

Transnational Marriages between Eastern European-Born Wives and U.S.-Born
Husbands

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Dedication

To my parents.

To my husband and my son.

Abstract

In the era of globalization and increased mobility of individuals who pursue various goals in their immigration, immigration due to marriage becomes a new norm. As the number of transnational marriages increases, including those from Eastern Europe, it is important for social scientists to focus on these types of marriage circumstances, and for family practitioners to better understand how marriage migrants adjust within their marriage and community.

The two research questions of the dissertation include the following: What are the characteristics of spouses in transnational EE-U.S. couples that can distinguish them from spouses in intranational U.S.-U.S. couples? (Research Question 1); Are EE wives in transnational interethnic couples exposed to more areas of potential vulnerabilities compared to EE wives who are in intraethnic EE-EE immigrant couples? (Research Question 2). To answer these questions a 1% representative sample from 2008-2010 American Community Survey was used.

Results from Project 1 suggested that preference for a traditional wife, limited opportunities of a local marriage market, and husband's exposure to diversity could be the factors that motivate U.S.-born husbands' to seek spouses transnationally. The findings from Project 2 suggested that certain areas of vulnerability described in previous qualitative studies could be a reality of Eastern European marriage migrants. Limitations and implications for future research were discussed.

Keywords: transnational (international / cross-border / cross-national) marriages, marriage migrants, Eastern Europe

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General Introduction

Significance

The United States of America is a country of immigrants. Individuals and families come to the U.S. for various reasons and represent a variety of immigration patterns: some initially seek occupational or educational opportunities; others reunite with their family members. Yet there is another model, probably not the most common, yet drawing considerable public and political attention: immigration due to marriage, also known as marriage migration. Marriage migration is a result of transnational marital arrangements that take place between two people from different countries.

Transnational marriages in the U.S. have been on the rise since the immigration legislation of 1965, which allowed for family reunification. Additionally by the end of the 20th century, the increase in travel for tourism, business, and education as well as the development of communication technologies, supported direct (in-person) and indirect (technology-mediated) contacts between nationals of different countries. As a result, over the last two decades the number of nonimmigrant visas issued annually to foreign-born fiancé(e)s of U.S. citizens and children of fiancé(e)s of U.S. citizens increased several times (Figure 1).

Despite such an increase, little research has been done in the area of transnational marriages. The studies, predominantly qualitative, that address the phenomenon of transnational marriages, tend to focus just on the foreign-born spouses in these unions, and in most cases, specifically on those who experience abusive relationships. While qualitative designs allow the experiences of these women to be heard, they lack an opportunity to explore overall patterns in transnational marriages. As a result, the bigger

picture is missing: Who are the individuals, both U.S.- and foreign-born, engage in transnational marriages? What are their differences and similarities? How are transnational marriages different from those in which both partners were born in the U.S.? To understand general characteristics of transnational marriages in the U.S., there is a need for quantitative studies with nationally representative samples.

In the context of contemporary diverse ethnic and racial immigration to the U.S., immigrants from Eastern Europe rarely draw research focus and even in the society are typically perceived as White mainstream majority. Therefore this dissertation further narrows its scope and focuses specifically on transnational marriages between Eastern European-born and U.S.-born spouses. The author's Eastern European ancestry allows a valuable insight on socioeconomical and cultural processes in the sending countries.

Definitions

Eastern European. The Eastern European region typically include the following countries: Armenia, Bosnia (former Yugoslavia), Bulgaria, Byelorussia, Croatia (former Yugoslavia), Czech Republic (former Czechoslovakia), Estonia, Hungary, Kazakhstan, Latvia, Lithuania, Moldavia, Poland, Republic of Georgia, Romania, Russia, Slovakia (former Czechoslovakia), Slovenia, Ukraine, Uzbekistan, and Yugoslavia. However, the sample used in the following studies included the top four countries from which marriage migrants currently come: Poland, Romania, Russia, and the Ukraine. These four (out of 21) countries constitute 70% of the marriage migrants from Eastern Europe who were included in the American Community Survey (ACS; Ruggles et al, 2010) data set. The decision to exclude other Eastern European countries was made to reduce cultural variability within the sample.

Transnational marriages. This term refers to marital unions between two individuals from different countries. However, other terms have also been used in the social sciences literature: cross-border (e.g., Piper, 2003), cross-national (e.g., Seto, & Cavallaro, 2007), bi-national (e.g., Beck-Gernsheim, 2011), international (e.g., Jones, & Shen, 2008), and transnational marriages (e.g., Gardner, 2006). Although, the term “international marriages” is the one that is most commonly used, the term “transnational marriages” conveys a more contemporary idea of marriage in a world in which traversing national boundaries and geopolitical borders is an increasing common occurrence. The term also fits the recently developing concept of transnational immigration, which is no longer a one-way process with “homeland” left behind. Transnational families nowadays remain political, economic, familial connections with their countries of origin (Gardner, 2006). Hence in this paper the term *transnational marriages* will be used to describe marital unions between two individuals from different countries.

The term *Eastern European-U.S.* or *EE-U.S.* will be used to identify transnational marriages between U.S.-born and Eastern European-born (EE-born) spouses. In Project 1, these families are compared to *intranational U.S.-U.S. marriages*, the marital unions between two U.S.-born spouses. In Project 2, transnational EE-U.S. marriages are compared to marriages between two Eastern European-born spouses (EE-EE marriages) who currently reside in the U.S. Only those EE-EE marriages in which spouses share the same country of origin were included, hence the term *intraethnic EE-EE marriages*. For clarity, the term *interethnic* will be added to the term *transnational marriages*, that is, *interethnic transnational EE-U.S. marriages*.

Marriage migrants. Similar inconsistency exists in terminology used to identify foreign-born spouses engaged in such marital unions. Depending on the context and discipline, foreign-born spouses are referred to by gendered terms such as ‘picture’, ‘mail-order’, ‘Internet’, and ‘correspondence’ brides. Although to some extent these terms reflect the reality of transnational marriage patterns in which the majority of foreign-born spouses tend to be women, it also does a disservice to them by perpetuating certain stereotypes or labeling them as victims by default (e.g., ‘mail-order bride’). Thus in this paper the term *marriage migrant* is used to refer to a foreign-born marriage partner in transnational marriage (see also Heyse, 2010; Merali, 2008).

Structure

The two projects that constitute the body of this dissertation were designed to pursue the overall research objective, which is to fill in the gap in our understanding of transnational marriages, namely, a) what motivates U.S.-born spouses to marry transnationally; and b) how marriage migrants are doing in terms of their adjustment in the U.S.. The two overall research questions are (see Table 1.1):

Research Question 1: What are the characteristics of spouses in transnational EE-U.S. couples that can distinguish them from spouses in intranational U.S.-U.S. couples?

Research Question 2: Are EE wives in transnational interethnic couples exposed to more areas of potential vulnerabilities compared to EE wives who are in intraethnic EE-EE immigrant couples?

Based on these two research questions the following two projects were implemented (see Table 1.1):

Project 1: Who marries women from Eastern Europe? Transnational marriages between U.S.-born husbands and Eastern European-born wives.

Project 2: Assessing potential vulnerability among Eastern European-born wives in interethnic transnational Eastern European-U.S. marriages.

**Project 1: Who Marries Women from Eastern Europe? Transnational Marriages
Between U.S.-Born Husbands and EE-Born Wives**

The phenomenon of U.S. men seeking wives across national borders is not new. However, during the 1990s when the mail-order bride industry found its new media (the Worldwide Web), the number of matchmaking companies increased rapidly. In fact, the occurrence of transnational marriages in the U.S., that is, marriages between U.S.-born and foreign-born spouses, increased fivefold over the last two decades (U.S. Department of Homeland Security, 2010).

Despite the rapid increase in the number of transnational marriages in the U.S., research on mate selection and spousal characteristics is relatively limited in scope. First, the focus of research studies in this area focuses primarily on one spouse – the foreign-born wife (Cottrell, 1990). What is known about U.S.-born husbands in transnational marriages is from limited information from studies focused on EE-born women (Esteve, Garcia, & McCaa, 2011; Sahib, Koning, & van Witteloostuijn, 2006). The reason for this is quite evident, since it is foreign-born women who experience the most transitions and adaptation in the new cultural and socio-economical environment, and it is women who are more likely to be the victims of intimate partner abuse. However, it is also obvious that a marriage decision involves two people; its success or failure depends upon both spouses. Therefore our understanding of strengths and vulnerabilities of these marriages must be based on research that includes both spouses.

Second, the research on transnational marriages tends to be problem-focused, in part due to higher reported cases of abuse in these types of marriages. In fact, the abuse rate for foreign-born women in transnational marriages is three times higher than that

reported for the general U.S. marriage population (Hass, Ammar, & Orloff, 2006). Consequently, research on the husbands in these transnational marriages are only peripherally included and are often described from a one-dimensional perspective as ‘buyers’, ‘exploiters’ and ‘abusers’ (e.g., Crandall, Senturia, Sullivan, & Shiu-Thornton, 2005; Patico, 2009; Sahib, Koning, & Witteloostuijn, 2006).

Third, despite their increasing prevalence, Eastern European-U.S. (EE-U.S.) marriages are often overlooked in these studies. A recent Pew Research Center report titled “The rise of intermarriage: Rates, characteristics vary by race and gender on transnational marriages” (Wang, 2012) highlights this limitation with its lack of attention to EE-U.S. marriages. Thus, there is a need for a systematic focus on transnational marriages in which one spouse is from Eastern Europe. This need has been highlighted in literature on international marriages in general (Jones & Chen, 2008; Esteve, Garcia & McCaa, 2011) and from research on Eastern European immigrants in particular (Robila, 2007).

The limited scope of the extant body of literature on transnational marriages represents a significant gap in our knowledge base leading to an incomplete picture of current trends in transnational marriages and the unique characteristics of the spouses therein. We need to understand the individual, societal, cultural, and structural determinants that motivate U.S.-born men to marry across borders (Esteve, Garcia, McCaa, 2011). This study aims to fill that gap. With dual foci on two limitations of current literature, namely U.S.-born men and Eastern-European-born women in transnational marriages, the research considers the odds of marrying transnationally (being in an EE-U.S. marriage) versus intranationally (being in a U.S.-U.S. marriage).

Background

Theoretical Frameworks

Several theories attempt to answer how individuals choose their marriage partners. This paper integrates two theoretical approaches. The first approach is Kalmijn's (1998) theoretical framework on intermarriages that explores how the degree of openness of group boundary allows for marriages outside one's own group (intermarriages). Kalmijn's theory is complemented by Becker's assortative mating theory (1973), which states that in the process of mate selection, individuals tend to choose a mate with traits similar to their own (positive assortative mating). The following sections explore how these two theoretical approaches guide the current study.

Theoretical Framework on Intermarriages. Matthijs Kalmijn's (1998) theoretical framework on intermarriages includes three general propositions that are supported in intermarriage literature: "(a) the preference of marriage candidates for certain characteristics in a spouse, (b) the interference of "third parties" in the selection process, and (c) the constraints of the marriage market in which candidates are searching for the spouse" (Kalmijn, 1998, p 395). This study employed two theoretical distinctions proposed by Kalmijn and Tubergen (2010): 1) *cultural determinants* "that relate norms, values, and preference that people have regarding interactions and marriage with members of other groups" (p. 461) and 2) *structural determinants* "that address the opportunities that people have to marry inside or outside the group" (p. 461). Unlike mate selection among individuals within the same country, mate selection resulting in transnational marriage happens in a global context. Approximately 50% of these marriages are mediated by Internet Marriage Agencies ("Abuse and Exploitation", n.d.,

para. 1). Therefore, some of the cultural and structural determinants used in the current study have been adjusted to fit the context of mate selection in the global arena.

