

Bowling Green State University
The Center for Family and Demographic Research

<http://www.bgsu.edu/organizations/cfdr>

Phone: (419) 372-7279 cfdr@bgsu.edu

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**CITIZENSHIP FOR YOUTH? THE SPOUSAL AGE GAP AMONG
IMMIGRANT MARRIAGES**

Kelly Stamper Balistreri, PhD
Assistant Professor of Sociology
Bowling Green State University

Kara Joyner, PhD
Professor of Sociology
Bowling Green State University

Grace Kao, PhD
Professor of Sociology, Education and Asian American Studies
University of Pennsylvania

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*Kelly Balistreri 206 Williams Hall BGSU Bowling Green OH 43403 kellyba@bgsu.edu
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Citizenship for Youth? The Spousal Age Gap among Immigrant Marriages

Abstract

U.S. studies on intermarriage among the immigrant population have focused on race/ethnicity and education as sorting mechanisms but not age or citizenship. We use 2010-2014 American Community Survey data to examine the intersection of migration, marriage, and spousal citizenship status. We distinguish four types of immigrant marriages: 1) non-citizen married to a citizen before or upon arrival to the U.S., 2) non-citizen married to a citizen after arrival to the U.S., 3) non-citizen married to a non-citizen before or upon arrival to the U.S., and 4) non-citizen married to a non-citizen after arrival in the U.S. We find that among immigrants, marriage to a citizen—whether native-born or naturalized—is not a rare event, particularly among women. We also find evidence of status exchange—citizens in the U.S. who reach past their local marriage markets and across international borders for a spouse tend to secure a more youthful partner.

Citizenship for Youth? The Spousal Age Gap among Immigrant Marriages

The proportion of marriages that includes partners of different nationalities has increased dramatically in recent decades and may be an indicator of increasing globalization. This growth in marriages between partners of different nationalities—frequently referred to as cross-border marriages—has generated public interest in this practice. These cross-border marriages are often characterized by a gender imbalance in which men from wealthier countries after a relatively brief courtship marry women from less developed countries, increasingly with the assistance of international marriage brokers or through social media networks (Lu and Yang 2010). Much of what we know about cross-border marriages is based on studies conducted in Asia or Europe. In Asia, increases in marriages between natives and immigrants have been sparked by local marriage squeezes, while in Europe increases have been attributed to shortages in labor that attract individuals from other countries. Popular and ethnographic accounts, as well as population-based studies conducted in Asia and Europe, suggest these marriages are often characterized by an unusually large age gap between partners, with the native-born husband being older than the immigrant wife (e.g. Elwert 2016; Ma, Lin, and Zhang 2010; Nguyen and Tran 2010). However, we know very little about the prevalence and characteristics of these marriages in the U.S.

While an extensive body of sociological and economic research has considered the mechanism of status exchange to theoretically account for intermarriage between U.S. natives and immigrants, U.S. studies have not considered age and citizenship status as elements of exchange. Instead, researchers focus on racial/ethnic and educational assortative marriage patterns (e.g. Jasso, Massey, Rosenzweig and Smith 2000; Choi, Tienda, Cobb-Clark and Sinning 2012; Kalmijn 2012). Yet, qualitative studies and journalistic accounts suggest that a substantial number of American citizen men have gone abroad to areas such as Russia, Southeast and East Asia in search of a bride. Many of the narratives involve older men who are seeking younger women; these men offer entry to the U.S. and the promise of an

economically secure future. In exchange, the women offer youth and the hope of domesticity with traditional gender roles and companionship (e.g. Schaeffer 2013; Bernstein 2010; Constable 2003). However, these accounts are inadequate in addressing the relative prevalence of these relationships and whether they are fundamentally different from marriages that occur between two immigrants in the U.S.

This omission reflects the fact that few U.S. studies have examined the timing of marriage and migration (for an exception see Stevens et al. 2012). Indeed, the extant quantitative research on marriage patterns of immigrants in the U.S. necessarily makes two assumptions: first, marriages occur well before immigrants arrive in the U.S. or they occur sometime after arrival to the U.S. Marriages in the former category occur largely outside the purview of research on intermarriage. Marriages in the latter category are often viewed as an indicator of the assimilation status of different racial and ethnic groups (see Lichter, Qian and Tumin 2015 for example). However, a nontrivial number of marriages that involve immigrants occur at roughly the same time as migration. Recent estimates find that 19 percent of immigrant wives and 8 percent of immigrant husbands entered the country the same year they married. In addition, over a quarter of the husbands and roughly 30 percent of the wives who migrated and married in the same year had a native-born spouse (Stevens et al. 2012). For a growing number of immigrants, marriage and the ability to migrate to the U.S. are integrally entwined.

The exclusion of such a large proportion of immigrant marriages is a significant oversight because marriage to a native-born American has long been viewed as the ‘final step’ in the assimilation process for immigrants and their offspring. Specifically, studies routinely assume that cross-border marriages occur after cultural (i.e. language and social practices) or structural (i.e. socioeconomic) assimilation, which increases with time spent in the United States. Indeed, most prior research on intermarriage between immigrant and native populations in the U.S. routinely focuses on immigrants who married after migrating, thus excluding marriages that were formed prior to migration. Immigrants who form a relationship with a U.S. citizen before migration defy the notion that intermarriage is the final step in assimilation. It may be that migration on behalf of marriage to a U.S. citizen (i.e. during the same year

of arrival or even before entering the U.S.) serves as the necessary first step in the trajectory from newcomer status to an assimilated American for some migrants, but serves as the final step for other migrants.

Data from several recent years of the American Community Survey (hereafter ACS) offer us an unprecedented opportunity to study the intersection of marriage, migration, and citizenship among immigrant marriages in the United States. We add to the existing literature by utilizing information on year of migration and year of marriage to identify immigrants whose timing of migration was closely linked to their timing of marriage (i.e. those who marry in their home country or marry the same year they enter the U.S.). We compare these marriage migrants to immigrants who marry their spouse after residing in the U.S. over a year. We also extend the literature on immigrant marriage patterns in the U.S. by considering the citizenship status of the spouse, not just the nativity status. Emerging research suggests that “the citizenship status of the marriage partner is crucial” toward understanding the experiences of immigrants and that “marriages involving one or more non-citizens are qualitatively different from marriages joining partners who share a secure status in their country of residence” (Williams 2010: 24). This is a clarifying distinction because citizenship, regardless of nativity status, offers many advantages related to economic opportunity and civil liberties (Aptekar 2015).

We consider the intersection of timing and spousal citizenship status to contrast four groups of immigrants. These four groups form a continuum of marital assimilation, with immigrants marrying a U.S. citizen either in their home country or upon arrival occupying a fast track toward becoming an assimilated American. We provide a descriptive profile of these four groups of immigrant men and women, examining how they differ in terms individual characteristics and partner homogamy. We also feature how immigrant men and women from different regions of the world are distributed across these four groups. Finally, we provide evidence that immigrants trade valued characteristics (e.g. youth) for an expedited path toward becoming an assimilated American.

BACKGROUND

Prior studies on marriages between immigrant and U.S. natives classify the spouses of immigrants in a variety of ways. To offer some recent examples, several studies merely distinguish spouses by whether they are native-born versus foreign-born (e.g. Choi et al. 2012; Stevens et al. 2012; Levenshenko et al. 2013). Kalmijn (2012) captures whether immigrants are paired with white native-born partners versus a same national origin partner. Lichter et al. (2015) use U.S. Census data to contrast Hispanic and Asian immigrants by whether they are married to a foreign-born co-panethnic, native-born co-ethnic, White, or other minority partner. Bohra-Mishra and Massey (2015) define intermarriage in a similar fashion using a select sample of recent immigrants to the U.S. The vast majority of studies on this topic do not capture possible differences based on spousal citizenship and routinely exclude immigrants who married prior to or around the time of migration to ensure that the marriages occurred in the host country where the immigrant was exposed to U.S. marriage market conditions.

Prior studies of immigrant marriage occurring in the U.S. find a strong positive association between educational attainment and intermarriage. This association is driven primarily by the tendency for married partners to match each other regarding their levels of education. Positive assortative mating along the lines of education presumably reflects both opportunities for contact provided by schools and workplaces, as well as preferences for a partner who is similar regarding socioeconomic status and cultural tastes. Interestingly, education gradients are weaker for immigrant groups that have higher levels of education on average (Kalmijn 2012). More educated immigrants from these groups (e.g. Asians) presumably have more opportunities to meet other more educated individuals from their own group. This, of course, assumes they have a preference for in-group marriage.

