Disability Trajectories by Age of Migration among Mexican Elders in the U.S.

INTRODUCTION

The United States population is rapidly aging. With increasing age, many elderly individuals experience disability and lower levels of functioning. It is estimated that roughly one-half of individuals 65 and older in the United States have a disability (U.S. Census Bureau, 2012). While research on disability has expanded over the last several decades, less is known about minority and immigrant elderly. This is particularly true of persons of Mexican-origin relative to other racial groups. Research suggests that elderly Mexican-origin individuals tend to enter their later years in life with limited economic resources which is associated with negative health outcomes (Angel and Angel, 2006; Angel et al., 2001). Nonetheless, one of the most intriguing findings in the health and mortality literature is the epidemiological paradox (also known as the “Latino paradox”). This paradox describes the unexpected favorable health outcomes of Latinos, especially persons of Mexican-origin, in light of limited socioeconomic resources. In addition, studies consistently find that Latinos who immigrate to the United States are often healthier than their U.S.-born counterparts. This “healthy immigrant effect” can be seen across a range of health-related outcomes, though is generally found to be smaller for individuals who migrate at older ages since they likely migrate for family reunification purposes rather than for employment opportunities (Jasso et al., 2004; Markides et al., 2007).

Selective migration is thought to shape the health profiles of Mexican immigrants. Researchers speculate that individuals who migrate are not a random-cross section of their origin population, and tend to be healthier, on average, than non-migrants and their U.S.-born counterparts (Jasso 2004). Although immigrants are initially healthier upon arrival, this apparent health advantage tends to dissipate with length of residence in the U.S. (Antecol and Bedard, 2006; Lopez-Gonzalez et al., 2005; Vega and Amaro, 1994). Previous research has shown U.S.-born Mexican elderly have a health profile more indicative of their minority and lower
socioeconomic status while foreign-born Mexican elderly have much more favorable mortality and health profiles (Cantu et al., 2013). However, while much debate exists related to the “healthy immigrant effect” there is also a growing body of evidence that suggests that foreign-born Mexicans who live longer tend to have a greater prevalence of disability and functional limitations (Angel et al., 2015; Garcia et al., 2015; Markides et al., 2007; Melvin et al., 2014; Cantu, Hayward, Hummer and Chiu, 2013; Hayward, Hummer, Chiu, Gonzalez and Wong, 2014). However, there is fairly limited research on the extent to which the healthy immigrant effect holds among older Mexican-origin immigrant subgroups relative to their U.S.-born counterparts. The protective health benefits of immigration may not occur until Mexican immigrants enter their later years of life.

One of the major distinguishing features of the Mexican-origin elderly population is their diversity on the basis of nativity and temporal presence in the United States. While many Mexican-origin elders were born in the United States and others came during the early parts of the 20th century when they were young, many others immigrated as adults including those who entered the country during their later years in life. Despite the increasing interest on how nativity status affects life experiences of Mexicans, there has been relatively little research on how age of migration affects health outcomes of elderly Mexicans. This analysis focuses on the development of age of migration categories based on the age when Mexican elderly arrived in the United States. I then examine the nativity and for immigrants, age of migration categories on the basis of disability status. This research is particularly interested in how Mexicans who immigrated to this country at age 50 and older fare compared to their U.S.-born counterparts as well as to their foreign-born peers who migrated to this country at a younger stage of their lives. Individuals who immigrated while elderly (50+) are of interest because the move to the U.S. may be driven by health related conditions which can be better addressed in the United States. Moreover, this study also seeks to document how early life Mexican immigrants (foreign-born individuals who came to the U.S. when they were 1 to 19 years of age) compare to their U.S.-born counterparts. This interest stems from findings in recent research that reveal foreign-born
individuals have advantageous health outcomes compared to U.S.-born persons (Singh and Hiatt 2006; Finch et al. 2009; Kimbro 2009; Padilla et al. 2009; Sanders 2010; Tillman and Weiss 2009) and that the advantage declines with time in the United States (Antecol and Bedard 2006; Finch et al. 2009; Kimbro 2009). Thus, this analysis will provide knowledge on whether or not the advantages of the foreign-born—especially those involving early life migrants which are the most like the U.S.-born population—are long term.