Assortative Mating. Becker's (1973) neoclassical marriage market model posits that two individuals seek marriage partners to either gain the most benefits and this might be due to compatibility (positive assortative mating) or due to complementarity (negative assortative mating) of market and nonmarket characteristics. Although in theory the correlation between characteristics can be both positive and negative, the empirical literature asserts that positive assortative mating on one or several individual traits such as spousal age, religion, education, and social status has been observed in various populations (e.g., see Jepsen & Jepsen, 2002). At the same time while positive assortative mating on race and ethnic background has long been a norm, the blurring of boundaries among different ethnic and racial groups indicates a greater mutual acceptance of members in these groups and leads to intermarriages between them (Kalmijn, 1998).

Although these areas of similarity are well-documented in a fairly sizeable literature on mate selection, whether or not this similar-trait seeking behavior is also found when individuals marry transnationally has not been examined and is one of the aims of the current study.

Marriage Preferences and Opportunities for U.S.-Born Husbands

The following paragraphs review existing literature on EE-U.S. transnational marriages and marriages in general and on the U.S.-born men in these unions in particular, through the lenses of the aforementioned guiding theoretical frameworks.

Cultural determinants. U.S.-born husbands seek wives in Eastern Europe because of preferences for certain wife's characteristics that, from their perspective, might not be found in U.S. women.

Preference for a traditional wife. In studies on EE-U.S. transnational marriages, an explicit preference of men to seek a traditional wife is a reoccurring theme. This preference is explained by men's perceptions that U.S. women are too selfish and calculating, and are unwilling to entertain a traditional role of housewife and mother. More specifically, U.S. husbands' perceptions of a more traditional wife includes her being less career- and more family-oriented, that is, being more focused on home and family (Heyse, 2010; Patino, 2009; Rossiter, 2005; Sahib, Koning, & Witteloostuijn, 2006; Shafer, 2009). This family-oriented value implies that she becomes a housewife. As one man put it: "The idea of having a wife from a more traditional background, the idea of the man going out to work while the woman stays and tends the home has long been an ideal of mine" (Luehrmann, 2004).

Additionally, findings from qualitative studies on international marriages provide some evidence that couples in which the husband is older are quite common (Luehrmann, 2004; Patino, 2009; Rossiter, 2005). A recent study on differences and similarities in major demographic characteristics provide empirical support for greater spousal age differences (negative assortative mating) in EE-U.S. couples. The average spousal age difference in these couples was 8.7 years compared to 2.3 years in White non-Hispanic U.S.-U.S. couples (Levchenko & Solheim, 2013).

Preference for similarities. Certain spousal similarities in EE-U.S. transnational marriages have been noted in recent literature. The first similarity is in spouses'

educational attainment. Positive assortative mating by education has been found for interethnic marriages (Kalmijn, 1993; Qian, 1999; Qian et al., 2001), as well as for transnational marriages in Denmark (Çelikaksoy, Nielsen, & Verner, 2006), and for transnational EE-U.S. marriages (Levchenko & Solheim, 2013). Qualitative studies on EE-U.S. transnational marriages have found that U.S.-born men in these marriages tend to have professional careers (Patino, 2009). Two-thirds of EE-born women have a university level degree (Luehrmann, 2004).

Positive assortative mating by ethnicity means that people commonly seek marital partners with similar ethnic backgrounds and presumably similar cultural values. Research has found that U.S.-born men who seek prospective wives in Eastern Europe are predominantly White (Patino, 2009). A study of EE-U.S. transnational marriages using data from the American Community Survey (ACS; Ruggles et al, 2010), reported that 95% of the U.S.-born husbands were White non-Hispanic (Levchenko & Solheim, 2013). Levchenko and Solheim's (2013) study also found that 19% of U.S.-born husbands reported Eastern European ancestry. Others have reported that there is a tendency within some U.S.-based immigrant groups to seek brides from their native countries (Champion, 1994; Jackson, 2007). Luehrmann (2004) proposed that similar spousal races in transnational marriages reduces people's tendency to label the husband as one who has married a 'mail-order bride'.

In summary, prior research on the relationships among preferences, norms, values, and marrying transnationally suggests that U.S.-born men who seek transnational brides prefer: a) women who focus on home versus career; b) younger women; c) women

with similar educational background; and d) women with similar ethnic backgrounds.

Based on this body of research, four hypotheses are proposed for this study:

Hypothesis 1: If in a couple the wife stays at home, it increases the odds that the couple's marriage is transnational.

Hypothesis 2: If in a couple the wife is younger than her husband, it increases the odds that the couple's marriage is transnational.

Hypothesis 3: If spouses are similar in educational level, it increases the odds that the couple's marriage is transnational.

Hypothesis 4: If in a couple the husband has Eastern-European ancestry, it increases the odds that the couple's marriage is transnational.

Structural determinants. Certain characteristics of women in the U.S. marriage market might constrain U.S.-born men's choices of potential partners within the U.S., and thus propel them to seek a wife internationally. Conversely, the marriage market may be expanded when U.S.-born men are exposed to greater diversity and thus look beyond their own national borders to seek a marriage partner.

Limited opportunities. Research has found that U.S.-born husbands in transnational marriages are likely to be remarried (e.g., Crandal, Senturia, Sullivan, & Shiu-Thornton 2005; Rossiter, 2005). Levchenko and Solheim's demographic study using the 2008-2010 ACS data set (2013) found that 65% of U.S.-born husbands in Ukrainian-U.S. marriages, 50% – in Russian-U.S. marriages, and 32% – in Romanian-U.S. marriages had been divorced prior to their current marriage with an EE-born woman, compared to 27% in U.S.-U.S. marriages. As current research suggests, the majority of divorces occur due to the general quality of the marital relationship or

affective reasons, e.g., incompatibility, drifting apart, personality clashes, and communication problems (e.g., Amato & Previti, 2003; Wolcott & Hughes, 1999). Hence these marital unsuccessful experiences can alter a person's perceptions of marriage and his or her own preferences in spousal characteristics in case of remarriage. Because of previous marital experiences, divorced individuals become more selective about what they are looking for in a subsequent partner (Gelissen, 2004). In addition to that, studies of remarriages propose that individuals face limited opportunities to meet potential spouses after divorce because the pool of potential unmarried partners is smaller (de Graaf & Kalmijn, 2003).

Exposure to diversity. A person's decision to choose a mate from a different culture can be influenced by his or her previous exposure to a specific ethnic group or to diversity in general. Two primary environments in which individuals are exposed to ethnic diversity are college and the workplace. Having multiethnic social networks (e.g., ethnically diverse friends) is related to having interethnic romantic relationships among college students (Bowman, 2012; Clark-Ibáñez, & Felmlee, 2004). Compared to K-12 educational settings in which substantial segregation continues to exist, U.S. colleges are more diverse (Orfield & Lee, 2006; Reardon & Yun, 2002). The diversity is comprised of not only U.S.-born or new immigrant multiethnic populations, but also international students who come to the U.S. for education, especially at the graduate level (Rose-Redwood, 2010). Diversity exposure in college has a long-lasting effect on choices five or six years after graduation, e.g., more diverse friendships and work in more diverse environments (Gurin, 1999; Jayakumar, 2008), or recognition of racism, volunteering, and a having pluralistic orientation even 13 years after college (Bowman, Brandenberger,

Hill, & Lapsley, 2011; Jayakumar, 2008). Finally, the presence and size of an immigrant group in one's community might also contribute to the acceptance of diverse people and increased interethnic relationships (Clark-Ibáñez & Felmler, 2004).

Based on the aforementioned literature, an additional four hypotheses related to structural influences on transnational marriages are proposed.

Hypothesis 5: If in a couple the husband is remarried, it increases the odds that the couple's marriage is transnational.

Hypothesis 6: If in a couple the husband obtained bachelor's degree or higher, it increases the odds that the couple's marriage is transnational.

Hypothesis 7: If a couple is living in a metro area, it increases the odds that the couple's marriage is transnational.

Hypothesis 8: If a couple is living in the state with greater Eastern-European community, it increases the odds that the couple's marriage is transnational.

Finally, Based on Kalmijn's (1998) suggestion,

Hypothesis 9: Cultural rather than structural determinants will contribute more to the power of the model to predict the odds that the couple's marriage is transnational.

Interrelatedness between cultural and structural determinants. Although theory proposes that there is a distinction between cultural and structural determinants, "the indicators for either of the two approaches will sometimes include elements of the other" (Kalmijn & Tubergen, 2010, p. 461). Therefore, this study explored how remarriage (structural determinant) might be related to a man's preferences for a younger wife and for educational similarity in his spouse (cultural determinants).

As previously stated, U.S.-born men in *transnational* marriages are more likely (32-64%) than U.S.-born men in *intranational* marriages (27%) to have been divorced prior to their current marriage. Some studies have proposed that in the general U.S. population, large numbers of divorced men have more traditional gender role attitudes (Goldscheider, Kaufman, & Sassler, 2009; Kaufman, 2000). Moreover, they seek a considerably younger wife for remarriage, possibly due to attitudes about beauty and a desire to have children with a new partner (England & McClintock, 2009). Additionally, studies on divorcees have found that positive assortative mating by education is stronger in second marriages than in first marriages (Gelissen, 2004; Shafer, 2012).

The interrelatedness between cultural and structural determinants generated two hypotheses involving two-way interactions between variables:

Hypothesis 10: If in a couple the husband is remarried to a younger wife, it increases the odds that the couple's marriage is transnational.

Hypothesis 11: If in a couple the husband is remarried to a wife with similar educational level, it increases the odds that the couple's marriage is transnational.

Hypothesis 12: The inclusion of interaction terms will contribute significantly to the overall model's power to predict the odds that the couple's marriage is transnational.

Method

Data

Data for this study were from the 2008-2010 American Community Survey (ACS), a 1% representative sample of the Integrated Public Use Microdata (IPUMS; Ruggles et al, 2010). The ACS dataset has a number of characteristics that are advantageous for this project. First, because it is nationally representative census data,

the dataset captures often-overlooked minority groups, namely Eastern Europeans. Second, the ACS dataset includes information obtained from both spouses who can be paired to create couple-level analysis. Finally, although there is no direct variable that describes the reason for entry into the U.S., later waves of the ACS dataset include important demographic variables, which allow marriage migrants to be identified.

One disadvantage of this dataset, typical for cross-sectional designs, is that it includes only those couples that were married at the time of the survey. As a result, the national rate of marital disruption for transnational couples remains unknown.

Sample

White non-Hispanic U.S.-born men married to either White non-Hispanic U.S.-born wives (U.S.-U.S. intranational marriages, n=1,236) or to Eastern European-born wives (EE-U.S. transnational marriages, n=258) were selected for this study. To identify EE-U.S. transnational marriages, the following steps were taken. Because the ACS does not include a specific variable to identify marriage migrants (e.g., visa type or reason for immigration), only those EE-U.S. couples for which the year of marriage was the same year as the wife's migration to the U.S. were included. This procedure has previously been used as a proxy for K-1 (fiancée) visas (Esteve, Garcia, & McCaa, 2011; Levchenko & Solheim, 2013). Additionally, for EE-U.S. transnational marriages, to reduce variation due to culture, only men who were married to EE-born women from one of four countries, that is, Russia, Ukraine, Poland, and Romania, were selected which constitutes 70% of EE-U.S. transnational marriages in the ACS dataset. The remaining 30% of the original EE-U.S. sample was excluded because it represented 17 different Eastern European countries, none of which were large. It was determined that there was too

much cultural variability across those countries to allow for meaningful interpretation of the data, so those marriages were excluded from analyses.

Two additional inclusion criteria were used to identify the sample. First, because both spouses in EE-U.S. transnational marriages are typically White non-Hispanic (Levchenko & Solheim, 2013), I used this race-ethnicity inclusion criterion to increase comparability. Second, I included marriages that lasts no less than 2 and no more than 7 years. The rationale for this decision was based in research by Gottman & Levenson (2000), which found that half of divorces would take place within seven years of marriage. Therefore, it was assumed that the 7-year upper bound would account for both successful marriages and those that might end in divorce. Additionally, the lower 2-year bound was used to account for immigrant EE-born women's employment constraints. This was estimated based on circumstances related to initial visa restrictions on travel and employment, time needed to apply for work authorization (up to four months), and time need to conduct a job search.