Using data from both the U.S. and Australia, Choi and colleagues (2012) found that both same-nativity and mixed-nativity marriages are more likely to include partners with equal levels of education than different levels; however, immigrant men (but not women) in mixed-nativity marriages are more apt than their counterparts in same-nativity marriages to marry down in terms of education. This finding

suggests that men trade higher education for nativity (Choi et al. 2012). Understanding patterns of exchange for cross-border marriages is complicated by the fact that immigrants may have completed their education in their countries of origin. As immigrants may receive lower economic returns from education in their countries of origin (Betts and Lofstrom 2000), they may be less able to use their education as a resource in exchange for citizenship. Notwithstanding this limitation, the findings of Choi and colleagues (2012) hint that exchange is an important “secondary force” that facilitates mixed-nativity marriages (Rosenfeld 2005). Like studies concerning intermarriage more generally, studies on this topic fail to measure characteristics that women traditionally trade on marriage markets, such as youth (for an exception see Sassler and Joyner 2011).

Studies on specific sending regions to the U.S. using population-based data are scant. An exception is Levchenko and Solheim (2013) who used ACS data to contrast East European (e.g. from Russia, the Ukraine, Poland, and Romania) women who moved to the U.S. as “marriage migrants” (defined as entering the U.S. and marrying a non-Hispanic white native in the same year) with U.S.-born non-Hispanic white women married to non-Hispanic white men (pp 30). Regarding couple-level characteristics, they found an overriding tendency for all groups of women to be similar to their partners concerning education and marital history. At the same time, they found that the age gap between partners, with the male partner being older than the female partner, was four times greater for the East European marriage migrants than for the U.S. born women. In fact, Russian and Ukrainian women were, on average, eleven years younger than their American husbands. Such a pattern is also found in cross-border marriages in East Asia (Jones and Shen 2008; Tsai 2011), Italy (Guetto and Azzolini 2015) and Sweden (Gustafson and Fransson 2015; Elwert 2016). These studies are critical as they highlight a resource that women exchange in cross-border marriages: youth.

Another line of research centered in European and Asian countries examines cross-border marriages anchored in the literature of gender, globalization and transnational families. Much of this research is qualitative and concerns marriage migrants in other nations, mainly focusing on the prosperity

gap between developed and less-developed countries as a key driver of cross-border marriages. This gap, combined with the increased globalization of culture and media representations of the West, is thought to inspire migration among those living in less-developed countries (Appadurai 1991). Beck-Gernsheim (2007) argues that ‘the very difference between the sending country and the receiving country leads to the marriage union: this difference is the secret matchmaker’ (p. 277). Other research considers how globalization results in the greater commodification of intimate relationships, including marriage. Hochschild (2003) likens the love provided by women from developing countries to the extraction of resources such as gold from these countries in the nineteenth century. Recently, scholars have begun to consider that women in cross-border marriages are often simplistically characterized in popular and academic discussions as passive victims of trafficking or active agents with interests in ensuring their economic security (Constable 2009; Kim 2010; Beck-Gerstein 2010). While contested, these dualistic characterizations suggest that exchange may play a prominent role in marriages occurring between U.S. citizens and non-citizens. Typically ignored are the non-migrant spouses who are often the initiator of cross-border marriage contact (Williams 2010).

Research utilizing population-based data have only recently begun to consider how patterns of matching and exchange in cross-border marriage are complicated by citizenship status. One recent study which examines intermarriage in Italy provides some evidence of an exchange between youth and citizenship. Guetto and Azzolini (2015) find that among migrants, the acquisition of citizenship reduces the likelihood that immigrants have a native-born spouse versus a foreign-born spouse. This finding is consistent with the notion that possessing citizenship among the foreign-born reduces the rewards from marrying a native-born spouse. Further, this study found that spousal age gaps are greatest in marriages that involve immigrant women who do not possess Italian citizenship and an Italian man with Italian citizenship (Guetto and Azzolini 2015). Using data from Sweden, Elwert (2016) finds evidence of status exchange on age in cross-border marriages. These studies also find that the prominence of status exchange in cross-border marriages differs according to the country of origin of the immigrant partner

(Elwert 2016; Guetto et al. 2015). Taken together, the above studies on cross-border marriages suggest that age and citizenship may operate as key mechanisms of exchange among immigrant marriages.

DATA AND METHODS

We use microdata from the 2010-2014 American Community Survey (ACS) made available by the Integrated Public Use Microdata Series (IPUMS) (Ruggles et al. 2015). Each year, the ACS selects a representative sample of roughly 3.5 million addresses in the United States and collects a variety of demographic and economic information. Our analysis is based 90,302 female immigrant respondents and 75,713 male immigrant respondents who are currently married (spouse present) to a different-sex spouse, were married in the last ten years and who entered the U.S. as adults (i.e., ages 18 and older). We merge spouse characteristics to each immigrant respondent record. Beginning in 2008, the ACS began to include the year of last marriage, current marital status, and the number of times married. For foreign-born respondents, the survey also asked about the year of arrival in the United States and if a citizen, the year of naturalization. These data allow us to determine which marriages occurred before the immigrant came to the United States, which marriages are closely tied to migration (i.e. occurring in the same year of migration), and which happened in the years after arriving in the United States. Also, these data allow us to determine the citizenship status of the spouse at the time of marriage. To better capture possible exchange, we limit our analysis to immigrant respondents who were not citizens at the time of marriage, acknowledging that immigrants with citizenship at marriage constitute a small fraction of recently married immigrants (i.e., 13% of female respondents and 19% of male respondents).

To help illustrate this relationship, Figure 1 presents the percentage distribution of the timing of marriage and migration separately for our immigrant respondents for three groups: 1) those who are married to native-born citizens, 2) those married to foreign-born immigrants who had become naturalized citizens prior to marriage, and 3) those who were married to foreign-born immigrants who were non-citizens at the time of marriage. The x -axis measures the difference between the year of marriage and the

year of arrival in the U.S. and the y-axis measures the percentage distribution of the three types of spouses. For each of these three types the percentages sum to 100 percent.

[Figure 1 about here]

The top panel of Figure 1 shows that roughly 29% of immigrant women married to a native-born citizen and 27% married to a naturalized citizen did so the same year that they migrated to the U.S. This is a sizable share of the total population of immigrant women who were non-citizens when they married. An additional 17% married to a U.S. native did so before entering the country while roughly 24% of those married to a naturalized citizen married before arrival. The remaining 55% of immigrant women married to native-born citizens, and 49% married to a naturalized citizen did so at least a year or more after arrival. Among immigrant women in our sample married to non-citizen husbands, the patterns are less extreme, with roughly 19% marrying the same year they enter the U.S. and 32% marrying before entering.

The bottom panel of Figure 1 indicates that the bulk of male migrants marry after residing in the U.S. at least a year. Almost three-quarters of immigrant men married to either a native or naturalized citizen married at least a year after arrival. Roughly 13% of immigrant men married to a native or married to a naturalized citizen did so the same year that they last entered the U.S. Among non-citizen men married to non-citizen women, nearly two-thirds marry at least a year after arrival, and just 9% marry the same year they enter. These patterns support the importance of classifying the spouse by citizenship rather than simply by nativity status as done in prior research.

Measures

Dependent variable. Our dependent variable is a continuous measure of the difference between spouses' age—the spousal age gap. This is measured from the perspective of the husband for both male and female respondents and is created by subtracting the wife's age from the husband's age. If the gap is positive, the husband is older, and if the wife is older, the gap is negative.

Independent variables. Our key independent variable represents the intersection of the timing of migration, marriage, and spousal citizenship. First, we collapse the timing of marriage and migration into two groups, marrying and migrating *before or upon arrival* and marrying at least one year *after arrival*. We then create a categorical variable consisting of four mutually exclusive categories for our non-citizen respondents: 1) married a citizen before or upon arrival, 2) married a citizen after arrival, 3) married a non-citizen before or upon arrival, and 4) married a non-citizen after arrival.

Prior research on immigrant marriage in the U.S. typically focuses on marriages that occur after the immigrant has arrived in the country. Our decision to collapse the timing of marriage and migration into two groups is conceptually driven by the idea that marriages (in particular, marriages between an immigrant and a U.S. citizen) which occur outside the U.S. or during the same year of migration represent a ‘fast track’ toward assimilation compared to marriages that take place after the immigrant has arrived in the country. In sensitivity analyses, we explore the intersection of the un-collapsed measure of marital/migration timing (i.e., prior to arrival in the U.S., same year, and after arrival) with spousal citizenship.

We also classify the country of origin of our non-citizen respondents into 13 world regions: Latin America and the Caribbean, South America, Northern/Western Europe, Southern Europe, Central/Eastern Europe, Russia/Baltic States, East Asia, Southeast Asia, India and Southwest Asia, the Middle East/Asia Minor, Africa, Australia, and Canada. Details of the countries included in these categories are presented in Appendix 1 (female respondents) and Appendix 2 (male respondents).

