Educational Assortative Mating Among New Immigrants to the United States

Introduction

One of the noteworthy findings emerging from the literature on assortative mating is that marital decisions reflect an intersection of cultural, economic and structural factors. Further, research indicates that partnering choices are correlated with marital stability, socioeconomic status, fertility preferences, children's well-being, socioeconomic stratification, gender relations, structural assimilation. Given these wide-ranging associations and the context of the increasing racial and ethnic diversity (stemming primarily from immigration) of the United States' population, there is a growing interest in studying inter and intra-group marriage patterns and trends by ascribed characteristics such as race, ethnicity, nationality as well by achieved characteristics like education. This study by examining educational assortative mating for a demographically significant group, namely new legal immigrants adds to our existing knowledge of marital partnering. It employs the New Immigrant Survey (NIS) and builds on the (NIS) pilot study that finds variables like place of origin, mode of entry, citizenship status as important in marital decisions (Jasso et.al 2000). NIS is the first dataset that provides information on couples that help distinguish the education received in the home country from that in the U.S., the foreign born by the visa status, timing of the visa transitions.

Assortative mating patterns are considered a measure of openness and therefore of stratification in societies (Kalmijn 1991; Blossfeld 2009). As marriage creates new ties and networks, the decision about who marries whom is critical to the reproduction of inequality. Additionally, in case of immigrants, marital choices are an indication of social assimilation in the host country (Pagnini and Morgan 1990; Qian and Lichter 2001; Alba and Nee 2003; Qian and Lichter 2007; Kalmijn and van Tubergen 2010). The extent of immigrant inter-marriage across social groups and classes is a measure of 'social distance' and of the strength of social boundaries and impacts assimilation of the first and forthcoming generations. An additional factor that potentially affects partnering patterns is the immigration laws. There are, typically restrictions on immigration especially when the migration is between the developed and

developing countries. Research in case of European countries has shown such controls to have an effect on the marriage market of immigrant groups (Celikaksoy, Nielsen, and Verner 2006). Marriage migration in such situation is seen as an attractive way to get admittance into the developed country by trading positive attributes such as education for a good quality of life. This can be seen as a special case of exchange hypothesis developed by sociologists.

Given that the post 1965 immigration to the U.S. has been dominated by people from the developing countries that are economically, socially, and culturally distant from the native population and experience restrictive immigration laws, marital patterns of this new group are critical for understanding immigrant assimilation and implications for reproduction of inequalities. This study contributes to an understanding of educational assortative mating patterns of new legal immigrants and how are those related to their educational, employment and visa status? What role does the place of origin play? How does marital choice get affected by whether the individual is the principal immigrant or a sponsored immigrant? What are the patterns of assortative mating on education depending on whether the immigrant returns to the home country to get married or finds a partner in the host country? How are marital choices related to cultural factors such as religion?

Past Research and the Present Study

Research across the disciplines of Demography, Economics, and Sociology, on marriage markets in the U.S have focused on several facets such as the interaction between cultural and structural factors, determinants of racial/ethnic exogamy and endogamy, effects on ethnic identity, varying bargaining power within marriage, gender equity/relations. The theoretical framework employed overwhelmingly is a combination of the economic, structural and cultural factors. Economic theory suggests a positive correlation between educational attainments of spouses because educational levels of husband and wife complement one another in the production of non-market commodities. In the same vein, a negative relationship between characteristics that tend to be substitutes in the production of market commodities in the household. Sociologists have examined assortative mating from the point of view of it having

implications on the stratification and inequality. The application of the exchange theory developed by Davis (1941) and Merton (1941) in the context of marriage decisions would imply that marriage can be considered as higher status or money for good looks. Since marriage creates intimate ties not only between the two individuals but also among families and social groups. The exchange between social groups is robust if the society is more open and boundaries among social groups are not rigid. On the contrary, if there is a considerable social distance between groups, the exchange between groups is weak. The marital choice in who marries whom is hence critical in understanding the reproduction of social inequalities. The three main perspectives that have been employed in the literature are modernization theory, industrialization theory and individualization theory. The underlying premise shared by all these perspectives is that increased modernization, industrialization and individualization is associated with social openness and hence plausibly greater homogamy. The overall findings, notwithstanding some ambiguity, in the context of the U.S. similar to that for other countries indicate that there is a strong correlation between characteristics of spouses in terms of race, age, religion, education, occupation, father's occupation and several other characteristics suggesting that important social mechanisms exist in modern societies that influence spouse selection.