Independent Variables

Cultural determinants. Age difference is a couple-level continuous variable measured as the difference between husband's and wife's ages.

Not in labor force is an individual-level dummy variable used as a predictor of wives' stay-at-home status. The category "yes, in labor force" is the reference category coded as 0, and "no, not in labor force" coded as 1.

Educational similarity is a couple-level dummy variable measuring similarity in spouses' educational attainment. The variable was constructed using the following steps for both spouses: First, a new variable with fewer categories was created based on the

original ACS variable on educational attainment, that is, No schooling; 12th grade or less; regular high school diploma; some college or Associate degree; Bachelors degree; Professional degree beyond Bachelors. Second, wife's educational attainment was subtracted from husband's. Third, the resulting variable was coded 0 if spouses' educational attainment was different and 1 if it was similar.

Cultural similarity is a husband's individual-level dummy variable measured by whether a husband reported any Eastern European ancestry for his first or second response to a question about ethnicity, with those who reported Eastern European ancestry coded as 1, otherwise 0.

Structural determinants. *Remarriage* was recoded from the original ACS data to create an individual-level dummy variable indicating whether a U.S.-born man has been married prior to his current marriage. "Married twice" and "married thrice or more" responses were recoded as 1, and a code of 0 indicates that his current marriage is his first.

Husband's higher educational status is an individual-level dummy variable used to indicate educational attainment level among U.S.-born men: high school degree or less was coded as 0. Bachelor's degree or higher was coded as 1.

Residency in metro area is an individual-level dummy variable used as a proxy for husband's exposure to diversity. The variable is coded as 1 if the U.S.-born man resided in a metro area and 0 for non-metro area residence responses.

Size of Eastern European community in the state is a community-level variable that identifies the percent of the Eastern European population (U.S.-born or foreign-born) relative to the overall population within each state in which the husband resided.

Correlations among the predictor variables were checked using Spearman's rho test. There were no issues with multicollinearity among predictors in the model; none of the variables were correlated at or above .50 (see Table 1.4).

Analytical Procedures

The dependent variable consisted of two categories: (0) White non-Hispanic U.S.-born wife, and (1) EE-born wife. To test the hypotheses, the odds of marrying *transnationally* versus marrying *intranationally* were considered. Logistic regression was chosen over discriminant analysis due to unequal group sizes (1,236 vs. 258) in the sample. Additionally, the set of predictors was a mix of continuous, discrete, and dichotomous variables, which also supported the choice of logistics regression, which is relatively free of restrictions (Tabachnik & Fidell, 2007). The ratio of cases to variables for the small size group (n=258) complied with the requirement of at least 10 cases per predictor, the number in the current study's model (Agresti, 2007).

Based on the earlier theoretical discussion that highlighted the interactions among cultural and structural determinants, sequential logistic regression was used to increase the predictive power of the model. To test hypotheses 9 and 12, sequential logistic regression analysis was done through comparison of three models: with structural determinants only (Model 1), with cultural determinants added (Model 2), and when two interaction terms were added to the previous two models (Model 3). To run the sequential logistic regression analysis, the SPSS LOGISTIC REGRESSION syntax function was used with two successively ENTER instructions for inclusion of Model 2 and Model 3 predictors (see Table 1.5). To evaluate improvement in each successive model, goodness-of-fit, classification, and likelihood ratio tests were used. A likelihood

ratio test was done by subtracting the chi-square of the fuller model from the chi square of the smaller model. More specifically, at the first step the chi square for Model 2 was subtracted from the chi square for Model 1; for the second step in which Model 3 was added to Model 1 and Model 2, the chi square for Model 3 was subtracted from the chi square for the combined Model 1 and Model 2. The same procedure was repeated for the degrees of freedom.

To test the remaining hypotheses, the full Model 3 (hierarchical binary logistic regression) with both interaction effects and main effects included in the analysis (Tabachnik & Fidell, 2007) was considered (see Table 1.5). Significant predictors and their importance in predicting the outcome variable are reported based on the value of odds ratios, that is, the farther the odds ratio from 1, the more influential the predictor (Tabachnik & Fidell, 2007).

ACS is a weighted sample, which means that persons with some characteristics are over-represented in the samples, while others are underrepresented (Ruggles et al, 2010). However, weights were not applied because weighted samples are disproportionately large and can lead to Type I error (false positive). Due to the fact that in the proposed model the sampling weights are a function of independent variables, that is, age, sex, race, and Hispanic origin, rather than the dependent variable, that is, country of birth, the unweighted OLS estimates are applicable “because they are unbiased, consistent, and have smaller standard errors than weighted OLS estimates.” (Winship & Radbill, 1994, p. 230). The statistical analyses were performed using SPSS for Windows (Version 20) statistical software program.

Results

Descriptive

Table 1.3 lists percentages (for dummy variables), and means and standard deviations (for continuous variables) for the two marital groups in the sample: intranational U.S.-U.S. marriages (White non-Hispanic men married to U.S.-born women), and transnational EE-U.S. marriages (White non-Hispanic men married to EE-born women). Compared to U.S.-born men married to U.S.-born women, U.S.-born men married to EE-born women had greater spousal age differences (H_2 ; see Table 1.2) and tended to be remarried (H_5). More of them had at least a college degree (H_6), and slightly more of them resided in a metro area (H_7). Compared to U.S.-born men in U.S.-U.S. marriages, more U.S.-born men in EE-U.S. marriages reported EE ancestry (H_4), however the percentage was small. Almost twice more EE-born versus U.S.-born wives were not in the labor force (H_1).

Spousal educational similarity was less common in EE-U.S. marriages (H_3), and the average percent of Eastern European populations in states where EE-U.S. couples reside was smaller than in states in which U.S.-U.S. couples reside (H_8).

Sequential Binary Logistic Regression

A sequential binary logistic regression analysis (see Table 1.5) was performed to assess the predictive power of Model 2 over Model 1 (H_9) and Model 3 over Model 2 (H_{12}). There was an acceptable model fit (discrimination among groups) on the basis of the four structural determinants alone (Model 1), $\chi^2(8, N=1,494)=4.860$ $p=.772$, Nagelkerke $R^2=.10$. However, correction classification rates were 0% for transnational

EE-U.S. marriages, and 100% for intranational U.S.-U.S. marriages, implying that the model does not predict the odds of U.S.-born men marrying transnationally.

After addition of the four cultural determinants (Model 2), $\chi^2=(8, N=1,494)=17.552$ $p=.025$, Nagelkerke $R^2=.36$, Model 2 showed a better fit with the model correctly classifying 37% of transnational marriages and 97% of intranational marriages. Overall, this model correctly classified 87% of all marriages. Comparison of log-likelihood ratios for Models 1 and 2, $\chi^2=(4, N=1,494)=274.149$ $p<.001$, showed statistically significant improvement with the addition of cultural determinants (H_9).

Finally, when the full set of determinants and two two-way interaction terms were added (Model 3), $\chi^2=(8, N=1,494)=11.714$ $p=.164$, Nagelkerke $R^2=.37$, there was a slightly improved prediction of transnational marriages (39% versus 37%), , while the prediction for intranational marriages (97%) and overall correct classification of marriage type (87%) remained the same. Comparison of log-likelihood ratios further demonstrated statistically significant improvement for full Model 3 (vs. Model 2), $\chi^2=(4, N=1,494)=21.496$ $p<.001$ (H_{12}). This full model was used to predict the odds of marriage to EE-born woman *vs.* to U.S.-born.

Hierarchical Binary Logistic Regression

Because the sequential logistic regression confirmed that the model with a full set of predictors had the best power to predict U.S.-born men's marriage type, the full Model 3 (hierarchical binary logistic regression) was considered to assess the relationships among prediction of marriage type as outcome and the 10 specific predictor variables in the model: 4 cultural determinants, 4 structural determinants, and 2 two-way interaction terms. Table 1.5 (Model 3) shows regression coefficients, standard errors, odds ratios,

and p values for each of the 10 predictors. A test of the full model with all predictors against a constant-only model was statistically significant $\chi^2(13, N=1,494)=378.852$ $p<.001$, indicating that the predictors, as a set, reliably distinguished between transnational and intranational marriages. The accounted variance for marital group was medium, Nagelkerke $R^2=.37$.

Significant predictors. The most influential predictor of marriage to an EE-born woman was husband's educational level. U.S.-born husbands with BA or graduate degrees (vs. high school) were 3.6 times more likely to marry transnationally (H_3). Number of previous marriages significantly contributed to the prediction of marital group only for husbands in three or more marriages. U.S.-born men who were married thrice or more were approximately 2.7 times more likely to be married to EE-born women (H_5). U.S.-born husbands of wives who were not in the labor force were almost 2 times more likely to be in a transnational marriage (H_1). For a U.S.-born man, each additional year in spousal age difference increased his chances to be married to an EE-born woman (that is, in a transnational marriage) by 25% (H_2). However, the likelihood of being in a transnational marriage decreased by 10% for U.S.-born men in their third or greater marriage as spousal age difference increased (H_{10}). Although educational similarity was a significant predictor in the model, it actually decreased the odds of transnational marriage by 50% (H_3).

Nonsignificant predictors. Nonsignificant coefficients were produced for U.S.-born husband's EE ancestry (H_4), residency in metro area (H_7), percent of EE population in the state (H_8), and interaction term for remarriage by educational similarity (H_{11}).

Overall, the prediction power of the model significantly increased when the three sets of predictors were included, that is, cultural determinants, structural determinants, and interaction terms. The sequential binary logistic regression analysis also demonstrated greater importance of cultural predictors over structural. When the full model was considered, the prediction of who of U.S.-born men marry an EE-born woman by three cultural determinants, two structural, and one two-way interaction term with three hypotheses supported fully, three partially and four rejected (see Table 1.2).

Discussion

This study employed sequential and hierarchical binary logistic regression analyses to examine how cultural and structural determinants predict whether or not U.S.-born men are in transnational marriages, that is, whether they are married to EE-born wives. The sample was drawn from the ACS 2008-2010 data set (Ruggles et al, 2010).

In accordance with Kalmijn's (1998) theory, the set of cultural determinants, that is, stay-at-home status, spouses' age difference, educational similarity, and husbands' EE ancestry, were more important than structural determinants in predicting transnational marriages in this study. Additionally, the inclusion of two-way interactions among these determinants further improved the power of the model to predict marriage type. Results of the hierarchical binary logistic regression analysis in the full model suggested that spousal age difference, stay-at-home status (not participation in labor force), spousal educational similarity, and husband's college degree or higher significantly predicted transnational marriages between U.S.-born husbands and EE-born wives.

These findings demonstrated that U.S.-born husbands who choose to marry transnationally might search for a more traditional marital partner as has been suggested

by previous studies (Heyse, 2010; Patino, 2009; Rossiter, 2005; Sahib, Koning, & Witteloostuijn, 2006; Shafer, 2009). Indeed, greater spousal age difference and wives' stay-at-home status have been noted in more patriarchal societies, which value traditional gender-based role division in the family (Casterline, Williams & McDonald, 1986).

When the interaction between age difference and remarriage was considered, age difference was related to the chances of a U.S.-born husband being married to an EE-born wife, although the chances were adjusted downward slightly if the person has been married thrice.

In contrast however, spouses in transnational marriages differed substantially from marriages observed in previous studies. More specifically in the current study, U.S.-born husbands who married transnationally had higher socioeconomic status if measured by educational attainment. This is similar to what Levchenko and Solheim (2013) found in their previous study based on the same ACS sample of EE-U.S. transnational couples, namely that U.S.-born husbands had higher incomes than their counterparts who married U.S.-born women. Further, EE-born wives tended to be more educated than U.S.-born women (Levchenko & Solheim, 2013). However, not all studies find this same pattern. For example, Atkinson and Glass (1985) found that greater spousal age difference and stay-at-home status of the wife were associated with either her lower educational status or lower family income.