Control variables. Our multivariate models control for several characteristics. We include age at marriage as higher ages of marriage have been found to be associated with larger spousal age differences (England and McClintock 2009). We also include a measure of educational attainment expressed as number of years of schooling, along with an indicator of remarriage. We control for whether a respondent had a previous marriage because prior studies found less similarity in spousal ages with higher order marriages (Dean and Gurak 1978; Wheeler and Gunter 1987).

Analysis. We present descriptive statistics by these four mutually exclusive marriage categories, separately for our male and female respondents. For the continuous variables, we conduct tests of statistical significance to assess differences in means across our four migration/marriage/spousal citizenship groups. Our multivariate analysis is a series of OLS regressions, stratified by gender of the respondent and region of the world adjusted with person-level ACS weights. We present model-based predicted values of the age gap by gender and region.

RESULTS

Table 1 shows the sample characteristics and distribution by sex for our four categories of immigrant respondents: 1) married a citizen before or upon arrival, 2) married a citizen after arrival, 3) married a non-citizen before or upon arrival, and 4) married a non-citizen after arrival. Among our sample of immigrant women, one in five (20%) marry a citizen either prior to or upon entering the U.S., 22% marry a citizen after they have been in the U.S. at least a year, with the remaining marrying a non-citizen either prior to during the same year they arrive (30%) or marrying a fellow non-citizen after residing in the U.S. at least a year (28%). Patterns of immigrant marriages differ starkly by sex. Just 9 percent of immigrant men in our sample marry a citizen close to the time they migrate, while 23% marry a citizen after residing in the U.S. at least a year. The largest share of our immigrant male respondents marries a fellow non-citizen after living in the U.S. at least a year (45 percent).

[Table 1 here]

If men value youth, and immigrant women value U.S. citizenship, then we would expect to find the largest differences in age between non-citizen women married to citizen men. Also, if an immigrant woman has already borne the cost of migrating to the United States, then any marriage that takes place after arrival should ‘cost less’ in terms of youth. Evidence for this is found in the left panel of Table 1, which shows that spousal age differences among female respondents follow a distinct gradient. Among immigrant women who marry a U.S. citizen either before or upon entering the U.S., the groom is on

average 7.4 years older than she is. When she marries a citizen after residing in the U.S. at least a year, the average age difference declines to 4.5 years. Further evidence is found among marriages of immigrant women to non-citizen men. The spousal age difference is smaller overall compared to marriages involving a non-citizen woman and a citizen man. The cost of arrival is apparent as well. When an immigrant woman marries a fellow non-citizen man either before or upon arrival in the U.S., she is 3.4 years younger than her spouse, on average. The age difference falls to 1.6 years when she marries a fellow non-citizen after she has already resided in the U.S.

If the exchange between youth and spousal citizenship or access to the U.S. operates the same for male immigrants as it does for comparable female immigrants we would expect the smallest spousal age difference, that is the unions in which the husband is closest in age to his wife, would be among non-citizen men who married citizen women either before or upon migrating to the U.S. Evidence for this is found in the right hand panel of Table 1 which presents parallel information for male respondents. The smallest spousal age difference (0.7 years) was found among non-citizen men who married a citizen woman either prior to or upon arrival to the U.S. This suggests that citizen women may be able to exchange their citizenship and access to the U.S., for a younger husband. Similar to the patterns presented for women, among non-citizen men who marry citizen women after residing in the U.S., the spousal age gap increases to 1.9 years. If the non-citizen man marries a fellow non-citizen woman prior to or upon arrival he is roughly 2.6 years older than his bride, whereas if he marries a non-citizen woman after arriving in the U.S., the gap increases to 3.3 year.

To place these values in context, we calculated the average difference in spousal ages for a similar sample of marriages between two native-born respondents of the ACS and found that husbands are on average 2.1 years older than their wives. To account for any skewness in the distribution, Table 1 also presents the median values of the spousal age gap by our four-category migration/marriage/spousal citizenship groups. We find similar patterns of a possible exchange between youth and spousal citizenship.

The bottom panel of Table 1 presents select characteristics of immigrant men and women by our four-category typology. (Differences across the four groups are all statistically significant to at least the $p < .05$ level unless indicated). Among immigrant respondents, the youngest average age at marriage occurs among those who marry a non-citizen either in their home country or upon arrival in the US, 23.8 years for brides and 26.7 years for grooms. The oldest age at marriage is found for men and women marrying a citizen after residence in the U.S., possibly because this group is more likely to be in their second or higher marriage. Migrant educational levels exhibit little variation by their spouse's citizenship status and marital timing. Respondents who are non-citizen brides have, on average, approximately 14 years of education with the exception of those who married a non-citizen spouse after arriving in the US. They are the least educated with just under a high school diploma (11.6 years). The education gap between the non-citizen wife and their husband is also modest – about 0.3 years for those that marry a citizen or a non-citizen prior to or upon arrival, and 0.15 years for those that marry a citizen after arrival in the U.S. However, immigrant brides who marry a fellow non-citizen spouse after one year or more in the U.S. are, on average, better educated than their husbands.

Respondents who are non-citizen grooms who married a citizen women either prior to or upon arrival are slightly more educated (13.7 years of education) compared to their counterparts who married a citizen after arrival, who have about 13.0 years of education. Non-citizen grooms that married a non-citizen bride close to their time of arrival have about 14.2 years of education compared to 12.3 years of education of the average non-citizen grooms that married a non-citizen bride after migration. Interestingly, non-citizen husbands who married a citizen wife were less educated than their wives. Non-citizen grooms who married citizen women either prior to or upon arrival had 0.7 fewer years of education than their citizen wives, and non-citizen grooms who married their citizen wives later also had about 0.8 years less education than their wives. Non-citizen grooms who married non-citizen wives around the time of arrival had about 0.34 years more education than their wives. Finally, non-citizen

husbands who married a non-citizen after more than a year in the US had education levels almost identical to their wives (gap = -0.01 years).

These patterns may be confounded by the distribution of immigrants from various regions into different migration/marriage/spousal citizenship categories (i.e., respondents from certain regions may be clustered in specific categories). We address this issue by presenting regional differences in our 4-category group membership in Table 2. We find very clear regional patterns of marriage, migration, and spousal citizenship. For example, non-citizen brides from Southeast Asia (46.2%), Canada (33.8%) and Russia (31.2%) are the most likely among the thirteen world regions represented to be married to a U.S. citizen prior to or upon arrival. In contrast, just 11.3% of women respondents from Latin America/Caribbean, and 12.4% from India are married to a U.S. citizen prior to migrating or upon arrival. Among men, the top sending regions for migrants married to U.S. citizens is quite different. For example, 27.9% of male respondents from Northern/Western Europe (i.e. France, the United Kingdom, and Switzerland), 27.7% of male respondents from Australia, and 20.2% of male respondents from Canada marry a U.S. citizen woman either prior to or upon entering the country. Table 2 also reveals striking gender differences in these patterns. For example, almost a quarter (23.1%) of female respondents from East Asia (i.e. China, Korea) and almost a third of female respondents from Russia are married to a citizen prior to or upon arrival, yet just 4.3% of men from East Asia and 7.8% of men from Russia share the same status.

[Table 2 here]

Regression Analyses

We next regress the gap in spousal ages on three indicators for our migration/marriage/spousal citizenship categories (with married to a non-citizen after arrival in the U.S. serving as the reference category) controlling for age at marriage, number of times married, and the number of years of education. We stratify the models by gender and region. For ease of interpretation, we present the predicted age gap

adjusted for region and sex-specific mean levels of the control variables. The predicted average age gap by category and region for men and women migrants are presented in Figures 2 and 3. (Appendix Tables 1 and 2 present predicted age gap by region and country for male and female respondents).

The result provides strong evidence of exchange – youth for access to spousal citizenship net of education, past marital history and age at marriage. For example among brides from Southeast Asia, those marrying a citizen either before or upon entering the U.S. are roughly 10 years younger than their spouse. Once the non-citizen woman is in the U.S. and marries a citizen, the predicted spousal age difference drops to 6 years. When a Southeast Asian woman marries a non-citizen outside of the U.S. or upon entering the exchange is smaller at only 2.5 years, falling to 2 years when marrying a non-citizen in the U.S. Among non-citizen women from Russia and the Baltic States, the predicted age gap is 9.1 years for marriages to a citizen that occur prior to or upon her arrival, falling to 6.5 for marriages to a non-citizen after she has resided in the U.S. for at least a year, 3.2 years for marriages to a fellow non-citizen either prior to or upon arrival, and 2.7 years for marriages to a non-citizen after she has resided in the U.S. for at least a year. We find this continuum of exchange for all regions with the exception of migrant women from Canada.