Education is one of the central variables factoring in assortative mating decisions because a) education is the most important determinant of occupational success and b) it reflects cultural resources influencing individuals' preferences for specific partners. Thus, educational homogamy helps perpetuate the level of inequality by leading to resource pooling. The present study adds to the existing body of knowledge by examining educational assortative mating patterns for immigrants, a population group whose marriage markets are distinct from that of the native born. Further, immigration restrictions, especially with respect to the migration from the developing to the developed countries potentially influence the marital choices. For the first time via the 2003 New Immigrant Survey (NIS henceforth), we have nationally representative information on immigration status and on educational and marital experience in the host country identifiable for the individual as well for the couple.

I explore the pattern of marital sorting on educational attainment (Blossfeld 2009; Schwartz 2010; Torche 2010). The central question addressed in the study is how strong is the association between the educational levels of spouses? Is that association related to factors such as the length of stay, country of origin, whether both the spouses are immigrants at the time of marriage? In specific terms, the research questions that I investigate are;

1) what are the patterns of assortative mating for the major racial/ethnic and national origin groups on the indicators of education ? Do the patterns show homogamy or heterogamy (hypergamy and hypogamy)?

2) what are the relative roles of the socioeconomic (home country and U.S. education), demographic (ethnicity, country of origin, marital duration, nativity status), structural (mode of entry) and cultural (religion) factors in explaining the inter-group variations and similarities in marital sorting on education?

In examining the above questions, this study contributes to the existing literature in the following ways. First, it provides an update on the type of marital partnering on the two central variables, educational attainment for the major new immigrant groups by their racial/ethnic identity and national origin. Further, in the process it adds to our knowledge of the extent and nature of contemporary assimilation patterns. Second, by analyzing the educational attainment of the spouses of the new immigrants the study sheds light on the enduring concerns about immigrant quality and inter-generational mobility and hence stratification. Third, the analysis helps understand the interaction between the seemingly competing norms of sorting oneself on the basis of similar ascribed attributes (race/ethnicity, nationality, religion) as well as achieved characteristics (educational attainment, employment, earnings). Given the substantial variation among the new immigrant groups in their cultural backgrounds, it is reasonable to expect a relative difference in the significance of ascribed versus achieved characteristics. Fourth, the investigation brings forth the association between educational preferences of partners with modes of entry and therefore aids in understanding the role of immigration policies. Findings using the pilot survey of NIS indicate that in marriages in which one of the spouses is a U.S. citizen, both husband and wife have similar educational level with the U.S. citizen being slightly better educated than the

immigrant spouse. Finally, the study contributes to the understanding of the gendered dimension of the formation of marital partnerships. Immigrants hailing from traditional societies where marital decisions are based less on the individual and more on family-wide collective preferences in combination with low emphasis on women's education are likely to experience less egalitarian unions (Esveldt and Schoorl 1998; Kalmijn 1998). However it is also possible that the two partners are exchanging resources with a woman's better education being traded for the better quality of life. This is especially plausible in case of migration from developing to developed countries.

Data and Methods

I employ the 2003 NIS dataset. The sampling frame for 2003 NIS data comprises foreign born population that were granted legal permanent residency between May and November 2003. The survey design constitutes a stratified sample. The sample size for the adult sample (age 18 or older at the time of admission to legal permanent residency) is 8,573 individuals. However given the goals of the present study and following the tradition (Torche 2010), I restrict our sample to currently married individuals which results in the number of observations to be 5,856.

Apart from the information on socioeconomic and demographic indicators and on immigrant specific indicators, NIS dataset contains detailed information on education, employment, migration history and visa transitions. Also, the survey instrument was translated into seven languages, namely Chinese, Korean, Polish, Russian, Spanish, Tagalog, and Vietnamese to facilitate respondents who were not fluent in English (Jasso et.al 2006).

I analyze educational assortative mating patterns of new immigrants to the U.S. The dependent variable that measures educational assortative mating indicates if the respondent is in a hypergamous (male more educated), homogamous (spouses have the same educational attainment), or hypogamous (female more educated) marriage. I determine the type of educational partnership by using years of schooling and generating educational categories which approximate movement through the schooling system. These categories are: less than high school education (less than 12 years), high school graduate

(12 years of education), some college (13-15 years), and college educated (16 or more years). Assortative mating categorization then followed the pattern explained above.

I include several key independent variables in our analysis, which are associated with immigration to the U.S., marriage patterns, or both. The variables I include, at this time, and how they are measured are listed in Table 1.

I employ multinomial logistic regression models to analyze the educational assortative mating patterns in the prevailing marriages (Schwartz and Mare 2005) of new legal immigrants to the U.S. I use multinomial models because our dependent variables have three possible outcomes each and the use of such regression techniques permits us to compare the likelihood of entering each marriage type across key characteristics and variables. I analyze the marriage patterns of male and female respondents separately because of potential gender selectivity in who immigrates to the U.S.