The findings also supported the theory-driven assumption that limited opportunities for U.S.-born divorcees might be related to higher chances for them to be married transnationally. Considering the findings that U.S.-born husbands who marry transnationally have preference for more traditional wives, it is possible that these men

might not be able to find a potential partner in the U.S. marriage market who would share their traditional beliefs. In fact, a cohort analysis of a shift from traditional to egalitarian views in marriage, provided evidence that compared to men, women hold more egalitarian views and are more responsive to social changes, especially if she has more education (Pampel, 2011). Additionally, remarried divorcees develop more traditional views over the time, compared to divorcees who remain single (Lucier-Greer & Adler-Baeder, 2011).

The significance of husband's education (college and higher) was used as a proxy of diversity exposure via educational environment. What it might also suggest, and this goes beyond the frameworks suggested in this study, is that higher educational level U.S.-born men can be associated with higher income which opens financial opportunities to seek perspective spouses transnationally. Indeed, most of the Internet-based marriage broker agencies require registration fee, the process of getting to know each other in person (at least once according K-1 visa regulations) requires transnational travel expenses, and so does sponsoring a perspective spouse's immigration process (Lloyd, 1999).

One of the contributions of this study is that it incorporated two theoretical frameworks: Kalmijn's (1998) theoretical framework on intermarriages and assortative mating (Becker, 1973). As would be predicted by assortative mating, spouses in EE-U.S. transnational marriages matched racially, since both women and men in these marriages are White non-Hispanic. In fact, one study provided evidence that some U.S.-born men make a deliberate choice to marry a woman from Eastern Europe to avoid interracial marriages (Luehrmann, 2004).

In terms of other characteristics that assortative mating theory would predict, the transnational marriages in this study demonstrated little similarity. First, although 13% of U.S.-born husbands reported EE ancestry, it did not increase the odds that they would be married to an EE-born woman. Therefore, the majority of EE-U.S. marriages were interethnic.

Furthermore, spousal education similarity actually decreased the chances of U.S.-born men being in a transnational marriage. This supported and extended a similar finding in a descriptive demographic study (Levchenko & Solheim, 2013). A possible explanation for this is that educational environment is individuals' primary marriage market in which they first meet (Blossfeld & Timm, 2003). The educational system provides a social network or a structural opportunity to meet people with similar educational attainment. Although this may be true for *intranational* mate selection processes, individuals in *transnational* marriages marry later in life (Levchenko & Solheim, 2013) and are likely to choose each other via Internet Marriage Broker Agencies (Tahiri Justice Center). Additional support for this argument is found in Mare (1991), who stated that those who marry years after the end of schooling are more likely to marry someone with a different educational level.

Limitations and Implications

First, the dataset contained only those couples that were married at the time of the survey. Certain steps were taken to include couples that were still in marital relationships. However, Gottman and Levenson's (2000) 7-year rule was developed based on intranationally married couples and might not be applicable to those who marry

transnationally. The rate of marital disruption among transnationally married couples still remains unknown.

Second, some of the measures in areas of potential vulnerability were not available in the dataset. One such example is the information on religious affiliation. Religious homogamy among spouses is a strong predictor of couple stability (Myers, 2006). Also, by design, census data included only quantitative information on individuals and families, while the qualitative aspects such as marital satisfaction or psychological dependencies could have contributed to the analysis of power imbalance.

Third, although multiple measures of potential contacts with community were considered, none of them measured the actual frequency and quality of those connections. Additionally, it is known that use of technology to develop and sustain social connections is increasing in last decades. There are Internet-based forums that were created to connect foreign-born wives who reside in U.S.. Based on the number of participants and the number of topics in two of them briefly described above, it is clear that these forums are of great demand. This study could not take into consideration these ways of EE-born wives connection with virtual communities.

Finally, there was one limitation that is specific for the comparison group (intraethnic EE-EE marriages). The assumption for choosing this comparison group was that these are female immigrants who are part of individual immigration (vs. family) and thus might be more comparable with foreign-born wives in EE-U.S. marriages.

However, there is no variable that denotes the reasons for migration, nor are there variables that provide information on other relatives in the U.S. who do not reside in the same household. The lack of such information can lead to the fact that EE-born women

in the comparison group actually have greater within-group diversity of immigration experiences. For example, there might be women who immigrated as spouses of U.S.-born men and later got divorced, or there might be women who immigrated to the U.S. as a family.

The findings on assortative mating in transnational marriages lead to certain implications for family practitioners about potential instability of interpersonal relationships. First, heterogeneous marriages are more prone to divorce (Booth & Edwards, 1992), especially if it is a woman who has higher educational level (Bumpass, Martin & Sweet, 1991; Kalmijn, 2003), which is the case of EE-U.S. marriages. Second, it is possible that this dissimilarity might contribute to the higher than in general population abuse rate reported by Hass, Ammar, and Orloff (2006).

On the other hand, examples from qualitative studies, as well anecdotal evidence, demonstrate that as there are less stable and potentially vulnerable marriages, there are also those that stay strong as a couple. The question that cannot be answered with census data and thus should be one that pursued in the future research is on what makes these couples stay together despite the differences?

Another area of future research focus on transnational couples should focus on mutual stereotypes and expectations of spouses in transnational marriages and how couples adjust if those stereotypes do not coincide with the characteristics of spouses and expectations are not met.

Conclusions

This study contributes to the literature on transnational marriages in several ways. First, while previous research focused primarily on brides and wives in transnational

marriages, the current study focuses on husbands in these marriages. Second, it adds to the literature on Eastern European immigrants in the U.S., a group largely missing in studies of immigrant groups. Finally, it validates and complements the theoretical framework on intermarriages. Similar to Kalmijn and Tubergen (2010), the current study found that cultural determinants play a more important role in predicting transnational marriages. Additionally, Kalmijn's (1998) theoretical framework on transnational marriages was complemented by assortative mating theory by studying the effect of spousal similarities in chances to be in a transnational marriage.

Project 2: Assessing Areas of Potential Vulnerability among EE-Born Wives in Interethnic Transnational EE-U.S. Marriages

During the late decades of the twentieth century women became more active participants in the immigration process (Robinson, 2007). The prevalence of female immigrants is especially prominent in the case of the former U.S.SR countries, the only region whose immigrants are predominantly women and constituted 52% of total immigrants in the region in 2002 (Asis, 2005). One process that contributes to the high percentage of female emigration to another country is marriage to a citizen in the country of destination, also known as transnational marriage.

What is known from primarily qualitative studies is that marriage migrants, foreign-born individuals who come to the U.S. to marry, share many experiences that are common for immigrants in general: the need to develop language skills, find a job to achieve a steady personal income, integrate into a community. Marriage migrants, however, face additional challenges, such legal, financial, and emotional dependency upon their U.S. spouses. These dependencies can create within-couple power imbalance (e.g., Ammar, Orloff, Dutton & Hass, 2005; Crandall, Senturia, Sullivan, & Shiu-Thornton, 2005). For some, the power imbalance is resolved over time as women adjust to their new environment. For others, the imbalance remains, which increases the likelihood that abuse, emotional, physical, sexual, may occur.

Therefore, female marriage migrants in transnational marriages are potentially vulnerable due to the power-imbalance created by initial dependence of the foreign-born spouse on the native-born spouse. Although data from nationally representative samples do not include incidences of abuse, there is evidence that, for example among Latino-

U.S. spouses, the abuse rate is higher than among spouses in the general U.S. population. Thus there is a need to examine the potential vulnerability that could arise from immigration-related power-imbalance within couples.

Although marriage migrants come primarily from three regions (Figure 2): Asia, Latin America, and Eastern Europe (as cited in Orloff & Sarangapani, 2007, p. 473), this study focuses specifically on Eastern European marriage migrants. Literature on Eastern European-U.S. marriages is limited, and overall, Eastern-European immigrants are an understudied population. Generally perceived as White, they differ from the U.S.-born White population due to cultural differences and immigration-related experiences (see Adler, 2004; Robila, 2004; Robila & Krishnakumar, 2004). Robila (2007) suggested that more systematic research will lead to the development of more culturally sensitive support programs and policies to ensure Eastern Europeans' successful integration into their new socioeconomic environment.

Therefore, this quantitative study intends to explore the potential vulnerabilities of EE-born women by answering the following research question: What is the likelihood of being in an interethnic transnational EE-U.S. marriage, controlling for within-couple heterogeneity, wife's legal and financial dependency, and her social isolation? To answer this question I will use data from the 2008-2010 American Community Survey (ACS) (IPUMS; Ruggles et al, 2010).

In the following sections, I first review challenges that marriage migrants from Eastern Europe face when they join their husbands in the U.S.. Second, I integrate these findings into a theoretical framework that describes marriage migrants' characteristics that could represent vulnerability: couple heterogeneity, financial and legal dependency,

and social isolation. Third, I use this framework to create an analytical model to explore which of these experiences predict EE-born women's likelihood of marrying U.S.-born husbands versus EE-born husbands. Results of the study will contribute to a better understanding of the potential vulnerability of EE-born women in interethnic transnational EE-U.S. marriages.

Background

According to studies on immigration, there are important areas, which contribute to immigrants' successful integration into their host society. These areas include financial and legal adjustment, and social integration. The importance of these adjustment processes has been examined in various studies on immigrants, specifically in the case of immigrant women who marry U.S.-born husbands (Crandall, Senturia, Sullivan, & Shiu-Thornton, 2005; Rossiter, 2005). Although not the case for all immigrant women, gaining independence in these key areas can reduce women's potential vulnerability by empowering them. In some cases where abuse begins, this independence allows them to leave an abusive situation.

Female marriage migrants in the U.S. face similar adjustments as others who immigrate for a variety of reasons: learning the language, getting familiar with a new culture, developing new social networks, obtaining official recognition of their diploma or education credentials, finding a job, and obtaining a steady income (Crandall, Senturia, Sullivan, & Shiu-Thornton, 2005; Heyse, 2010; Rossiter, 2005). However, unlike most other immigrants, they do not typically migrate to geographic locations where there are similar ethnic enclaves or Diasporas. Instead, they follow their husbands to their place of residence. As a result, they might be less likely to have access to communities that share

the same or a similar culture or speak the same language. Further this might reduce their access to social support and can contribute to feelings of isolation and increases their vulnerability (Rossiter, 2005).

In addition to the typical immigration-related adjustment experiences, marriage migrants tend to enter more heterogeneous marriages, that is, marriages in which spouses share fewer similarities and tend to differ on major characteristics. One significant contributing factor to this couple heterogeneity is the Internet-mediated realm in which these couples develop relationships. Internet-based matchmaking agencies and individuals who use their services tend to emphasize certain characteristics that make them more attractive (Lloyd, 2000). For example, it is common for U.S.-born husbands to expect that foreign-born women are more traditional and more family-oriented. And foreign-born women tend to seek potential spouses in the U.S. who they expect are more financially stable, more caring, and hold egalitarian views on marriage (Heyse, 2010; Luehrmann, 2004; Patino, 2009; Rossiter, 2005; Sahib, Koning, & Witteloostuijn, 2006; Shafer, 2009). These preferences can lessen the importance of seeking spouses who are similar in age, educational, cultural and religious backgrounds that spouses in the general population tend to prefer.

The above-mentioned immigration-related experiences and the tendencies for more heterogeneous marriages among marriage migrants and their U.S.-born spouses overlap with Dutton and Starzomski's (1997) Minnesota Power and Control Wheel (see Figure 3). The model was developed an intervention program for wife assaulters initiated in Duluth, MN: the program philosophy "assumes battering is not an individual pathology or mental illness but rather just one part of system of abusive and violent

behaviors to control the victim for the purpose of the abuser” (Dutton & Starzomski, 1997). The Minnesota Power and Control Wheel includes eight areas of abusive and violent behaviors (octants), three of them are related to those discussed above, i.e., using isolation, using male privilege, and using economic abuse.