[Figures 2 and 3 here]

It is notable that the exchange appears for male migrants but the patterns are less pronounced. Figure 3 shows that for many regions, migrant men who marry a citizen either before entry or upon arrival are closest in age to their bride. For example, among Southeast Asian non-citizen men married to citizen women the predicted age gap is just 0.45 years, for African men 0.38 years, and for Russian men 0.53 years. This gap widens with marriage to a non-citizen.

To examine the robustness of our findings we also conducted several sensitivity analyses. While the decision to collapse the timing of migration and marriage into two categories – marriage before or upon arrival vs marriage after arrival—was conceptually driven by prior research, we explored whether

the patterns varied if we used an uncollapsed version of marriage/migration timing. Table 3 presents the unadjusted weighted mean spousal age difference for respondent men and women by spousal citizenship status for those who married prior to migrating to the U.S., those who married and migrated in the same year, and those who married after arrival in the U.S. Here, we find still find evidence that marriage to a citizen is associated with large spousal age differences for female respondents and small spousal age differences for male respondents compared with marriage to a non-citizen. Female respondents who marry a citizen prior to entering the U.S. are on average 7.2 years younger than their husbands, and those who marry a citizen the same year they enter the U.S. are 7.6 years younger than their husbands—both figures are much higher than the difference when she marries a citizen after already arriving in the U.S. (4.5 years). Among male respondents we see a similar pattern: the spousal age gap for marriage to a citizen prior to migrating is 0.9 years and 0.4 years when marrying a citizen the same year as arrival. Again, both figures are smaller (meaning the husbands are much closer in age to their wives) than when a non-citizen man marries a citizen woman after he has already arrived in the U.S. Similar patterns are found for both male and female respondents married to non-citizens.

[Table 3 here]

Another concern lies in the notion that there are cultural preferences for age heterogamous marriages. In other words, perhaps in certain countries large spousal age differences are normative. While we do not have comparable data on recent marriages of non-migrants in the sending countries (i.e., Philippines, India, Russia), in supplemental analyses we examined the spousal age differences among couples in our sample who share the same country of origin (not shown). If a large spousal age gap is culturally normative in certain sending countries, then we would expect little variation by either citizenship of the partner or timing of migration and marriage among couples who are from the same country. However, we find the opposite. For example, among non-citizen women respondents married to citizen men who share the same country of birth, the spousal age difference ranged from 7.6 years for those married prior to or upon arrival, 5.1 years for those married to a citizen after arrival, 3.2 years for

those married to a non-citizen either prior to or upon arrival, and finally 1.6 years for those married to a fellow non-citizen. Among non-citizen men married to a citizen woman who shares the same country of origin the spousal age difference ranges from 0.6 years for those married prior to or upon arrival, 1.5 years for those married to a citizen woman after arrival, 2.6 years for those married to a non-citizen woman prior to or upon arrival and 3.3 years for those married to a non-citizen woman after arrival. Similar patterns were found when we examined couples that shared the same region of origin.

DISCUSSION

Due primarily to data limitations, prior studies on marriage patterns of immigrants make the necessary assumption that they meet their partners in the U.S. This research was unable to consider how the relative timing of marriage and migration may affect the matching of spouses. As less traditional patterns of migration and courtship emerge, scholars studying intermarriage in the U.S. must revise their notion that migration and marriage are independent processes. Indeed, as cross-border marriages become more visible, it is likely that these spouses face unique opportunities (e.g. a ‘fast track’ to assimilation) and challenges (e.g. power differentials due to differences in the citizenship of partners). While journalistic accounts of “mail-order brides” or marriage tourism is widespread, most research on cross-border marriage focuses on European and Asian countries and we know relatively little about how the timing of marriage and migration may matter in the U.S.

The large scale of the Census data used here combined with the newly available information on the timing of marriage, migration and citizenship acquisition enabled us to present a more complete portrait of immigrant marriage in the U.S. than was formerly possible. Our analyses of these data give us a broader view of partner selection and allow us to more carefully examine the possible exchange of desired characteristics between partners. Our research highlights the complex association between marriage and migration in a way that has been neglected by most sociologists and economists. We find that among non-citizens, marriage to a citizen (whether native-born or naturalized) is not a rare event,

particularly among women. Nearly 44% of non-citizen female migrants married in the last ten years are married to a citizen of the U.S., in contrast to 32% of comparable male migrants. Also, the importance of the timing of migration vis-à-vis marriage should not be understated. A substantial proportion of non-citizen female migrants marry a citizen before or upon arrival, suggesting that for many, the decision to marry and the decision to migrate are linked.

We also find that the nexus of marriage, migration, and spousal citizenship provides evidence of status exchange for men and women alike—citizens in the U.S. who reach past their local marriage markets and across international borders for a spouse tend to secure a relatively more youthful partner. On average, non-citizen female migrants marrying a citizen either before or upon entry are 7 years younger than their spouses. Once she is in the U.S. the exchange becomes less pronounced but is still substantial. The opposite holds true for men. We find evidence that non-citizen men who marry a woman with citizenship either prior to or upon arrival in the U.S. are closer in age to their spouse than their counterparts who marry a non-citizen.

Qualitative research suggests that settled migrants, in this case, those who have earned citizenship, may have a strategic advantage in marriage negotiations (e.g. Charsley 2005). Beck-Gernsheim suggests “(s)ince they have much to offer—the ticket to migration—they can likewise demand much in return” (2007: p. 280). Our findings support this notion. Among respondent marriages to non-citizens spouses, we find evidence of exchange based on the timing of marriage and migration. Non-citizen women who marry a non-citizen man in their home country or upon entering face a more expensive ‘ticket’ with respect to spousal age than comparable women who arrive in the U.S. and marry later. In many sending communities, the social position of the migrant is enhanced by migrating to the U.S. (e.g. Kanaiaupuni 2000; Lievens 1999; Charsley and Shaw 2006). It may be that once the migrant comes to the U.S. and earns citizenship, they are in a better social position to reach back to choose a spouse (i.e. younger) they may not have been able to select in their home country.

Some limitations are worth noting. First, our findings cannot assess specific cultural or structural conditions influencing the timing of marriage and migration, nor are we able to determine what motivates men and women to seek out partners outside of their local marriage market. Nor can we understand how these motivations contribute to marital quality or gendered imbalances in power. We do not know how or where the cross-border couples first met, whether they were introduced through the auspices of a marriage broker website, or were introduced through links with transnational communities. While there is exciting new qualitative research on these types of marriages in the U.S. that shed light on possible motivations and outcomes, our research fills a void by identifying regional patterns by immigrant origin and evidence of a marital exchange that occurs at the intersection of timing of migration and spousal citizenship. Importantly, our findings indicate that for many immigrants, particularly female immigrants, marriage may not be the final but the first step in the process of assimilating into American society.

REFERENCES

- Appadurai, Arjun. 1991. "Marriage, Migration and Money." *Visual Anthropology* 4: 95-102.
- Aptekar, Sofya. 2015. *The Road to Citizenship: What Naturalization Means for Immigrants in the United States*. Rutgers University Press. New Jersey.
- Beck-Gernsheim, Elisabeth. 2007. "Transnational Lives, Transnational Marriages: A Review of the Evidence from Migrant Communities in Europe." *Global Networks* 7(3): 271-288.
- Bernstein, Nina. 2010. "Do You Take This Immigrant?" *New York Times*,
http://www.nytimes.com/2010/06/13/nyregion/13fraud.html?pagewanted=all&_r=0
- Betts, Julian R. and Magnus Lofstrom. 2000. "The Educational Attainment of Immigrants: Trends and Implications." Pp.51-116 in *Issues in the Economics of Immigration*. Chicago, IL: University of Chicago Press.
- Bohra-Mishra, Pratikshya, and Douglas S. Massey. 2015. "Intermarriage among New Immigrants in the U.S.A." *Ethnic and Racial Studies* 38(5): 734-758.
- Charsley, K. 2005. "Unhappy Husbands: Masculinity and Migration in Transnational Pakistani Marriages." *Journal of the Royal Anthropological Institute* 11(1): 85-105.
- Charsley, Katharine and Alison Shaw. 2006. "South Asian Transnational Marriages in Comparative Perspective." *Global Networks* 6(4): 331-344.
- Choi, Kate, Marta Tienda, Deborah Cobb-Clark, and Mathias Sinning. 2012. "Immigration and Status Exchange in Australia and the United States." *Research in Social Stratification and Mobility* 30(1): 49-62.
- Choi, Kate, and Sarinnapha Vasunilashorn. 2013. "Widowhood, Age Heterogamy, and Health: The Role of Selection, Marital Quality, and Health Behaviors." *Journals of Gerontology Series B: Psychological Sciences and Social Sciences* 69B(1): 123-134.
- Constable, Nicole. "The Commodification of Intimacy: Marriage, Sex, and Reproductive Labor." 2009. *Annual Review of Anthropology* 38: 49-64.