This analysis draws on the life course perspective which argues that people’s early life experiences in the area of socialization and stages in the life cycle impact health outcomes in the later stages of life (Crosnoe and Elder, 2004; Dannefer, 2003). This perspective is particularly useful in the examination of the age at which immigrants arrive in the United States. This study aims to contribute to the immigrant literature by examining whether the “healthy immigrant effect” that has been documented among immigrants in mortality extends to disability by examining the functional limitation trajectories past 65 lived with and without serious disability (Markides and Eschbach, 2005). I draw on a unique data set, the Hispanic Established Population for the Epidemiologic Study of the Elderly (H-EPESE) to address the following two questions: 1) to what extent does functional disability trajectories differ for Mexican elders residing in the United States by nativity and, for the foreign-born by age of migration segment of the population? and 2) to what extent does the healthy immigrant effect in mortality extend to disability trajectories among foreign-born Mexican subgroups residing in the southwestern United States?

LITERATURE REVIEW

Recent research shows the healthy immigrant effect evident in mortality and life expectancy among foreign-born Latino and Mexican elderly is not reflected in disability rates (Markides and Rote, 2014). It appears that foreign-born Mexicans are a long living population primarily because of immigrant health selection (Arias, 2010; Markides and Eschbach, 2005). Mexican immigrants arrive in the United States in relatively good health but lose their advantage
with time in the United States so that they become more disabled in late life than the non-Latino white population partly because of a lifetime of physical labor and substandard health care (Markides and Gerst, 2011). A growing body of literature documents higher rates of disability for U.S.-born and foreign-born Latinos compared to U.S.-born whites (Hayward et al. 2014; Angel, Angel, and Hill 2014; Zsembik Peek and Peek 2000). More specifically, recent research on functional health status indicates substantial differences by race/ethnicity and nativity among the elderly U.S. population, with U.S.-born Latinos generally shown to suffer from the poorest outcomes (Hummer, Benjamin, and Rogers 2004; Warner and Brown 2011).

In comprehensive surveys such as the National Health Interview Survey, Mexican individuals are more likely to report activity limitations when compared to individuals from other racial or ethnic groups (Melvin et al., 2014; Hummer et al. 2004). Further, data from the Hispanic Established Population for Epidemiologic Studies for the Elderly (H-EPESE) shows that older Mexican Americans are more likely to report disabilities in activities of daily living (ADL) and in instrumental activities of daily living (IADL) than their non-Latino counterparts (Markides and Gerst, 2011). Although these national surveys provide us much insight about the disability status of Mexican elderly, the immigration and age of migration heterogeneity among this population remains relatively unexplored.

In a recent study, Markides et al. (2007) use the PUMS data to assess disability rates among elderly Latino-origin individuals accounting for nativity status. Consistent with prior research this study illustrates that Latinos, regardless of gender, are more likely to report disabilities than non-Latino whites on each of the disability outcomes. Upon a closer examination of nativity for Latinos, the investigators report that U.S.-born Latino males and females are more likely to report “any disability” than their foreign-born counterparts. When they examine Latino ethnic specific outcomes, the investigators note that U.S.-born Mexican males report higher rates of “any disability” (51.4 percent) than their foreign-born counterparts (49.4 percent). This pattern is not found for U.S.-born Mexican females who are less likely to report “any disability” (53.4 percent) than their foreign-born (54.4 percent) counterparts.
Similarly, Cantu et al., (2013) found that foreign-born Latinos have the longest life expectancies at age 50 and have a lower prevalence of morbidity and functional limitations compared to non-Latino whites. Importantly, this study also demonstrated that U.S.-born Latinos do not share the same health advantages of their foreign-born counterparts.