These areas of increased vulnerability for female marriage migrants are discussed in mass media and in studies on this population, yet none of the studies or official statistics provide abuse rate among marriage migrants. The only known source is a survey that studied needs assessments and incidence rates of domestic violence among Latina immigrant women in the District of Columbia area. The survey was conducted between 1993 and 1995 by AYUDA, a non-profit organization in the DC metro area that provides a wide range of immigration and family law assistance. Although the results might not be applicable for marriage migrants from other parts of the world, the survey yet gives some idea on what marriage migrants might experience. According to the AYUDA survey, abuse is higher in immigrant couples, compared to U.S.-U.S. couples. That likelihood further increases if an immigrant woman is married to U.S. citizen. More specifically, the results from the survey suggested that, compared to the abuse rate in the general U.S. population, the abuse rate is three times higher in couples where a U.S. citizen is married to a foreign-born (as cited in Hass, Ammar & Orloff, 2006, p. 5).

Based on the current literature on marriage migrants and a need for a better understanding of their experiences in the U.S. that contribute to their adjustment, I plan to test the following theoretical model that analyzes three areas of potential vulnerability of EE-born wives in transnational marriages. These areas include: 1) the potential for within-couple power imbalance; 2) the possibility for couple situations that might create

dependency; and 3) the potential isolation of EE-born wives from contacts outside home. This study will determine the impact of these within-couple and individual characteristics on whether an EE-born wife is married to a U.S.-born husband (interethnic transnational EE-U.S. marriages) or to an EE-born husband (intraethnic EE-EE marriages).

Proposed Theoretical Model

Couple heterogeneity. Assortative mating theory (Becker, 1973) proposes that individuals seek to maximize the benefits from marriage by searching for certain characteristics in prospective partners that either complement their own (negative assortative mating) or are compatible to their own (positive assortative mating). Based on findings from the literature, the characteristics for which individuals seek similarity include age, religion, education, and social status (Jepsen & Jepsen, 2002). In general, couples that are more similar (homogeneous) tend to have fewer interpersonal conflicts and higher marital satisfaction (Gaunt, 2006). In contrast, dissimilarity between spouses is associated with higher divorce rates (Booth & Edwards, 1992; Bumpass, Martin & Sweet, 1991).

In the specific case of interethnic transnational EE-U.S. marriages in a recent study, EE-born wives were younger and tended to have more education compared to their spouses (e.g., Levchenko & Solheim, 2013). The age and education differences were layered on top of other differences that existed by virtue of marrying transnationally, namely differences in ethnicity, culture, and the socio-historical experiences in their respective countries of origin.

In contrast to what assortative mating theory would predict, EE-born wives in EE-U.S. interethnic transnational marriages are more likely to be different in the

characteristics that the theory posits will be similar. To understand the prevalence of these dissimilarities among EE-born wives and U.S.-born husbands, the following hypotheses were tested:

Hypothesis 1: If in a couple there is difference in age between spouses, it increases the odds that the couple's marriage is interethnic and transnational.

Hypothesis 2: If in a couple the wife has higher or lower educational level compared to her husband's, it increases the odds that the couple's marriage is interethnic and transnational.

Legal and financial dependency. When marriage migrants come to the U.S. and marry, they need to start the procedure of acquiring legal status. This procedure allows the immigrant spouse to travel. She can also receive work authorization, which allows her to look for a job and eventually earn personal income.

Studies that focus on the safety of female immigrants who marry U.S.-born husbands, emphasize that lack of the immigrant spouse's legal status can be used as a means for controlling the dependent wife. There are documented cases in which immigrant women were kept uninformed about the required immigration procedure, the necessary paperwork was not done, or U.S.-born husbands precluded them from getting green cards (Ammar & Orloff, 2006; Crandall, Senturia, Sullivan, & Shiu-Thornton, 2005). According to the recently enacted "International Marriage Broker Regulation Act" ("International Marriage Broker Regulation Act of 2005", 2006), marriage migrants themselves can submit necessary paperwork. However, in reality, not all of them are knowledgeable about the process and their rights (Crandall, Senturia, Sullivan, & Shiu-Thornton, 2005; Rossiter, 2005), as well as not all the requirement of the Act have

already been implemented by government agencies responsible for part of it (U.S. Accountability Office, 2008). Lack of documentation can lead to greater wives' dependency on their husbands and become a significant barrier for leaving an abusive marriage.

Although it might take a few years to receive a green card, travel and work authorization still can be obtained more quickly, from one day to four months (Fiancée visa information, n.d.). However, even when travel and work authorization is granted, there are no guarantees for steady personal income. Studies on marriage migrants have reported that finding a job can be problematic for immigrant wives. This was an especially common situation for those migrants who resided in rural areas, and it was also true for those who had poor language skills, were overwhelmed with household responsibilities, or whose husbands had traditional expectations about their wife's' role in the family (Crandall, Senturia, Sullivan & Shiu-Thornton, 2005; Rossiter, 2005).

In summary, legal status and financial independence can ensure that a marriage migrant will be able to leave the marriage in hypothetically threatening relationships. Yet in some situations, neither is achieved and thus the foreign-born wife continues to depend solely on her husband. This creates a significant power imbalance, which increases the wife's vulnerability to abuse. Therefore to understand the prevalence of legal and financial dependency in interethnic transnational marriages the following hypotheses were tested:

Hypothesis 3: If there is spousal difference in legal status, it increases the odds that the couple's marriage is interethnic and transnational.

Hypothesis 4: If in a couple the wife has no personal income, it increases the odds that the couple's marriage is interethnic and transnational.

Social isolation. Unlike immigrants in general, marriage migrants move to the U.S. and join their prospective husband. Although these women and men who meet via Internet-based matchmaking agencies use various means to get acquainted and develop their relationships across the globe, it is typical for them to have been physically in each other's presence only once, the minimum, required by fiancée visa regulations. Not knowing her husband well, not knowing anyone in the new community, and not even having an opportunity to meet someone who shares her native culture, might create a stressful situation. Women in previous studies have reported that they felt anxious, lonely, and depressed because they did not have someone to turn to and to speak in their native language (Rossiter, 2005; Crandall, Senturia, Sullivan, & Shiu-Thornton, 2005).

For some of marriage migrants, social isolation was an additional barrier to exiting from abusive relationships (Dutton & Hass, 2001). While some women developed new non-familial relationships by attending school or working, having no formal connections with the world outside of the house adds another layer of social isolation (Rossiter, 2005). To understand the prevalence of social isolation for EE-born wives in EE-U.S. interethnic transnational marriages, the following hypotheses were tested:

Hypothesis 5: If in a couple the wife does not participate in labor force, it increases the odds that the couple's marriage is interethnic and transnational.

Hypothesis 6: If in a couple the wife does not attend school, it increases the odds that the couple's marriage is interethnic and transnational.

Hypothesis 7: If in a couple the wife has poor English proficiency, it increases the odds that the couple's marriage is interethnic and transnational.

Hypothesis 8: If a couple resides in states with a smaller EE community, it increases the odds that the couple's marriage is interethnic and transnational.

Hypothesis 9: If a couple resides in a rural area it increases, it increases the odds that the couple's marriage is interethnic and transnational.

Method

Data

Data for this project were from the 2008-2010 American Community Survey (ACS), a 1% representative sample of the Integrated Public Use Microdata (IPUMS; Ruggles et al, 2010). The ACS dataset has a number of characteristics that are advantageous for this project. First, because it is nationally representative census data, the dataset captures often-overlooked minority groups, namely Eastern Europeans. Second, the ACS dataset includes information obtained from both spouses who can be paired to create couple-level analysis. Finally, although there is no direct variable that describes the reason for entry into the U.S., later waves of the ACS dataset include important demographic variables, which allow marriage migrants to be identified.

One disadvantage of this dataset, typical for cross-sectional designs, is that it includes only those couples that were married at the time of the survey. As a result, the national rate of marital disruption for interethnic transnational couples remains unknown.

Sample

EE-born wives married to either White non-Hispanic U.S.-born wives (EE-U.S. interethnic transnational marriages, n=258) were selected for this study or to EE-born

husbands (EE-EE intraethnic marriages, n=138). To identify EE-U.S. interethnic transnational marriages, the following steps were taken. Because the ACS does not include a specific variable to identify marriage migrants (e.g., visa type or reason for immigration), only those EE-U.S. couples for which the year of marriage was the same year as the wife's migration to the U.S. were included. This procedure has previously been used as a proxy for K-1 (fiancée) visas (Esteve, Garcia, & McCaa, 2011; Levchenko & Solheim, 2013). Additionally, for EE-U.S. interethnic transnational marriages, to reduce variation due to culture, only husbands who were married to EE-born wives from one of four countries, that is, Russia, Ukraine, Poland, and Romania, were selected which constitutes 70% of EE-U.S. interethnic transnational marriages in the ACS dataset. The remaining 30% of EE-U.S. interethnic transnational marriages not included in the study were composed of 17 Eastern European countries, too few from any given country to comprise a meaningful group.

Two additional inclusion criteria were used to identify the whole sample. First, an intraethnic inclusion criterion was used to reduce within-couple variability in EE-EE marriages, that is, only EE-EE marriages whose spouses share the same country of origin were included on the sample. Second, for both marital groups, only marriages that lasted no less than 2 and no more than 7 years were included in the sample. The rationale for this decision was based on research by Gottman and Levenson (2000), which found that half of divorces take place within seven years of marriage. Therefore, it was assumed that the 7-year upper boundary would account for both successful marriages and those that might later end in divorce. Additionally, the lower 2-year boundary was used to account for immigrant EE-born wives' employment constraints. This was estimated

based on circumstances related to initial visa restrictions on travel and employment, time needed to apply for work authorization (up to four months), and time need to conduct a job search.

Independent Variables

Couple heterogeneity. *Age difference* is a couple-level continuous variable measured as the difference between husband's and wife's ages.

Educational similarity is a couple-level dummy variable measuring similarity in spouses' educational attainment. The variable was constructed using the following steps for both spouses. First, a new variable with fewer categories was created based on the original ACS variable on educational attainment, that is, No schooling; 12th grade or less; regular high school diploma; some college or Associate degree; Bachelor's degree; Professional degree beyond Bachelor's. Second, the value for wife's educational attainment was subtracted from the value for husband's educational attainment. Third, the resulting variable was coded 0 if spouses' educational attainment was different and 1 if it was similar.

Legal and financial dependency. *Differences in citizenship status* is a couple-level dummy variable. The original ACS variable in citizenship status was recoded as two categories that either stated that a person had citizenship (naturalized or born into) or a person had no citizenship. Next, values for both spouses were subtracted and the targeted variable was created with 0 indicating same citizenship status for both spouses, and 1 indicating that one of the spouses did not have citizenship.

No income, income below the poverty guidelines is an individual-level dummy variable which identified wife's zero or low income level status if her income was equal

to or less than the U.S. Health and Human Services federal poverty guidelines, which was \$10,400 in ACS wave 2008, \$10,830, in ACS wave 2009 and 2010 (e.g., U.S. Department of Health and Human Services, 2010, Table [2010 HHS Poverty Guidelines]).

Social isolation. *No labor force participation* is an individual-level dummy variable used to measure wife's opportunity for social contacts outside the home. The category "yes, in labor force" is the reference category coded as 0, and "no, not in labor force" coded as 1.

No school attendance is an individual-level dummy variable used to measure wife's opportunity for social contacts outside the home. The category "yes, in school" is the reference category coded as 0, and "no, not in school" coded as 1.

Poor English skills is a self-reported individual-level dummy variable indicating how well the wife, who speaks a language other than English at home, speaks English. The responses to the question "How well does this person speak English?" were recoded to a dummy variable with a reference category "Speaks English" coded as 0, and "Does not speak" / "Speaks but not well" as 1.

Size of Eastern European community in the state is a community-level variable that identifies the percent of the Eastern European population (U.S.-born or foreign-born) relative to the overall population within each state in which a couple resided.

Residency in rural area is an individual-level dummy variable used as a proxy of wife's opportunity for contacts outside the home. The variable is coded as 1 if EE-born woman joined her U.S.-born husband who resided in a metro area and 0 for non-metro area residence responses.