- Constable, Nicole. *Romance on a Global Stage: Pen Pals, Virtual Ethnography, and "Mail Order" Marriages*. Berkeley, CA: University of California Press.
- Dean, Gillian and Douglas T. Gurak. 1978. "Marital Homogamy the Second Time Around." *Journal of Marriage and the Family* 40(3): 559-70.
- Elwert, Annika. 2016. "Opposites Attract- Evidence of Status Exchange in Ethnic Intermarriages in Sweden." *Lund Papers in Economic History, Population Economics* 147.
- England, Paula, and Elizabeth Aura McClintock. 2009. "The Gendered Double Standard of Aging in U.S. Marriage Markets." *Population and Development Review* 35(4): 797-816.
- Francis-Tan, Andrew, and Hugo M. Mialon. 2015. "'A Diamond Is Forever' And Other Fairy Tales: The Relationship Between Wedding Expenses and Marriage Duration." *Economic Inquiry* 53(4): 1919-1930.
- Guetto, Raffaele, and Davide Azzolini. 2015. "An Empirical Study of Status Exchange through Migrant/Native Marriages in Italy." *Journal of Ethnic and Migration Studies* 41(13): 2149-2172.
- Gustafson, Per, and Urban Fransson. 2015. "Age Differences between Spouses: Sociodemographic Variation and Selection." *Marriage & Family Review* 51(7): 610-632.
- Hochschild, Arlie R. 2003. "Love and Gold." Pp. 15-30 in Ehrenreich, Barbara, and Arlie R. Hochschild (Editors). *Global Woman: Nannies, Maids, and Sex Workers in the New Economy*. New York, NY: Metropolitan Books.
- Jasso, Guillermina, Douglas S. Massey, Mark R. Rosenzweig, & James P. Smith. 2000. "The New Immigrant Survey Pilot (NIS-P): Overview and New Findings about U.S. Legal Immigrants at Admission." *Demography* 37(1): 127-138.
- Jones, Gavin, and Hsiu-hua Shen. 2008. "International Marriage in East and Southeast Asia: Trends and Research Emphases." *Citizenship Studies* 12(1): 9-25.
- Kalmijn, Matthijs. 2012. "The Educational Gradient in Intermarriage: A Comparative Analysis of Immigrant Groups in the United States." *Social Forces* 91(2): 453-476.

- Kanaiaupuni Shaun M. 2000. "Reframing the migration question: an analysis of men, women, and gender in Mexico." *Social Forces* 78(4): 1311–1347.
- Kim, Minjeong. 2010. "Gender and International Marriage Migration." *Sociology Compass* 4(9): 718-731.
- Levchenko, Polina, and Catherine Solheim. 2013. "International Marriages Between Eastern European-Born Women and U.S.-Born Men." *Family Relations* 62(1): 30-41.
- Lichter, Daniel T., Zhenchao Qian, and Dmitry Tumin. 2015. "Whom Do Immigrants Marry? Emerging Patterns of Inter-marriage and Integration in the United States." *The ANNALS of the American Academy of Political and Social Science* 662(1): 57-78.
- Lieven, John. 1999. "Family-Forming Migration from Turkey and Morocco to Belgium : The Demand for Marriage Partners from the Countries of Origin (English)." *The International Migration Review* 33(127): 717-744
- Ma, Zhondong, Ge Lin, and Frank Zhang. 2010. "Examining Cross-Border Marriage in Hong Kong," in Wen-shan Yang and Melody Chia-wen Liu (eds.), *Asian Cross-border Marriage Migration*. Amsterdam: Amsterdam University Press.
- Nguyen, T., and N. Tran. 2010. "Vietnamese-Taiwanese Marriages". 157-178. *Asian Cross-border Marriage Migration- Demographic Patterns and Social Issues*. Yang and Lu. eds. Amsterdam University Press. Amsterdam.
- Portes, Alejandro, and Ruben G. Rumbaut. 1996. *Immigrant America: A Portrait*. Berkeley, CA: University of California Press.
- Rosenfeld, Michael J. 2005. "A Critique of Exchange Theory in Mate Selection." *American Journal of Sociology* 110:1284–1325.
- Ruggles, Steven, Katie Genadek, Ronald Gofeken, Josiah Grover, and Matthew Sobek. 2015. *Integrated Public Use Microdata Series: Version 6.0 [MRDF]*. Minneapolis: University of Minnesota [distributor].

- Sassler, Sharon and Kara Joyner. 2011. "Social exchange and the progression of sexual relationship in emerging adulthood." *Social Forces* 90(1): 223-245.
- Schaeffer, Felicity Amaya. 2013. *Love and Empire: Cybermarriage and Citizenship across the Americas*. NYU Press.
- Stark, Oded, and David E. Bloom. 1985. "The New Economics of Labor Migration." *American Economic Review, Papers and Proceedings of the Ninety-Seventh Annual Meeting of the American Economic Association* 75(2):173-78.
- Stevens, Gillian, Hiromi Ishizawa, and Xavier Escandell. 2012. "Marrying into the American Population: Pathways into Cross-Nativity Marriages." *International Migration Review* 46(3): 740-759.
- Tsai, Ming-Chang. 2011. "'Foreign Brides' Meet Ethnic Politics in Taiwan." *International Migration Review* 45(2): 243-268.
- Wheeler, R. Gunter, B. 1987. "Change in Spouse Age Difference at Marriage: A Challenge to Traditional Family and Sex Roles?" *The Sociological Quarterly* 28 (3): 411-421.
- Williams, Lucy. 2010. *Global Marriage: Cross-Border Marriage Migration in Global Context*. Palgrave Macmillan.-United Kingdom.
- Lu, Melody Chia Wen and Wen Shan Yang. 2010. "Introduction" in *Asian Cross-Border Marriage Migration*. Yang, Wen-Shan and Melody Chia-Wen Lu eds. Amsterdam: Amsterdam University Press.