Preliminary Results

Preliminary descriptive results on educational assortative mating are reported in Table 2. The statistic show significant variation[1] in many of the characteristics I consider. The region of the respondent's birth is associated with differences in the likelihood of educational homogamy. For example, 43.57% of Sub-Saharan African men are married homogamously, compared with 55.36% of European/North American/Oceanic men, 57.22% of Latin American/Caribbean men, and 64% of Asian men. Instead, Sub-Saharan African men are much more likely to marry women with less education than any other group. Although marrying a better educated woman is relatively rare among all immigrant men, there are stark differences by region of birth, as well. For example, 21.94% of Latin American/Caribbean men marry a better educated woman, compared with only 9.33% of Asian men and 9.54% of Sub-Saharan African men. Although there is similar variation in the patterns observed among female immigrants, their patterns by region of birth differ from those for men. Like men, educational

[1] I conduct chi-square tests to examine the statistical significance of the differences, the results of which are presented in Table 2.

homogamy is strongest among Latin American/Caribbean and Asian women. However, the likelihood of hypergamy is much lower among Sub-Saharan African women and European/North American/Oceanic women than it is for the men from those respective places. Furthermore, hypogamy is more likely among Asian women, Middle Eastern/North African, and European/North American/Oceanic women than it is among their male counterparts.

Only small differences, however, are observed on other immigrant characteristics. Educational assortative mating outcomes vary little by admission category, English language proficiency, and duration of stay in the U.S. The distribution of individuals across the outcomes is similar for male and female immigrants for each of these variables.

Large differences in educational assortative mating are observed by educational attainment, for both men and women. Educational homogamy is most likely for the least and best educated immigrants. 70.6% of the least educated men and 72.02% of the least educated women are married homogamously. The comparable numbers for highly educated men and women are 63.31% and 70.51%, respectively. Importantly, however, college educated men are more likely than college educated women to be better educated than their spouse. This likely reflects important cultural norms against hypogamy, especially among the best educated men. However, among men, hypergamy is most likely for those with 13-15 years of education with 44.29% of men with some college are married to women with less education. As far as high school and college graduate males are concerned, 31.7% and 36.69% respectively show similar patterns. For men, hypogamy is observed for those who did not graduate high school. For women, hypergamy is most likely for high school graduates where 39.2% married up. Rates of hypogamy are highest among women with 13-15 years of education. Educational assortative mating patterns are also dependent upon whether the respondent was educated in the U.S. Men who received at least some education in the U.S are more likely to marry homogamously and less likely to marry hypogamously. Women educated in the U.S. also have high rates of homogamy and are less likely to marry a better educated husband than non-U.S. educated women.

Demographic and cultural factors are also related to educational assortative mating. For men, assortative mating patterns vary little by marital duration, but they do for women. Women married at least 10 years are much more likely to be married homogamously and less likely to be married hypogamously than are women with shorter marriages. I also note important differences by race/ethnicity, which is largely related to region of birth. Among men, a higher percentage of both Blacks and Whites are in educationally homogamous marriages than are Asians, Hispanics, or Native Americans. Rates of hypergamy are similar for all groups, while hypogamy is more common among Hispanics, Native Americans, and Asians. For women, there is less variation across race/ethnicity in rates of homogamy. However, Native Americans report lower levels of homogamy than the other racial/ethnic groups. Likewise, they also report a higher likelihood of hypergamy. Rates of hypogamy are similar across race/ethnicity among women.

Finally, I focus on two additional factors. There is very slight variation in educational assortative mating by U.S. region, though the likelihood of homogamy is highest in what I call as the gateway states[2] and hypergamy is most common in Pacific and Mountain states for both men and women. In terms of hypogamy, it is most common in the Pacific and Mountain states for men, but in the Central states for women. Educational assortative mating also differs by the nativity status of the respondent's spouse. Immigrants with foreign born spouses are more likely to marry homogamously than immigrants with U.S. born spouses. Both male and female immigrants with U.S. born spouses report higher levels of hypogamy, while hypergamy is most common for men with foreign born spouses and women with U.S. born spouses.

[2] Gateway states include the states/region of California, Florida, Illinois, New Jersey, New York, Texas, and New England, the places with high (relative to the national average) percentage of immigrant population.

