205) |
| Legalization | 0.252 | (0.222) |
| Refugee or asylum seeker | -0.345 | (0.228) |
| (Ref.: Other) | | |
| Constant | -1.290** | (0.363) |
| N | 4146 | 4146 |
| ** p<0.01, * p<0.05 | | |

Table 2. Logistic Regression Model to Predict the Probability of EducationalHomogamy among New Immigrants, NIS, 2003

| β 0.248** -0.271 -0.031** 0.142 0.201 | SE (0.018) (0.146) (0.010) (0.228) | β 0.165** -0.160 | SE (0.014) |
|--|--|--|---|
| 0.248** -0.271 -0.031** 0.142 0.201 | (0.018) (0.146) (0.010) (0.228) | 0.165** -0.160 | (0.014) |
| 0.248** -0.271 -0.031** 0.142 0.201 | $(0.018) \\ (0.146) \\ (0.010) \\ (0.228)$ | 0.165** -0.160 | (0.014) |
| -0.271 -0.031** 0.142 0.201 | (0.146) (0.010) (0.228) | -0.160 | (0.100) |
| -0.031** 0.142 0.201 | (0.010) (0.228) | | (0.122) |
| 0.142 0.201 | (0.228) | 0.0023 | (0.009) |
| 0.201 | (0.220) | -0.178 | (0.191) |
| | (0.146) | 0.463** | (0.131) |
| -0.244 | (0.244) | -0.653** | (0.170) |
| -0.003 | (0.036) | -0.031 | (0.033) |
| 0.254 | (0.219) | -0.036 | (0.189) |
| | . / | | . , |
| -0.225 | (0.252) | 0.0811 | (0.199) |
| -0.863** | (0.244) | 0.676** | (0.209) |
| -0.133 | (0.260) | 0.552* | (0.222) |
| | | | |
| | | | |
| 0.146 | (0.195) | 0.461** | (0.173) |
| 0.098 | (0.224) | 0.049 | (0.198) |
| | | | · · · · |
| 0.167 | (0.256) | -0.003 | (0.218) |
| -0.548* | (0.235) | -0.276 | (0.222) |
| 0.232 | (0.300) | -0.395 | (0.240) |
| 0.453 | (0.377) | -0.369 | (0.256) |
| -0.113 | (0.319) | -0.258 | (0.253) |
| 01110 | (0101)) | 0.200 | (0.200) |
| | | | |
| -0.889** | (0.303) | 0.044 | (0.239) |
| 0.461 | (0.294) | 0.129 | (0.245) |
| -0.804** | (0.284) | -0.442 | (0.215) |
| -0.094 | (0.317) | -0.176 | (0.255) |
| 0.054 | (0.336) | 0 493 | (0.270) |
| -0.442 | (0.338) | -0.278 | (0.303) |
| 0.112 | (0.000) | 0.270 | (0.517) |
| -0.910 | (0.569) | -1 900** | (0.485) |
| 2018 | (0.50) | 2128 | (003) |
| | 0.201 -0.244 -0.003 0.254 -0.225 -0.863** -0.133 0.146 0.098 0.167 -0.548* 0.232 0.453 -0.113 -0.889** 0.461 -0.804** -0.094 0.054 -0.442 -0.910 2018 | $\begin{array}{cccccccccccccccccccccccccccccccccccc$ | $\begin{array}{c ccccccccccccccccccccccccccccccccccc$ |

 Table 3. Logistic Regression Model to Predict the Probability of Educational Homogamy among New Immigrants by Sex, NIS, 2003