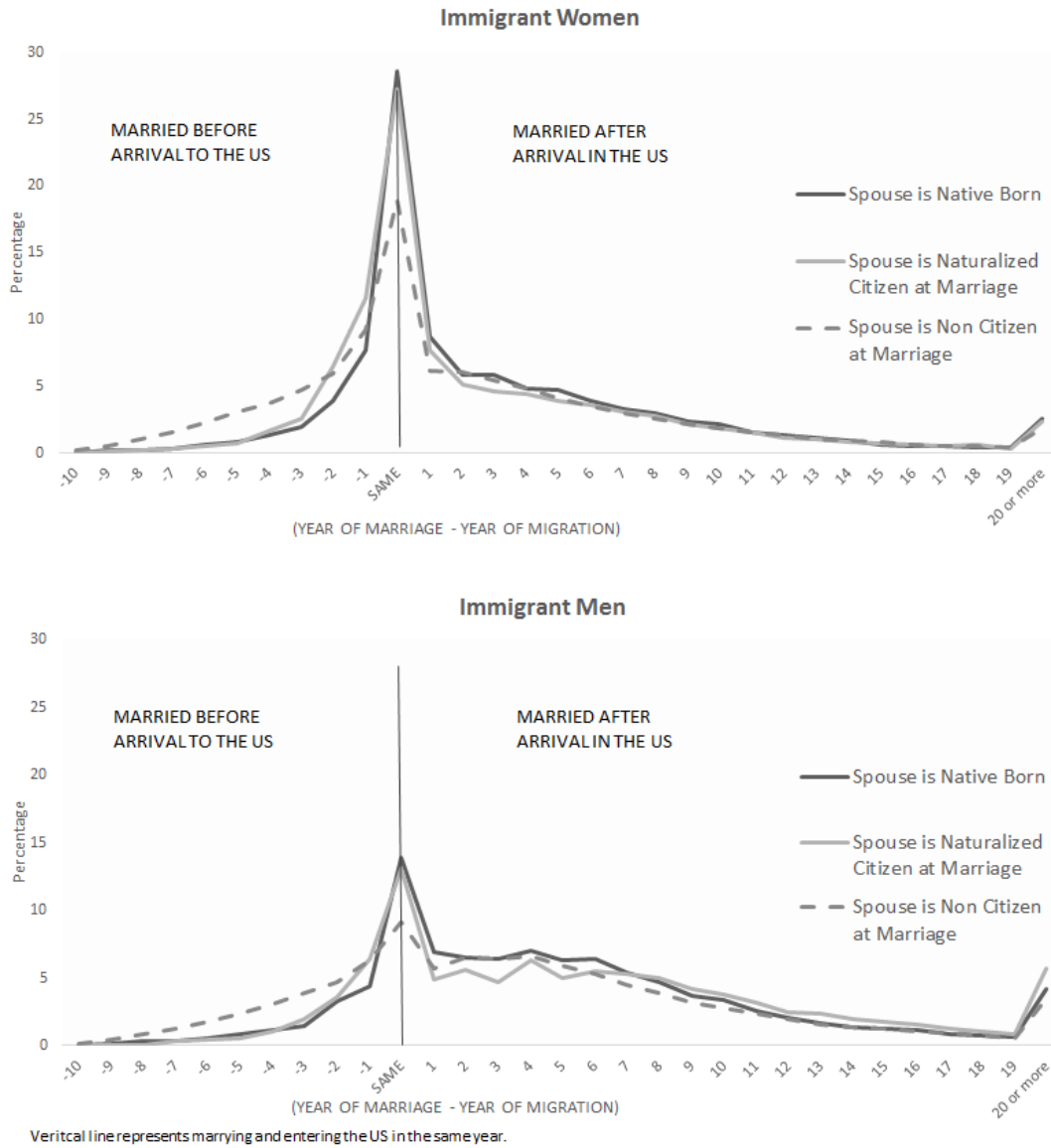


Figure 1: The Percentage Distribution of the Timing of Marriage and Migration among Currently Married Non-Citizens by Spousal Citizenship Status.

TABLE 1. Select Characteristics of Noncitizen Men and Women by Timing of Marriage, Migration and Spousal Citizenship Status

Dependent Variable	Non-Citizen Female Respondents				Non-Citizen Male Respondents			
	Spouse is a Citizen		Spouse is a Non-Citizen		Spouse is a Citizen		Spouse is a Non-Citizen	
	Marry Before/On Arrival 20%	Marry After Arrival 22%	Marry Before/On Arrival 30%	Marry After Arrival 28%	Marry Before/On Arrival 9%	Marry After Arrival 23%	Marry Before/On Arrival 23%	Marry After Arrival 45%
Mean Spousal Age Difference (years, husbands age minus wife's age)	7.4	4.5	3.4	1.6	0.7	1.9	2.6	3.3
Median Spousal Age Difference (years)	6.0	3.0	3.0	1.0	1.0	2.0	2.0	3.0
Respondent Characteristics								
Age married	27.7	31.8	23.8	29.3	28.9	31.8	26.7	30.4
Education (in years)	13.8	13.7	14.0	11.6	13.7	13.0	14.2	12.3
Categorical distribution of education								
Less than High School	0.09	0.12	0.16	0.34	0.12	0.19	0.17	0.31
High School	0.28	0.26	0.19	0.29	0.30	0.30	0.19	0.26
Some College	0.21	0.20	0.10	0.11	0.19	0.18	0.09	0.09
College Degree	0.42	0.42	0.54	0.25	0.40	0.34	0.55	0.33
Education gap (husband years of education - wife's years of education)	0.31	0.15	0.32 ^a	-0.10	-0.67	-0.77	0.34	-0.01
Distribution of education differences								
Husband More Education	0.37	0.34	0.33	0.28	0.27	0.28	0.32	0.31
Wife More Education	0.31	0.33	0.23	0.30	0.42	0.43	0.23	0.29
Same education	0.32	0.33	0.44	0.42	0.31	0.29	0.45	0.41
Respondent on second or higher marriage	0.16	0.30	0.06	0.16 ^a	0.15	0.27	0.07	0.15 ^a
Age at time of survey	35.1	38.8	32.1	36.5	36.2	38.6	35.2	37.7
Unweighted N	20,051	21,326	25,387	23,594	7,273	19,135	17,162	32, 143

Weighted estimates. IPUMS 2010-2014. Citizenship status is determined at time of marriage.

Differences in means across marital and migration timing categories are all statistically significant to the $p < .05$ level unless indicated.

a. Estimate not significantly different from "Married prior to arrival in the US"

TABLE 2. Region of Origin by Timing of Marriage, Migration and Spousal Citizenship Status, Percent Distribution

	Non-Citizen Female Respondents				Non-Citizen Male Respondents			
	Spouse is a Citizen		Spouse is a Non-Citizen		Spouse is a Citizen		Spouse is a Non-Citizen	
	Marry Before/On Arrival	Marry After Arrival	Marry Before/On Arrival	Marry After Arrival	Marry Before/On Arrival	Marry After Arrival	Marry Before/On Arrival	Marry After Arrival
World Region								
(sum across to 100%)								
Latin America / Caribbean	11.3	18.8	23.3	46.6	6.1	23.7	14.9	55.2
South America	21.2	35.1	17.2	26.5	7.0	31.7	19.4	41.9
Northern/ Western Europe	25.7	34.7	27.9	11.7	27.9	42.0	20.1	10.0
Southern Europe	25.8	30.6	27.7	15.9	17.5	33.1	27.0	22.4
Central/Eastern Europe	26.6	36.2	18.3	18.9	11.9	35.5	21.5	31.1
Russia/Baltic States	31.2	30.9	22.0	15.8	7.8	23.7	32.9	35.6
East Asia	23.1	25.4	30.5	21.0	4.3	14.1	37.3	44.3
Southeast Asia	46.2	28.1	12.8	12.9	12.5	23.0	26.8	37.7
India/South West Asia	12.4	5.6	65.6	16.3	5.7	8.7	35.7	49.9
Middle East / Asia Minor	26.5	13.2	49.2	11.1	14.9	25.6	35.6	23.9
Africa	22.5	21.5	33.5	22.5	12.7	31.3	26.1	29.8
Australia	28.8	28.5	23.6	19.2	27.7	32.8	22.5	16.9
Canada	33.8	40.1	18.5	7.6	20.2	47.9	18.5	13.5
Unweighted N	20,051	21,326	25,387	23,594	7,273	19,135	17,162	32, 143

Weighted estimates. IPUMS 2010-2014. Citizenship status is determined at time of marriage.

Table 3. Spousal age gap across uncollapsed categories of timing of marriage, migration and spousal citizenship, Weighted means (unweighted *N*)

	RESPONDENT NON-CITIZEN AT MARRIAGE		
	Married prior to arrival in US	Married the same year as arrival	Married after arrival in US
IMMIGRANT WOMEN RESPONDENTS			
Married to a man with citizenship at marriage	7.2 15,961	7.6 9,421	4.5 23,584
Married to a man without citizenship at marriage	3.4 8,122	3.3 ^a 11,915	1.6 21,299
IMMIGRANT MEN RESPONDENTS			
Married to a woman with US citizenship at marriage	0.9 3,538	0.4 3,735	1.9 19,135
Married to a woman without US citizenship at marriage	2.7 12,504	2.5 4,658	3.3 32,143

Weighted means and unweighted sample sizes shown. Spousal age gap = (Husband age - Wife age). Differences in mean spousal age gap across timing categories are all statistically significant to the $p < .05$ level unless indicated.

a. Estimate not significantly different from "Married prior to arrival in the US"