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Table 1. Key Variables in the Analysis of Educational and Age Assortative Mating

Variable	Measurement
Immigrant Characteristics	
Region of birth	Europe/North America/Oceania (1-0), Latin America/Carribean (1-0), Sub-Saharian Africa (1-0), Middle East/North Africa (1-0), Asia (1-0)
Immigrant admission category	Principal immigrant (1-0), Family-sponsored (1-0)
English proficiency	Self-rated; Very well (1-0), Well (1-0), Not well (1-0), Not at all (1-0)
Duration of stay in the U.S.	Constructed from migration history; First year in the U.S. (1-0), 1-5 years in the U.S. (1-0), More than 5 years in the U.S. (1-0)
Socioeconomic Status	
Educational attainment	Constructed from years of education; Less than 12 years (1-0), 12 years (1-0), 13-15 years (1-0), 16 or more years (1-0)
Educated in the U.S.	Yes (1-0), No (1-0)
Income*	Log of household income
Employment*	R is full-time, year-round employed
Demographic & Cultural	
Race/ethnicity	Self-defined; Hispanic (1-0), Native American/Hawaiian/Alaskan (1-0), Asian (1-0), Non-Hispanic Black (1-0), Non-Hispanic White (1-0)
Age	In years
Marital duration[a]	Continuous measure in years
Current U.S. region	Gateway states (1-0), Middle & South Atlantic (1-0), East, West, & South Central (1-0), Pacific & Mountain (1-0)
Nativity of spouse	Foreign born (1-0), U.S. born (1-0)
Religion*	Self-defined, dichotomous variables
Background	
Father's education	Constructed from years of education; Less than 12 years (1-0), 12 years (1-0), 13-15 years (1-0), 16 or more years (1-0)
Mother's education	Constructed from years of education; Less than 12 years (1-0), 12 years (1-0), 13-15 years (1-0), 16 or more years (1-0)

Note: * indicates variable is not included on descriptive tables included in this abstract; [a] indicates variable is dichotomized in descriptive tables

Table 2. Educational Assortative Mating Outcomes of Recent Legal Permenant Residents in the United States Across Key Variables, by Sex

	Men (n= 2,899)			*Women (n=2,957)*		
	Husband more educated	Same education level	Wife more educated	Husband more educated	Same education level	Wife more educated
Region of birth						
Europe/North America/Oceania	27.34	55.36	17.30	19.89	53.10	27.01
Latin America/Caribbean	20.84	57.22	21.94	19.08	62.61	18.31
Sub-Saharian Africa	46.89	43.57	9.54	25.58	53.49	20.93
Middle East/North Africa	31.25	51.56	17.19	31.25	49.11	19.64
Asia	26.67	64.00	9.33	25.59	58.14	16.27
Immigrant admission category						
Principal Immigrant	26.85	57.73	15.42	22.59	58.60	18.81
Family-sponsored	25.99	59.59	14.42	21.55	58.48	19.97
English proficiency						
Very well	29.35	58.40	12.25	21.84	58.50	19.66
Well	26.68	57.96	15.36	24.43	57.28	18.29
Not well	24.82	58.35	16.82	23.56	56.62	19.81
Not at all	29.45	54.88	15.68	20.71	59.82	19.46
Duration of stay in the United States						
First year in U.S.	25.33	59.83	14.84	23.12	58.03	18.85
1-5 years in the U.S.	25.87	58.72	15.41	22.92	58.84	18.23
More than 5 years in the U.S.	29.77	55.60	14.63	22.81	57.89	19.30
Educational attainment						
Less than 12 years of education	---	70.60	29.40	27.98	72.02	---
12 years of education	31.70	42.94	25.36	39.20	36.30	24.50
13-15 years of education	44.29	33.27	22.44	32.85	34.47	32.69
16 or more years of education	36.69	63.31	---	---	70.51	29.49
Educated in the United States						
Received no education in the U.S.	26.84	56.54	16.62	23.90	56.87	19.23
At least one year of education in U.S.	28.26	62.86	8.88	15.44	65.06	19.50
Marital duration						
Married less than 10 years	26.02	55.68	18.30	21.77	52.49	24.74
Married 10 or more years	28.13	59.67	18.20	23.05	62.91	14.04
Race/Ethnicity						
Hispanic	27.50	55.85	16.65	22.42	57.39	20.19
Native American/Hawaiian/Alaskan	28.57	54.76	16.67	28.28	51.52	20.20
Asian	27.75	55.61	16.65	22.91	59.28	17.81
Non-Hispanic Black	24.86	63.24	11.89	22.10	59.57	18.33
Non-hispanic White	26.66	60.84	12.50	20.92	58.62	20.46
Current U.S. region of residence						
Gateway States	25.76	58.83	15.41	22.51	59.57	17.92
Middle & South Atlantic States	31.13	56.73	12.14	22.48	58.50	19.02
East, South, West Central States	28.03	56.82	15.15	17.09	56.41	26.50
Pacific & Mountain States	30.09	49.54	20.37	24.44	52.26	23.31
Nativity of spouse						
Spouse foreign born	27.46	58.77	13.77	21.81	59.62	18.58
Spouse U.S. born	23.69	46.59	29.72	26.96	48.12	24.93
Overall average	27.11	57.44	15.14	22.42	58.30	19.28

Source: New Immigrant Survey, 2003

Chi-square tests are significant at p<.05 except for: immigrant admission category, English language ability, marital duration, and race/ethnicity

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