Correlations among the predictor variables were checked using Spearman's rho test. There were no issues with multicollinearity among predictors in the model; none of the variables were correlated at or above .50 (see Table 2.3).

Analytical Procedures

The dependent variable consisted of two categories: (0) EE-born husband, and (1) U.S.-born husband. To test the hypotheses, the odds of marrying a U.S.-born husband (interethnic transnational marriage) versus marrying to EE-born husband (intraethnic marriage) were considered. Logistic regression was chosen over discriminant analysis due to relatively unequal group sizes (258 vs. 138) in the sample. Additionally, the set of predictors was a mix of continuous, discrete, and dichotomous variables, which also supported the choice of logistic regression, which is relatively free of restrictions (Tabachnik & Fidell, 2007). The ratio of cases to variables for the small size group (n=138) complied with the requirement of at least 10 cases per predictor, the number in the current study's model (Agresti, 2007).

To test the hypotheses, binary logistic regression was employed. Significant predictors and their importance in predicting the outcome variable are reported based on the value of the odds ratios, that is, the further the odds ratio are from 1, the more influential the predictor (Tabachnik & Fidell, 2007).

ACS is a weighted sample, which means that persons with some characteristics are over-represented in the samples while others are underrepresented (Ruggles et al, 2010). However, in this study weights were not applied because weighted samples are disproportionately large and can lead to Type I error (false positive). The sampling weights in the proposed model are a function of the independent variables, that is, age,

sex, race, and Hispanic origin, rather than the dependent variable, that is, country of birth, the unweighted OLS estimates are applicable “because they are unbiased, consistent, and have smaller standard errors than weighted OLS estimates.” (Winship & Radbill, 1994, p. 230). The statistical analyses were performed using SPSS for Windows (Version 20) statistical software program.

Results

Descriptive

Table 2.2 presents percentages (for dummy or categorical variables) and means and standard deviations (for continuous). According to descriptive statistics, there was greater couple heterogeneity in interethnic transnational marriages than intraethnic EE-EE marriages. On average, couples in interethnic transnational marriages had 2.6 times greater spousal age difference (H_1 ; see Table 2.1). Percentage-wise, more couples in interethnic transnational marriages had different educational levels (H_2) than couples in intraethnic EE-EE marriages.

As for determinants of legal and financial dependency, twice as many spouses in interethnic transnational EE-U.S. marriages had different citizenship statuses compared to spouses in intraethnic EE-EE marriages (H_3), although there were more EE-born wives in marriages with U.S.-born husbands who already had obtained their U.S. citizenship than EE-born wives who were in marriages with EE-born husbands (27% vs. 21%). Slightly fewer EE-born wives of U.S.-born husbands had incomes below the poverty guidelines compared to EE-born wives married to EE-born husbands (H_4).

In terms of social isolation, fewer EE-born wives in interethnic transnational marriage were not in the labor force (H_5) compared to EE-born wives in interethnic

marriages; and slightly more of them were not enrolled in school (H₆). The overwhelming majority of all EE-born wives reported having good English language skills, but the percent was much higher for those who were married to U.S.-born husbands (H₇). On average EE-born women in interethnic transnational marriages lived in states with smaller Eastern European populations (H₈) and five times more of them lived in rural areas than EE-born women in intraethnic EE-EE marriages (H₉).

Interestingly, while almost half of the EE-born wives who were married to U.S.-born husbands were born in Russia (45%), followed by the Ukraine (31%), among the EE-born wives married to EE-born husbands, the most popular sending country was Poland (55%). The rest of the countries were distributed evenly.

Hierarchical Binary Logistic Regression

Table 2.4 shows regression coefficients, standard errors, odds ratios, and *p* values for each of the nine predictors. A test of the full model with all predictors against a constant-only model was statistically significant $\chi^2(10, N=396)=161.959 p<.001$, indicating that the predictors, as a set, reliably distinguished between interethnic transnational EE-U.S. and intraethnic EE-EE marriages. The accounted variance for marital group was medium, Nagelkerke $R^2=.46$. Correction classification rates were 86% for interethnic transnational EE-U.S. marriages, 62% for intraethnic EE-EE marriages, and 78% for an overall correct classification of marriage type, implying that the model predicted well the odds of EE-born wives marrying U.S.-born husbands.

Significant predictors. Residency in a rural area was the strongest predictor of an EE-born wife's marriage to a U.S.-born husband. EE-born wives in EE-U.S. marriages were 8.4 times more likely to reside in rural area compared to EE-born wives in

intraethnic EE-EE marriages (H₉). Another influential predictor was difference in citizenship status; EE-born wives married to U.S.-born husbands were 2.6 more likely to have a different citizenship status than their spouses (H₃).

In contrast to the hypothesized relationship, EE-born wives in interethnic EE-U.S. marriages had better English skills compared to EE-born wives in intraethnic EE-EE marriages, that is, EE-born wives with better English skills were 75% more likely to be married to a U.S.-born husband (H₇).

The two least contributing significant predictors (i.e., the β coefficient was the closest to zero) were spousal age difference (H₁) and residency in states with EE ethnic community (H₈). The coefficient for this predictor was negative, implying that as hypothesized, EE-born wives living in states with smaller population with EE ancestry were 14% more likely to be married to U.S.-born husbands (H₈).

Nonsignificant predictors. Four of nine hypothesized relationships were not significant predictors of the odds of EE-born wives marrying U.S.-born husbands. More specifically, spouse heterogeneity in education (H₂), wife's low income (H₄), lack of labor force participation (H₅) or school attendance (H₆) did not significantly contribute to the probability of being in an interethnic transnational marriage.

Discussion

The main purpose of this study was to begin to explore potential vulnerabilities of EE-born marriage migrants as indicated by greater couple heterogeneity, greater legal and financial dependency on their U.S.-born spouses, and greater social isolation compared to other EE-born immigrants in EE-EE intraethnic marriages. To address these questions empirically, this study employed binary logistic regression analyses to examine if select

characteristics of couple heterogeneity, legal and financial dependency, and social isolation predicted the probability of an EE-born wife being married to a U.S.-born husband versus an EE-born husband. The results provided mixed support for the stated hypotheses.

Overall, the proposed model proved to correctly classify the majority of the cases and there was at least one significant predictor for each of three areas of potential vulnerability: couple heterogeneity, legal and financial dependency, and social isolation. The probability of EE-born wives being married to U.S.-born husbands increased with greater spouse age difference (couple heterogeneity), with difference in spouse's citizenship status (legal dependency), and with wife's better (but not "poor") English skills, smaller Eastern European population in the state in which they reside, and couple residency in rural areas (social isolation).

In contrast, spousal differences in education (couple heterogeneity), wife's income below poverty guidelines (financial dependency), nonparticipation in the labor force, or school nonattendance (social isolation) did not influence the probability of an EE-born wife being married to a U.S.-born husband versus EE-born husband. One possible reason for the lack of support for these hypotheses is that the comparison group, spouses in intraethnic EE-EE marriages, also faces similar immigrant-related adjustment experience, particularly in terms of income, labor force participation, and participation in the educational system. Perhaps it is that financial dependency and the lack of social contacts via educational or work settings are common experiences among EE-born immigrant women, regardless of their husband's country of origin. In fact, it is possible that some of these factors might be better if a foreign-born wife is married to a native-

born husband. She may be able to avail herself of his social capital, for example, his work and friend networks. In addition, the finding that in both marital groups, EE-born women had higher education levels than their husbands, can be explained by the fact that in tertiary education in the Russian Federation, the gender gap is 20% in favor of Russian women (“Report on the Gender Initiative”, 2011)

EE-born wives in the two marital groups (interethnic EE-U.S. and intraethnic EE-EE) differed based on a number of predictors for all three areas of potential vulnerability. Apparently, the following differences are specific for EE-born wives who are married to U.S.-born husbands, that is, EE-born marriage migrants.

Findings from this study provide evidence that spouses in EE-U.S. interethnic transnational marriages are heterogeneous in age compared to spouses in EE-EE intra-ethnic marriages. One conclusion that can be drawn is that spousal age heterogeneity is not culturally-explained. Although age heterogamous marriages are on the rise (Amato, Booth, Johnson, & Rogers, 2007), there are few studies that focus on this type of spousal difference. Moreover, there is a lot of controversy on the stability of these types of marriages (cf. Berardo, Appel, & Berardo, 1993). Previous studies on age heterogeneity have suggested that greater spousal age difference could be an indicator of a more traditional gender-based role division in the family (Casterline, Williams, & McDonald, 1986). Pyke and Adams (2010) further specified with their findings that husband-older marriages, when other forms of heterogamy (e.g., racial status, social class, occupational prestige, and education) are involved, could create male-dominated relationships. Although one can hypothesize that there are interethnic transnational EE-U.S. marriages in which both spouses agree upon traditional gender-based division of family roles,

Luehrmann (2004) suggested something different: “Women from Russian cities languishing in the isolation of the American suburbs, language problems, she turning out not as submissive and domestic as he had thought Russian women would be, his standard of living turning out to be not as high as she had hoped, or he discovering that she was more interested in making her own life in the U.S. than in starting a family with him” (p. 861).

Potentially other social science theories can provide some rationale for why spouses in interethnic transnational marriages tend to have greater age differences. For example, the spousal heterogeneity can be explained by social exchange theory, which might posit that an EE-born wife’s younger age can be exchanged for a U.S.-born husband’s financial stability.

It is perhaps expected that EE-born wives’ citizenship status would be different from that of their U.S.-born spouses. Because this study employed a ‘difference’ variable, the intraethnic EE-born spouses might both have been non-citizens at the time of data collection, thus decreasing the likelihood of ‘difference’ on this variable when compared to EE-U.S. spouses. In addition, the process of getting citizenship allows marriage migrants to apply for citizenship 3 years after the issuance date of her permanent residency Green Card. However in the current study, 31% of EE-born marriage migrants who spent at least 5 years and 14% who spent at least 6 years in the U.S. (that is, who were married for the same period of time) did not have citizenship status. It was previously reported that when husbands had more stable immigration standing compared to wives, there were more chances for longer exposure to and greater severity from domestic violence abuse (Hass, Ammar, & Orloff, 2006).

The results of the study provide some evidence that EE-born marriage migrants can be more socially isolated compared to other EE-born immigrant women. EE-born marriage migrants tended to join husbands who live in rural communities and in states with smaller Eastern European populations. Some of the problems of social isolation can be resolved by connecting with counterparts via Internet. Indeed, there are a number of forums that connect women with similar experiences. One such example is *Форум русских невест и жен* (Forum of Russian Fiancées and Wives) <http://www.russian-fiancee.com/rus/forum/> that as of December 2012, has connected 33,126 registered fiancées and wives in the U.S., or *Форум русских женщин* (Forum of Russian Women) <http://www.zaokeanom.com/forum/> that as of December 2012, has connected 4,031 Russian-speaking women currently living in the U.S..

Connection with a community with the same ethnicity and language as one's own (in real life or virtually) can ease the initial adjustment period and can provide support during periods of relationship tension. Virtual forums can even provide necessary education about women's rights in the U.S.. For example, the Forum of Russian Women has a specific rubric *Нужна помощь* (Need Help) where forum participants provide advice, legal information, and contacts for relevant social services for those who experience abusive or violent relationships. In contrast to the benefits of connecting with an intraethnic community, there may also be negative effects. One study about experiences of Russian wives in the U.S. found that in some cases, the community actually reinforced cultural stereotypes about abuse and violence and communicated a disapproval of divorce, which kept women from leaving abusive relationships (Crandall, Senturia, Sullivan, & Shiu-Thornton, 2005).

Interestingly, it was EE-born wife's better (not "poor") skills that predicted interethnic transnational marriages. The initial hypothesis was guided by a few qualitative studies in which women reported language-barriers when trying to establish new contacts in the community. But only 3% of EE-born marriage migrants reported poor or no English skills, compared to 17% of EE-born female immigrants married to EE-born spouses. The most likely explanation for this is that EE-born wives married to U.S.-born husbands have more exposure to English on a day-to-day basis. Good English skills also can be as the result of self-selection, that is, women who feel comfortable speaking English are more eager to look for a spouse from an English-speaking country. Additionally, her English skills might make the couples' initial interaction more productive and less frustrating.