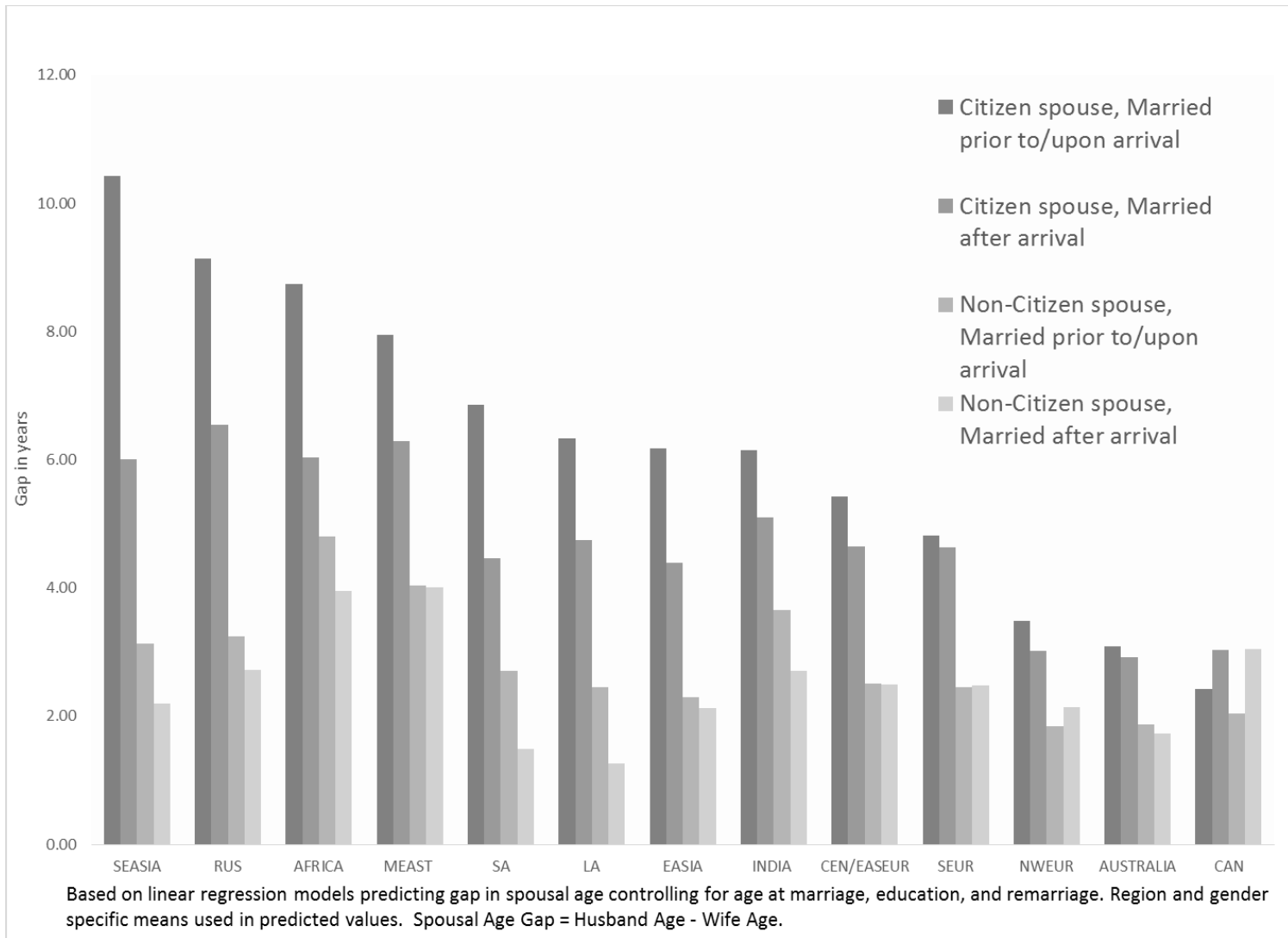


Figure 2: Predicted Spousal Age Gap by Region of Origin and Marriage, Migration and Spousal Citizenship Groups, Noncitizen Women

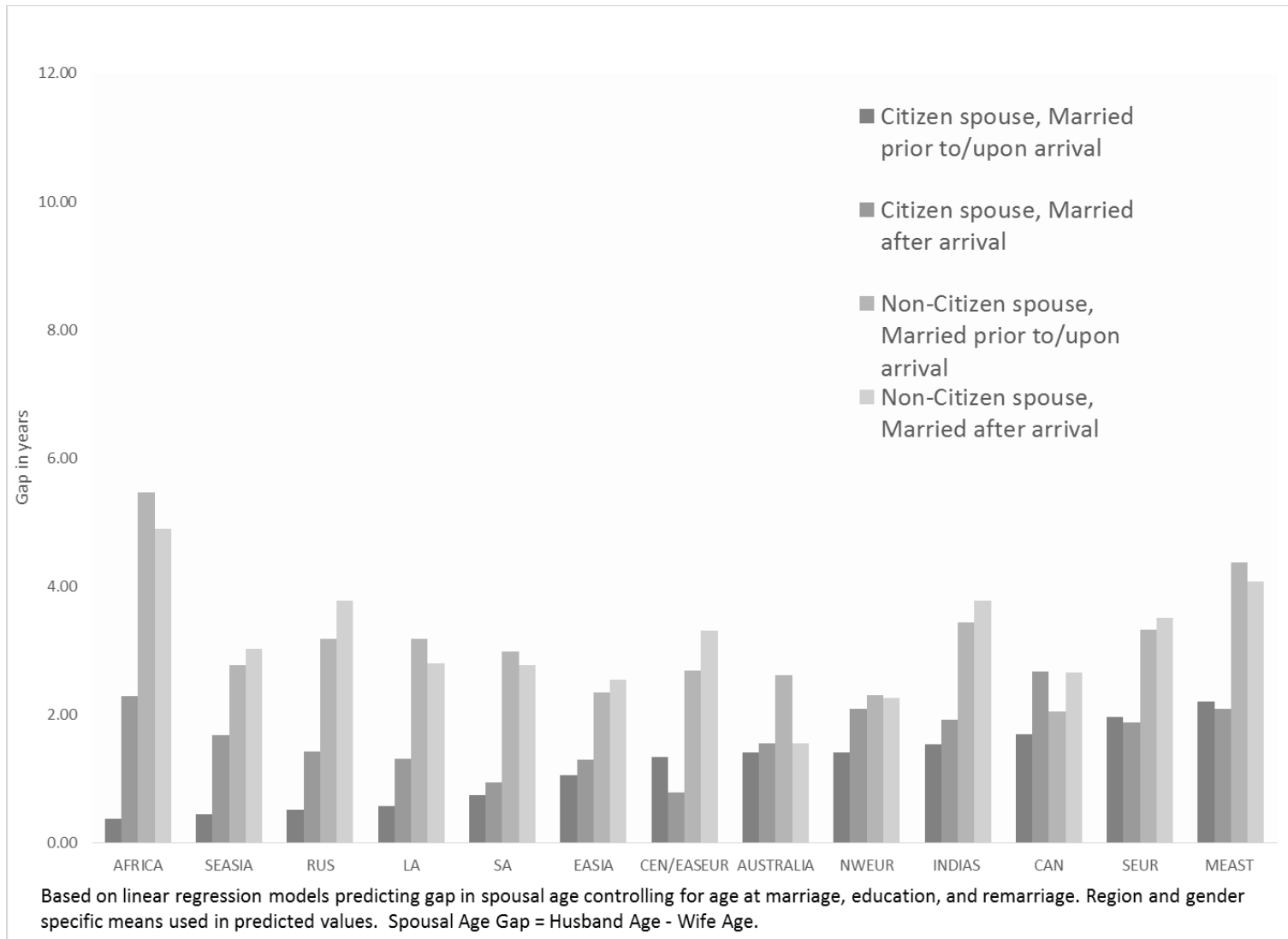


Figure 3: Predicted Spousal Age Gap by Region of Origin and Marriage, Migration and Spousal Citizenship Groups, Noncitizen Men

Appendix Table 1. Predicted Spousal Age Gap by Timing of Marriage, Migration and Spousal Citizenship and Country of Origin: Noncitizen Female Respondents.