Conversely, Hayward and colleagues (2014) found that foreign-born Latinos exhibited the greatest burden of disability among all racial/ethnic groups in terms of number of years of life spent with an activity of daily living limitation. This study found support for the Latino Paradox in mortality, but not in disability. In addition, they showed that while U.S.-born Latinos have mortality rates comparable to whites, they also spent more years in a disabled state. This is particularly the case in the Mexican-origin population, a group that constitutes approximately two-thirds of the Latino population in the United States (Markides and Rote, 2015). It appears that immigrants from Mexico arrive in relatively good health but lose their advantage with time in the United States (Antecol and Bedard, 2006; Gubernskaya, Bean, and Van Hook, 2013). Several additional studies (Angel et al., 2014; Garcia et al., 2015) also document important interactions by nativity. For example, foreign-born Mexican-origin women have the highest life expectancy and also spend a larger portion of their years after age 65 with IADL and functional limitation disability relative to their co-ethnic group members. Although these studies provide useful epidemiological information, a notable limitation is that the investigators did not examine the heterogeneity within the foreign-born population in terms of disability status by time of migration.

In summary, some research suggests that older Latinos have worse health (i.e., more disabilities) than their non-Latino counterparts. In studies where nativity status is examined, U.S.-born Mexicans have worse ADL and functional disability than their foreign-born counterparts; however, often length of U.S. residence is not accounted for. In studies that consider ethnicity and immigration status, often Mexicans who immigrate to the United States when they are older are found to have worse health than those who immigrated at a young age. This research adds to the small, but growing, literature that seeks to understand the health of
Latino elderly, with a focus on the identification of Mexican elderly along the lines of nativity and age at immigration as a useful lens to obtain a broader portrait of this population. Although numerous studies in this body of literature document overall health for Latino groups by nativity, less scholarship to date has focused on comparing foreign-born subgroups by age of migration. This omission is important because men and women tend to migrate for different purposes (i.e. family vs. employment) and experience migration in unique ways (Donato, 2010). Thus, this research addresses an important gap in our understanding of the long-term consequences of stage at immigration in the life course and disability status.

**Conceptual Framework**

From a life course perspective I test the “healthy immigrant effect,” specific to age of migration, among foreign-born Mexican elderly individuals. I argue that the life experiences of the foreign-born in the U.S. are likely to be shaped by the age at which they immigrated to the U.S. Age of migration can be useful for understanding health disparities in older age by approximating type of migration and the degree of selectivity among Mexican immigrants (Gubernskaya 2014). Health selection likely varies by gender and different age groups. A life course perspective describes a dynamic process emphasizing that health disparities are associated with various dimensions of the social structure, including gender, race/ethnicity, age, education, socioeconomic differences, childhood experiences and family background, and such development interacts with the social environment to create trajectories of well-being in later life (Alwin and Wray, 2005; Crosnoe and Elder, 2004). Using this conceptual framework, I seek to examine how the migration experience to the United States shapes the life course of individuals, the health process, and the quality of life in among elderly foreign-born Mexicans.

The life experiences of the Mexican elderly are likely shaped by where they are born and, for the foreign-born, when they immigrated to the U.S. Substantive explanations for the healthy immigrant effect point to health selection mechanisms. The age of an immigrant’s arrival in the U.S. appears to be significant (Teruya and Bazargan-Hejaz, 2013). For example, migrant health
selectivity is thought to be strongest among labor migrants who generally migrate in mid life (20-49) in search of employment opportunities in physically demanding industries such as agriculture and construction (Angel et al., 2010; Gubernskaya et al., 2013; Jasso et al., 2004). In contrast, health selectivity is more likely to be weaker among Mexicans who migrated to the U.S. in early life (1-19) as children or adolescents since their migration reflects their parents’ characteristics and they do not necessarily have to meet the demands required for migration by themselves (Angel et al., 2010; Breslau et al., 2009; Colon-Lopez et al., 2008; Gubernskaya, 2014). Likewise, health selectivity among late life migrants (50+) may be weaker as older Mexican migrants are more likely to migrate for family reunification reasons rather than to seek employment (Angel et al., 2010; Jasso et al., 2004; Terrazas, 2009; Treas, 2014).