Limitations and Implications

Although the census-type data benefited this study, it also caused a few of limitations that have been discussed in Study 1 (see [Limitations and Implications](#)).

Findings from the current study have implications for future research on transnational marriages. The theoretical framework presented in the study explored areas of potential vulnerability. For future research it is important to understand whether these vulnerabilities are perceived as such by all foreign-born wives. The question about what personal and couple characteristics predict the success of these marriages despite within-couple differences can focus on what makes some of these couples succeed. Stemming from one of the limitations for this study, another focus of future research should be on understanding the impact of virtual communities: how do they affect the initial

adjustment of foreign-born wives in the new marital relationship and in the new socioeconomic and cultural environment?

Considering the recent report of the United States Accountability Office on how agencies implement the requirement of IMBRA, 2005 (2006), future research needs to focus on the law's impact on transnational marriages. Specifically, research could examine whether foreign-born perspective spouses have made more informed marital decisions after the 2005 enactment, and whether more informed decisions have impacted the marital quality in transnational couples.

There are certain implications for family practitioners, although these should warrant cautions from over-generalization. Foreign-born wives might have a special need to develop new contacts within the local community as well with local and virtual communities of women who share similar experience. These contacts can support initial adjustment, language development, as well as provide emotional and informational support for foreign-born wives in crisis. Additionally, when working with transnational couples, family counselors might need to be aware of within-couple differences, as well as how two cultures are intertwined in marital relationships.

Conclusions

The study contributes to the literature on transnational marriages in several ways. First, it leads to a better understanding of transnational marriages by providing empirical support to some findings of qualitative studies. Second, it uses a nationally representative sample to assess the areas of potential vulnerability of foreign-born wives in these marriages. Finally, it also draws attention to an often-overlooked minority group of Eastern European immigrants.

In the era of globalization and increased mobility of individuals who pursue various goals in their immigration, immigration due to marriage becomes a new norm. As the number of transnational marriages increases, including those from Eastern Europe, it is important for social scientists to focus on these types of marriage circumstances, and for family practitioners to better understand how marriage migrants adjust within their marriage and community.

General Discussion

Stemming from the importance of research focus on transnational marriages as well as a need for better understanding of contemporary Eastern European immigration, the overall objective for this dissertational project was to fill in the gap in our understanding of a) what motivates U.S.-born husbands to marry transnationally (Project 1); and b) how marriage migrants are doing in terms of their adjustment in the U.S. (Project 2).

The two dissertational projects were designed so that two aspects of transnational EE-U.S. marriages would be explored. Project 1 focused on U.S.-born husbands' preferences and opportunities of spouse selection in Eastern Europe as compared to preferences and opportunities of U.S.-born husbands married to U.S.-born wives. Project 2 focused on areas of potential vulnerabilities that EE-born wives in transnational interethnic EE-U.S. marriages might deal with as compared to those of EE-born wives in intraethnic immigrant EE-EE marriages. The two projects used the same dataset, and the set of predictors was somewhat overlapping (see Table 2.5), opening an opportunity to explore the role of these overlapping predictors across two studies. In the section below, the potential connections and interdependence of some of those predictors across two projects will be discussed.

A Comparison of Predictors Across Projects

Age difference. Spouses in transnational interethnic EE-U.S. marriages were characterized by significant age difference averaging 10 years. This was an equally significant characteristic in both regression models (Project 1 & 2), holding other variables constant. The spouse age difference was used as a predictor of the U.S.-born

husband's preference for a more traditional wife that was hypothesized to be more typical for transnational EE-U.S. marriages (Project 1). In Project 2 the significance of the same predictor confirmed the hypothesis that with greater spouse age differences the chances of a couple to be in transnational interethnic EE-U.S. marriages (versus intraethnic immigrant EE-EE marriage) increased significantly. Indeed, unlike spouses in transnational marriages, spouses in U.S.-U.S. marriages tended to have 2 years of difference, and spouses in EE-EE marriages averaged 4 years (see Tables 1.3 and 2.2).

These findings indicated that spouse age difference is the characteristic that is unique to the nature of transnational marriages. While preference for a younger wife among U.S.-born husbands can be a part of the nature of transnational mate selection, it can also be a potential source of power imbalance within a couple, as is suggested by previous research (Pyke & Adams, 2010). While spouse age difference is common among transnational marriages, it is important to understand how couples deal with this difference and whether or not this difference becomes an area of vulnerability in their relationship.

The spouse age difference was the only characteristic that was significant in both Projects, the rest of the characteristics described below were found to be significant in or the other of them.

Wife's stay at home status. Another indicator of the U.S.-born husband's preference for a more traditional wife was her stay-at-home status as measured by non-participation in labor force. In the Project 1 model it was a significant predictor of transnational marriages, holding other predictors constant. The same variable was used in the model of Project 2 as a predictor of the social isolation of wives and it was not

significant. Thus, regardless of marriage type, EE-born women in these projects tended to have equal chances of not being in the labor force. According to descriptive statistics, there were approximately the same percent of EE-born women in EE-EE marriages who were not in labor force (47%) compared to EE-born women in EE-U.S. marriages (40%) (see Tables 1.3 and 2.2).

These findings might also suggest that labor force participation might be an indicator of husband's preference for a more traditional wife, but it can also be a nature of immigrant status. As it was discussed in the Project 2, it takes time for an immigrant to confirm her or his diploma, get certified, or even get new education since some degrees received in the immigrant's country of origin are not identical to those received in the U.S. and might have different requirements (Crandall, Senturia, Sullivan, & Shiu-Thornton, 2005).

Educational dissimilarity. Unlike it was hypothesized in Project 1, it was actually spouse educational dissimilarity (not similarity) that was a significant characteristic that increased the chances of a transnational marriage. The findings contradicted the idea of assortative matching theory that spouses tend to match based on educational homogeneity (Becker, 1973) and the overall trend of increasing educational homogeneity (Shafer & Qian, 2010). More important there were more EE-U.S. marriages in which wives (41%) but not husbands (25%) had more education, which according to recent literature increased the chances of interpersonal conflicts between spouses (Booth & Edwards, 1992; Bumpass, Martin & Sweet, 1991). The observed couple heterogeneity in education was not a significant predictor in Project 2. Regardless of whether EE-born wife was in an interethnic transnational EE-U.S. marriage or in an

intraethnic immigrant EE-EE marriage, there was the same nature of spouse educational matching. As was mentioned it was mentioned in Project 2, Russian women tend to have more education at the graduate level (“Report on the Gender Initiative”, 2011).

Residency in the state with Eastern European population and metro (rural) area. These two characteristics of transnational EE-U.S. marriages were used as a proxy for a U.S.-husband’s exposure to diversity in general and to EE population particular in Project 1. None of them were significant in predicting a couple being in transnational EE-U.S. marriage versus intranational U.S.-U.S. marriages. However, in Project 2 it was residency in rural area and states with fewer (not greater) EE populations that predicted the chances of a couple being in a transnational interethnic EE-U.S. versus an intraethnic immigrant marriage. In this project these two predictors were used as proxies for the social isolation of EE-born wives. Compared to EE-born wives in intraethnic immigrant marriages, EE-born wives in transnational marriages were less likely to meet Eastern European counterparts in the community and were generally more isolated since they tended to live in rural communities. It is worth suggesting that unlike women in intraethnic EE-EE marriages, EE-born wives in transnational interethnic marriages tended to join their U.S.-born husbands, but did not consider the availability for connections with EE immigrants in the area. At the same time, their U.S.-born husbands were not more likely to be exposed to diversity as U.S.-born husbands in intranational U.S.-U.S. marriages, as findings from Project 1 suggested. The two factors can also put some constrains in partner relationships in transnational marriages and EE-born wives’ adjustment into a new community.

In my future research I plan to focus on spouse differences that are quite common due to the nature of transnational marriages and spouse mutual preferences and how they are perceived by spouses themselves. What steps do couple take to resolve them? What influences their successful resolution?

Illustrations

Table 1.1

Description of Projects

Project	Research Question	Title	Marital group	n
# 1	What are the characteristics of spouses in transnational EE-U.S. couples that can distinguish them from spouses in intranational U.S.-U.S. couples?	Who marries women from Eastern Europe?	Transnational EE-U.S. marriages	258
		Transnational marriages between U.S.-born husbands and Eastern European-born wives	Intranational U.S.-U.S. marriages	1,236
# 2	Are EE wives in transnational interethnic couples exposed to more areas of potential vulnerabilities compared to EE wives who are in intraethnic EE-EE immigrant couples?	Assessing areas of potential vulnerability among Eastern European-born wives in interethnic transnational Eastern European-U.S. Marriages	Interethnic Transnational EE-U.S. marriages	258
			Intraethnic EE-EE marriages	138

Table 1.2
Summary of Hypotheses Tests

Hypothesis	Status
H ₁ : If in a couple the wife stays at home, it increases the odds that the couple's marriage is transnational.	Supported
H ₂ : If in a couple the wife is younger than her husband, it increases the odds that the couple's marriage is transnational.	Supported
H ₃ : If spouses are similar in educational level, it increases the odds that the couple's marriage is transnational.	Partially supported: significant, but different direction
H ₄ : If in a couple the husband has Eastern-European ancestry, it increases the odds that the couple's marriage is transnational.	Rejected
H ₅ : If in a couple the husband is remarried, it increases the odds that the couple's marriage is transnational.	Partially supported: one category of the predictor
H ₆ : If in a couple the husband obtained bachelor's degree or higher, it increases the odds that the couple's marriage is transnational.	Supported
H ₇ : If a couple is living in a metro area, it increases the odds that the couple's marriage is transnational.	Rejected
H ₈ : If a couple is living in the state with greater Eastern-European community, it increases the odds that the couple's marriage is transnational.	Rejected
H ₉ : Cultural rather than structural determinants will contribute more to the power of the model to predict the odds that the couple's marriage is transnational.	Supported
H ₁₀ : If in a couple the husband is remarried to a younger wife, it increases the odds that the couple's marriage is transnational.	Partially supported: significant, but different direction
H ₁₁ : If in a couple the husband is remarried to a wife with similar educational level, it increases the odds that the couple's marriage is transnational.	Rejected
H ₁₂ : The inclusion of interaction terms will contribute significantly to the overall model's power to predict the odds that the couple's marriage is transnational.	Supported

Table 1.3
Sample Characteristics by Marital Group (N=1,494)

Variable	White non-Hispanic U.S.-U.S. marriages (n=1,236)		Transnational EE-U.S. marriages (n=258)	
	Percentage	Mean (SD)	Percentage	Mean (SD)
Cultural determinants				
Age difference (c)		2.30 (5.47)		10.43 (8.15)
Not in labor force (w)	22.9		39.6	
Similar educational level (c)	45.4		34.6	
EE ancestry (h)	9.5		13.1	
Structural determinants				
Number of marriages (h)				
Married once	64.2		43.8	
Married twice	26.1		33.8	
Married thrice or more	9.7		22.3	
Residency in metro area (f)	67.8		73.5	
EE population by state (f)		6.28 (4.07)		6.22 (3.79)
Educational level (h)				
High school or less	32.1		15.4	
College degree or higher	67.9		84.6	

Note: c = couple-level characteristic, f = family-level characteristic, w = wife's characteristic, h = husband's characteristic.

Table 1.4

Test for Multicollinearity between Predictors, Spearman's rho (N=1,494)

	1	2	3	4	5	6	7	8
Age difference (c)	-							
Not in labor force (w)	.108***	-						
Similar educational level (c)	-.057*	.046	-					
EE ancestry (h)	.020	-.006	-.010	-				
Number of marriages (h)	.298***	.065*	-.075**	-.039	-			
Residency in metro area (f)	-.018	-.045	.044	.055*	-.073**	-		
EE population by state (f)	.013	-.087**	.010	.133***	-.090***	.077**	-	
College degree or higher (h)	.043	-.014	.054	.041	-.129**	.170**	.040	-

Note: c = couple-level characteristic, f = family-level characteristic, w = wife's characteristic, h = husband's characteristic.