	Non Citizen Brides				Unweighted Number of Cases
	MARRIED A CITIZEN		MARRIED A NONCITIZEN		
	COS	MOD	TRAD	CLA	
CANADA	2.43	3.03	2.04	3.04 ***	2,319
LATIN AMERICA/ CARIBEAN	6.33 ***	4.75 ***	2.45 ***	1.27 ***	29,374
Mexico	5.14 ***	4.20 ***	2.11 ***	1.17 ***	19,117
Central America	7.84 ***	5.53 ***	2.41 ***	1.18 ***	5,679
Cuba	8.27 ***	6.89 ***	2.59	2.85 ***	1,005
West Indies	8.03 ***	5.45 ***	4.24 ***	2.47 ***	3,573
SOUTH AMERICA	6.86 ***	4.47 ***	2.70 ***	1.48 ***	8,231
NORTHERN/WESTERN EUROPE	3.48 **	3.02 *	1.85	2.14 ***	2,800
Sweden	4.81 +	2.91	2.72	1.87	170
UK	3.25 **	2.72 *	1.77	1.41 *	1,578
France	3.56	4.41	1.89 +	3.28 ***	493
Netherlands	3.56	2.51	2.16 +	5.82 *	154
Denmark/Norway/Finland/Iceland	3.21	3.00	2.64	1.14 *	182
Switzerland/Belgium/Austria	3.27	2.58	0.52	1.68 *	223
SOUTHERN EUROPE	4.82 **	4.63 **	2.45	2.47 ***	972
Albania	6.97 +	6.57	4.82	4.11 ***	179
Greece	6.25 *	5.05 *	3.25	1.79	133
Italy	2.88	4.00	1.63	3.44	296
Spain	4.94 **	3.89 *	1.43	0.88	364
CENTRAL/EASTERN EUROPE	5.42 ***	4.65 ***	2.51	2.49 ***	3,821
Bulgaria	3.94	6.26 **	2.03	2.71	278
Czechoslovakia	6.69 ***	6.81 ***	3.46	2.20	277
Germany	3.80	3.52	2.68	2.51 **	1,160
Hungary	9.25 **	7.35 +	2.56	3.64	157
Poland	6.32 ***	4.66 ***	1.87	2.53 ***	1,056
Romania	7.90 ***	4.78 *	2.57	2.67 **	515
Yugoslavia	5.39 ***	4.16 +	3.50	2.48 ***	378
RUSSIA/BALTIC STATES	9.14 ***	6.54 ***	3.24	2.72 ***	3,080
EAST ASIA	6.18 ***	4.38 ***	2.30	2.12 ***	10,553
China	8.59 ***	5.46 ***	2.61 *	2.21 ***	6,340
Japan	2.26	2.75 *	1.17	1.52 +	1,743
Korea	2.98 *	3.29 **	1.93	1.91 ***	2,148
Other Asia	8.28 ***	6.01	3.91	3.88 +	322
SOUTH EAST ASIA	10.42 ***	6.00 ***	3.13 **	2.19 ***	9,950
Cambodia	10.46 **	6.67	5.65	5.23 **	323
Indonesia	9.47 ***	4.79 ***	2.22 +	0.99 *	437
Malaysia	5.04 **	2.76	1.86	2.09 **	263
Philippines	10.79 ***	6.09 ***	2.51	2.06 ***	5,614
Thailand	11.06 ***	7.46 ***	2.20	3.47 ***	863
Vietnam	9.25 ***	5.60 ***	5.03 **	2.54 ***	2,138
INDIA/ SOUTHWEST ASIA	6.15 ***	5.10 ***	3.66 ***	2.70 ***	12,295
Afghanistan	11.27 **	6.61	5.62	4.13	109
India	5.74 ***	5.00 ***	3.61 ***	2.71 ***	11,246
Iran	8.21 ***	6.05 *	3.22	3.83 ***	567
Nepal	7.23 **	4.21	4.16	3.44 ***	373
MIDDLE EAST/ ASIA MINOR	7.94 ***	6.29 **	4.04	4.00 ***	2,084
Iraq	9.00 **	6.82	4.97	4.79 ***	388
Israel	4.46	4.43	2.10	3.07 **	280
Jordan	9.36	11.51 +	7.94	6.41 **	134
Lebanon	9.33 *	6.11	4.97 +	6.91 ***	235
Saudi	8.42 ***	6.21 **	3.99 +	1.41 *	242
Syria	9.69	11.92 *	5.02	6.18 ***	157
Turkey	7.44 ***	6.71 **	2.15	2.24 **	443
Yemen	6.04 +	4.28	3.52	1.47	205
AFRICA	8.74 ***	6.04 ***	4.80 **	3.95 ***	4,250
Nigeria	10.53 ***	5.55	4.80	5.23 ***	614
Ethiopia	7.56 **	9.03 ***	4.78	4.04 ***	443
Egypt/UAE	7.56 *	7.38 +	4.66	4.82 ***	397
Ghana	7.79 ***	5.10 *	3.42	3.19 ***	502
Kenya	10.07 ***	4.57	4.54	3.15	446
Morocco	10.14 ***	7.05	5.13	4.93 ***	382
South Africa	5.84 ***	5.15 **	5.33 **	2.31 ***	348
Other Africa	9.48 ***	6.48 **	5.17	4.29 ***	1,118
AUSTRALIA	3.09	2.92	1.87	1.72 **	573

Predicted age gap based on regression models including age at marriage, years of education and an indicator of remarriage.
 *** p<.001; ** p<.01; * p<.05; + p<.10

Appendix Table 2. Predicted Spousal Age Gap by Timing of Marriage, Migration and Spousal Citizenship and Region: Noncitizen Male Respondents.

	Non Citizen Grooms				Unweighted Number of Cases
	MARRIED A CITIZEN		MARRIED A NONCITIZEN		
	COS	MOD	TRAD	CLA	
CANADA	1.69	2.67	2.06	2.67 **	1,934
LATIN AMERICA/ CARIBEAN	0.58 ***	1.32 ***	3.18 ***	2.80 ***	29,440
Mexico	1.45 ***	1.48 ***	3.17 ***	2.55 ***	19,137
Central America	-0.13 ***	0.78 ***	3.60 **	2.82 ***	5,552
Cuba	-1.44 **	1.19 **	3.93 +	3.06 ***	1,334
West Indies	-0.05 ***	1.33 ***	2.45 ***	4.00 ***	3,417
SOUTH AMERICA	0.76 ***	0.95 ***	2.99	2.78 ***	5,309
NORTHERN/WESTERN EUROPE	1.41 *	2.09	2.31	2.27 ***	4,265
Sweden	1.37	1.80	2.12	1.19 **	131
UK	1.77	2.42	2.56	2.46 ***	2,787
France	0.91	0.62 +	1.30	1.65 **	578
Netherlands	0.53	2.27	2.57	1.16 ***	250
Denmark/Norway/Finland/Iceland	1.36	3.66	2.19	3.33 *	221
Switzerland/Belgium/Austria	0.65 +	0.87 *	3.61	3.06	298
SOUTHERN EUROPE	1.96 **	1.89 **	3.33	3.51 **	1,142
Albania	3.18	0.03 **	5.90 +	3.92	148
Greece	3.94	1.57	4.52	3.20	148
Italy	2.35	2.98	2.92	2.59 **	424
Spain	-0.38 **	0.54 *	2.01	2.73 *	422
CENTRAL/EASTERN EUROPE	1.34 ***	0.79 ***	2.69 *	3.32 ***	2,822
Bulgaria	3.05	0.47 +	2.30	2.63 **	195
Czechoslovakia	-0.80 *	0.27 **	1.20 *	3.60	158
Germany	1.57 **	1.29 ***	3.12	3.72 **	971
Hungary	2.93	-1.01 *	2.54	2.26 *	112
Poland	2.67	1.43 **	2.40 +	3.25	665
Romania	1.58 +	-0.14 **	2.38	3.07 *	363
Yugoslavia	0.34 **	0.65 ***	3.32	3.52	358
RUSSIA/BALTIC STATES	0.53 ***	1.42 ***	3.19 +	3.78 +	1,521
EAST ASIA	1.06 ***	1.31 ***	2.35	2.55 ***	6,102
China	0.67 ***	1.12 ***	2.50	2.55 ***	3,787
Japan	1.02	0.88	1.94	2.21 ***	660
Korea	1.02 **	1.60 +	2.07	2.36 ***	1,403
Other Asia	4.00	2.66	3.66	3.99	252
SOUTH EAST ASIA	0.45 ***	1.68 ***	2.77	3.03 ***	3,666
Cambodia	1.98	2.50	4.56	3.04	107
Indonesia	-0.02 +	2.20	3.25	2.96 **	208
Malaysia	3.09	3.39	2.49	2.33	159
Philippines	0.34 ***	1.17 **	2.36	2.61 ***	2,055
Thailand	3.38	0.15	3.51	2.23	192
Vietnam	1.00 ***	2.47 **	3.47	4.33 *	802
INDIA/ SOUTHWEST ASIA	1.54 ***	1.93 ***	3.44 ***	3.78 ***	12,044
Afghanistan	2.33 *	3.69 +	4.91	6.34	11,173
India	1.57 ***	1.85 ***	3.46 **	3.75 ***	414
Iran	1.83 *	2.54 **	3.00 *	4.91 *	348
Nepal	1.88	2.83	4.04	3.99 ***	109
MIDDLE EAST/ ASIA MINOR	2.20 ***	2.10 ***	4.37	4.08 ***	2,165
Iraq	3.71	4.55	5.34	4.14 **	376
Israel	2.03	0.83 **	1.88 +	3.38	366
Jordan	5.03	2.86 *	7.29	6.14	160
Lebanon	3.04 *	2.89 *	5.51	5.76	223
Saudi	1.48 +	2.30	3.86	3.73 **	225
Syria	1.54 *	4.36 +	5.91	6.40	137
Turkey	-1.07 **	0.86 **	2.31	2.84 **	480
Yemen	4.17	3.92	3.88	3.82 +	198
AFRICA	0.38 ***	2.29 ***	5.47 *	4.89 ***	4,574
Nigeria	2.14 ***	3.14 **	4.79	5.05 ***	679
Ethiopia	1.24 ***	0.45 **	5.61	4.79 ***	351
Egypt/UAE	-1.07 ***	2.24 **	5.28	5.79	464
Ghana	0.27 **	3.16	5.59 +	4.14 ***	539
Kenya	2.40	3.11	5.61 ***	3.19 ***	422
Morocco	-1.76 ***	1.79 ***	5.29	5.69 ***	402
South Africa	1.92	2.18	5.59	3.81 **	397
Other Africa	-0.46 ***	1.75 ***	5.73	5.55 **	1,320
AUSTRALIA	1.41	1.55	2.63	1.55 **	729

Predicted age gap based on regression models including age at marriage, years of education and an indicator of remarriage.
 *** p<.001; ** p<.01; * p<.05; + p<.10