DATA AND METHODS

Data

This research employs data from the Hispanic Established Population for the Epidemiological Study of the Elderly (H-EPESE) to document nativity differentials in disability trajectories among older people of Mexican-origin. The H-EPESE is a large, multi-stage probability sample of older Mexican-Americans who reside in five southwestern states: Arizona, California, Colorado, New Mexico, and Texas (Markides et al., 1997). The H-EPESE has been used extensively to study the prevalence of disability among Mexican-origin adults in the U.S (Peek et al. 2003; Peek, Patel and Ottenbacher 2005). The surveys provide detailed information on health and physical functioning, immigration history, and demographic characteristics for a sample of 3,050 individuals of Mexican-origin who were first interviewed in 1993-94. This panel was re-contacted in 1995-96, 1998-99, 2000-01, 2004-05, 2007, and 2010-11. Due to attrition in
the original cohort, a new cohort of 902 individuals was added in 2004 to increase sample size and statistical power. Proxy respondents are omitted as are those with missing data on covariates. This new panel was re-contacted in 2007 and 2010-11. Individual level data from 1993-2011 is used to construct growth curve trajectories by age across survey years with a mortality linkages through NDI up to Dec. 31, 2011. Respondents ranged in age from 65-107 years. The final analytic sample includes 4,387 observations for 1,483 men and 6,769 observations for 2,051 women. The average respondent contributes 3.2 waves of data.

Measures

Disability refers to an elderly person’s difficulty or inability to perform social roles and self-care tasks which are crucial for independent living (Spector & Fleisman, 1998, Crimmins, 2004). Disability is measured through two separate indicators: one subjective measure Activities of Daily Living (ADLs) and one objective measure performance oriented mobility assessments (POMAs). ADL measurements are commonly used in aging research and are well-documented as reliable scales to assess disability (Smith et al., 1990). To assess ADLs, respondents were asked if they could independently perform the following tasks: walk across a small room, bathe or shower, perform personal grooming (brush hair/teeth), dress, eat, get into or out of a bed, and use a toilet (Katz, Ford, Moskowitz, Jackson, & Jaffe, 1963; Branch, Katz, & Papsidero, 1984). ADL disability was dichotomized as “no help needed” versus “unable to”, or “need help to do one or more of the tasks”. A positive response was coded as an ADL limitation.

I use the performance-oriented mobility assessment (POMA) to assess functional mobility. The POMA is based on three tasks rated by the interviewer on a 0-4 scale to assess a respondent’s ability to sit and stand in chair, walk across the room, and balance while standing
POMA limitations are coded as the number of tasks individuals are unable to perform, so 0 means no limitations, whereas 3 means a respondent is unable to perform any of the tasks. The main variables of interest refer to respondent’s nativity and in order to differentiate among the foreign-born, age of migration. To classify nativity, I use birth place information and categorize those respondents born in the U.S. (coded as 1) versus born in Mexico. To measure life course stage at migration, I include three age of immigration groups; those who arrived in childhood (0 – 19 years); middle age (20-49 years); and later life (after age 50). In the analysis with age of migration, individuals born in the US are coded as 0 and serve as the reference group.

Sociodemographic variables used in the analysis include gender, age, education, financial strain, and living arrangements. Gender corresponds to whether the respondent is female or male. Disability trajectories are age-graded using continuous age measure centered at age 65. Educational level is measured as less than high school education. Financial strain is measured with two items, difficulty in meeting monthly bills and how much money do you usually end up with at the end of the month. Respondents reporting that they have a great deal of difficulty meeting monthly bills or that they do not have enough money to make ends meet at the end of the month were coded as having financial strain. Living arrangements are coded as living with spouse or other family members, compared to living alone.

Health and health behaviors used in the analysis are chronic conditions, ever smoke, and ever drink. This analysis controls for six self-reported items that asked whether the respondent had ever been diagnosed by a doctor or medical personnel with one of the following six medical conditions: (a) a heart attack, or coronary, or myocardial infraction, or coronary thrombosis; (b) a
stroke, a blood clot in the brain, or a brain hemorrhage; (c) cancer, or a malignant tumor of any type; (d) high blood pressure; (e) arthritis or rheumatism; or (f) diabetes, sugar in your urine, or high blood sugar. The original response categories for each item were: yes, no, or suspect/possible. Response categories for each items were coded 1 for “yes” and “suspect/possible” and 0 for “no.” Previous research (Katz et al., 1996; Simpson et al., 2004; Skinner et al., 2005) has shown self-reported medical conditions by older adults to be reliable with medical records and physician reports. These six medical conditions are specifically used since each condition has potential to influence physical function and disability (Markides et al. 1996; Patel, Peek, Wong & Markides, 2006). Ever smoke, is coded as 1 if respondent ever reports having smoked in the past or that they currently smoke. Ever drink, is coded as 1 if respondent reports ever having been an alcohol drinker.