* $p \leq .050$, ** $p \leq .010$, *** $p \leq .001$

Table 1.5

Sequential Binary Logistic Regression Predicting Who Will Marry EE-Born Wives (N=1,494)

Measure	Model 1			Model 2			Model 3		
	<i>B</i>	<i>SE B</i>	<i>e^B</i>	<i>B</i>	<i>SE B</i>	<i>e^B</i>	<i>B</i>	<i>SE B</i>	<i>e^B</i>
Structural determinants									
Number of marriages (h)									
Married twice vs. once (h)	.736	.161	2.09***	.083	.188	1.09	-.088	.338	.92
Married thrice vs. once (h)	1.456	.201	4.33***	.342	.251	1.41	1.017	.384	2.76**
Residency in metro area or outside (f)	.210	.161	1.23	.279	.186	1.32	.288	.186	1.33
EE population by state, % (f)	.010	.018	1.01	.004	.021	1.00	.008	.021	1.01
College degree or higher (h)	1.187	.192	3.28***	1.356	.228	3.88***	1.332	.224	3.79***
Cultural determinants									
Age difference (c)				.192	.015	1.21***	.223	.023	1.25***
Not in labor force (w)				.615	.175	1.85***	.601	.176	1.83**
Educational similarity (c)				-.446	.169	.64**	-.689	.241	.50**
EE ancestry (h)				.408	.245	1.50	.403	.248	1.50
Interaction									
N of marriages BY age difference									
Married twice BY age difference							-.017	.035	.98
Married thrice BY age difference							-.101	.033	.90**
N of marriages BY educational similarity									
Married twice BY educational similarity							.553	.382	1.76
Married thrice BY educational similarity							.395	.471	1.48
χ^2				93.207		367.356			378.852

Note: e^B = exponentiated B

* $p \leq .050$, ** $p \leq .010$, *** $p \leq .001$

Table 2.1
Summary of Hypotheses Tests

Hypothesis	Status
H ₁ : If in a couple there is difference in age between spouses, it increases the odds that the couple's marriage is interethnic and transnational.	Supported
H ₂ : If in a couple the wife has higher or lower educational level compared to her husband's, it increases the odds that the couple's marriage is interethnic and transnational.	Rejected
H ₃ : If there is spousal difference in legal status, it increases the odds that the couple's marriage is interethnic and transnational.	Supported
H ₄ : If in a couple the wife has no personal income, it increases the odds that the couple's marriage is interethnic and transnational.	Rejected
H ₅ : If in a couple the wife does not participate in labor force, it increases the odds that the couple's marriage is interethnic and transnational.	Rejected
H ₆ : If in a couple the wife does not attend school, it increases the odds that the couple's marriage is interethnic and transnational.	Rejected
H ₇ : If in a couple the wife has poor English proficiency, it increases the odds that the couple's marriage is interethnic and transnational.	Partially supported: significant but different direction
H ₈ : If a couple resides in states with a smaller EE community, it increases the odds that the couple's marriage is interethnic and transnational.	Supported
H ₉ : If a couple resides in a rural area it increases, it increases the odds that the couple's marriage is interethnic and transnational.	Supported

Table 2.2
Sample Characteristics by Group of Marriage (N=396)

Variable	Interethnic transnational EE-U.S. marriages (n=258)		Intraethnic EE-EE marriages (n=138)	
	Percentage	Mean (SD)	Percentage	Mean (SD)
Couple heterogeneity				
Age difference (c)		10.39 (8.16)		3.95 (5.74)
Educational difference (c)				
Equal	33.7		41.3	
Husband-higher	25.2		23.2	
Wife-higher	41.1		35.5	
Financial and legal dependency				
Income below poverty guidelines (w)	57.0		60.1	
Not a citizen (w)	73.5		79.3	
Different citizenship status (c)	74.0		36.4	
Social isolation				
Not in labor force (w)	39.5		47.1	
No school enrolment (w)	76.0		72.5	
No \ poor English skills (w)	3.1		17.4	
Size of EE community in the state, % (com)		6.21 (3.80)		8.93 (3.92)
Residency in rural area (h)	26.4		4.3	
Other variables				
Country of wife's birth (w)				
Poland	12.0		55.1	
Romania	11.6		16.7	
Russia	45.0		15.2	

Ukraine	31.4	13.0
U.S.	.0	.0

Note: h = husband's characteristics, w = wife's characteristic, c = couple-level characteristic, f = family-level characteristic, com = community-level.

Table 2.3

Test for Multicollinearity between Predictors, Spearman's rho (N=396)

	1	2	3	4	5	6	7	8	9
Age difference (c)	-								
Difference in educational level (c)	.000	-							
Difference in citizenship status (c)	.178**	.048	-						
No personal income (w)	.056	-.010	.020	-					
No labor force participation (w)	.035	.027	-.059	.663**	-				
No school attendance (w)	.058	.014	.017	-.058	.061	-			
Poor English skills (w)	-.097	.020	-.128*	.064	.103*	.066	-		
Size of EE community in the state, % (com)	-.153**	-.090	-.079	.011	.070	.037	.120*	-	
Residency in rural area (h)	.145**	.113*	.059	.013	.050	.010	-.023	-.101*	-

Note: w = wife's characteristic, h = husband's characteristic, c = couple-level characteristic, f = family-level characteristic, com = community-level.

* $p \leq .050$, ** $p \leq .010$, *** $p \leq .001$

Table 2.4

*Hierarchical Binary Logistic Regression Predicting Transnational Marriage Based
Three Areas of Vulnerabilities for EE-Born Wives (n=396)*

Measure	B	SE B	e ^B
Couple heterogeneity			
Age difference (c)	.133	.023	1.14***
Difference in educational level (c)			
Husband has more education	.148	.357	1.16
Wife has more education	.379	.303	1.46
Financial and legal dependency			
Difference in citizenship status (c)	.964	.274	2.62***
No income, income below the poverty guidelines (w)	-.029	.362	.97
Social isolation			
No labor force participation (w)	-.350	.364	.71
No school attendance (w)	.301	.305	1.35
Poor English skills (w)	-1.919	.573	.15**
Size of EE community in the state, % (com)	-.151	.034	.86***
Residency in rural area (h)	2.127	.510	8.39***
Constant	-.090	.453	.91

Note: w = wife's characteristic, h = husband's characteristic, c = couple-level characteristic, f = family-level characteristic, com = community-level.

e^B = exponentiated B

p* ≤ .050, *p* ≤ .010, ****p* ≤ .001

Table 2.5

Summary of Predictors Used in Dissertational Projects and Their Prediction Status of the Outcome

Predictors (Project 1)	U.S.-born	EE-born	Predictors (Project 2)
	husbands	wives	
	married to	married to	
	EE-born	U.S.-born	
	wives	husbands	
age difference (c)	+	+	age difference (c)
not in labor force (w)	+	-	not in labor force (w)
similar educational level (c)	(+)	-	similar educational level (c)
BA or higher (h)	+	NA	NA
EE ancestry (h)	-	NA	NA
number of marriages	+	NA	NA
residency in metro area (f)	-	+	residency in rural area (f)
EE population by state (f)	-	+	EE population by state (f)
NA	NA	-	no personal income (f)
NA	NA	-	no school attendance (f)
NA	NA	(+)	poor English skills (f)

Note: “+” the predictor was significant, “-“ the predictor was not significant, “(+)” the predictor was significant, but the direction was opposite from the one stated in hypothesis

Figure 1

Data on K1 and K2 Visas Issues, 1981-2009

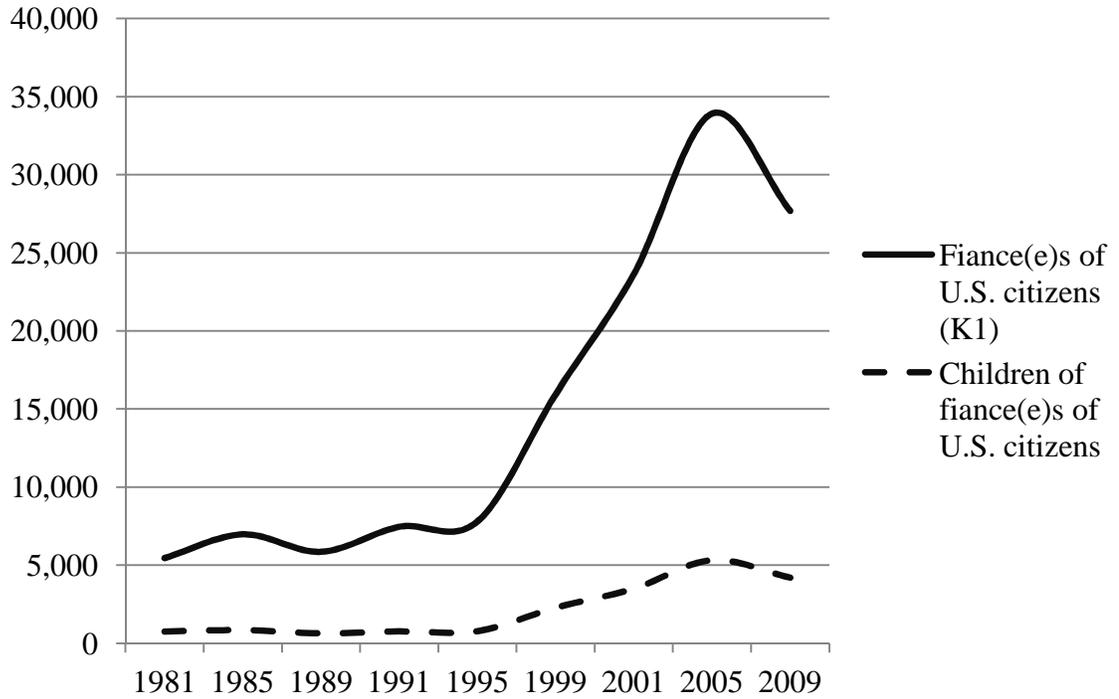
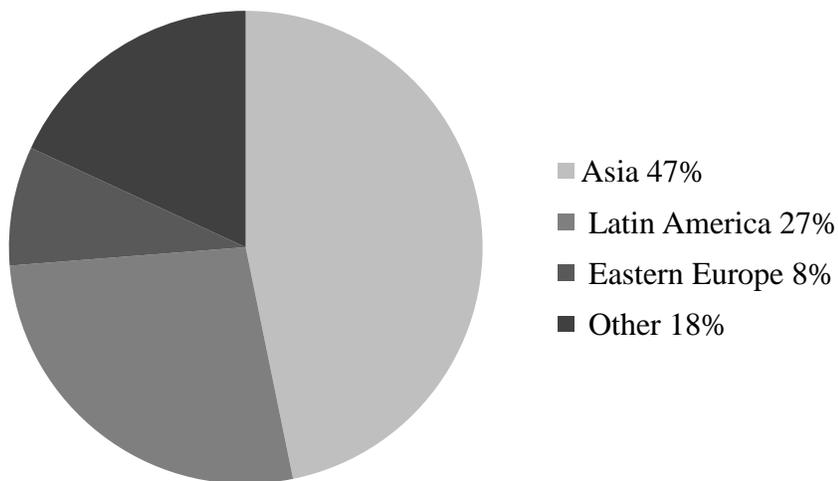


Figure 2

Distribution of K-type Visas Based on Recipients' Region of Origin, 2009



Note: Category 'other' includes recipients from Western Europe, North America (Canada), Africa and Oceania.

Figure 3

Power and Control Wheel, Domestic Abuse Intervention Project, 1984



DOMESTIC ABUSE INTERVENTION PROJECT

202 East Superior Street
Duluth, Minnesota 55802
218-722-2781
www.duluth-model.org

Note: <http://www.theduluthmodel.org/pdf/PowerandControl.pdf>

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