**Statistical Analysis**

I employ age-based linear growth curve models to estimate and predict ADL and POMA disability trajectories over the 17 year study period (Singer and Willet, 2003). In this analysis I estimate individual deviations from mean trajectory by nativity and for the foreign-born, by age of migration. The growth curve models assume linear individual trajectories that are based on estimates of person-specific intercepts and slopes or rate of change, that describe patterns of change in disabilities as a function of age (Raudenbush and Bryk, 2002). Age is centered at age 65, so that the intercept represents the mean response for 65 year olds at baseline. All analyses were conducted in Stata 13 and use the appropriate survey weights to ensure the results are representative and account for attrition.
Results

Table 4.1 presents estimates of the effects of key substantive predictors on subjective and objective disability trajectories for Mexican elders 65 years and older stratified by gender. The results show no nativity differences in subjective ADL disability at age 65 or on change in ADL by age. No immigrant health advantage is evident in ADL disability for either male or female foreign-born immigrants. The results in Panel A and Panel B (Models 1 and 2) indicate that ADLs are not significantly different by nativity at age 65, nor is there evidence that nativity affects the rate of change in ADL. However, significant nativity differences emerge in objective disability measured by POMA limitations. In Model 3, U.S.-born Mexican men have higher levels of POMA disability at age 65 relative to their foreign-born counterparts, although they also experience a slower increase in POMA limitations over time. Foreign-born males continue to show a health advantage in POMA disability once controls for health and health behaviors are added in Model 4. Among women (Panel B), Model 3 indicates no differences by nativity in POMA disability at age 65, though a slower increase with age in POMA limitations can be seen among U.S.-born females. In Model 4 for women, nativity differences in the rate of change in POMA disability remain significantly lower for the U.S.-born once controls for health and health behaviors are added to the model. Foreign-born women exhibit no health advantage relative to their U.S.-born counterparts in POMA disability at baseline, or in rate of change over time. In fact, the results indicate foreign-born women have a steeper rate of decline over time and are at a disadvantage compared to U.S.-born women in objective disability measured by POMA limitations.
Table 4.2 presents disability trajectories by age of migration stratified by gender. (Note in these models U.S.-born elderly are the reference group). Model 1 (Panel A) indicates that foreign-born males who migrated in early life (1-19 years) have fewer ADLs compared to U.S.-born men at age 65, but exhibit no differences in the rate of change in ADLs over time. However, once controls for drinking, smoking, and chronic conditions are included in the analysis, differences by age of migration are no longer significant. Turning to objective POMA limitations, Model 3 indicates that foreign-born males who migrated in mid life (20-49 years) and late life (50 years and older) have significantly fewer POMAs at age 65 than both U.S.-born and foreign-born men who migrated in early life. Interestingly, foreign-born males who migrated in mid life (20-49 years) have steeper increases in POMA limitations compared to the U.S.-born and early life migrants. When controls are added in model 4, age of migration differences remain at baseline, and significant differences between late life migrants and U.S.-born and early life migrants emerge, such that late life migrants have a steeper increase in POMAs compared to U.S.-born and early life migrants. These differences can be clearly seen in Figure 4.1. Mid life and late life migrants start with fewer POMA limitations, but increase swiftly with age, whereas the U.S.-born and early life migrants start with more limitations but experience a slight increase with age. Clearly, an immigrant advantage is evident among mid life and late life migrants at baseline. However, consistent with previous research the health of immigrants converges to native levels over time and with length of residence in the U.S.

Comparing age at migration differences among women (Panel B) Model 1 and Model 2, no significant differences by age at migration are found for ADL disability. Models 3 and 4 estimate models using objective POMA measures, the results show that mid life (20-49 years)
migrants have significantly fewer POMA limitations compared to the U.S.-born women. However, they experience a significantly faster increase in POMA disability compared to U.S.-born women and early life immigrant women net of controls for health and health behaviors (see Model 4). The results are illustrated in Figure 4.2, POMA age trajectories are similar for U.S.-born and early life (1-19 years) and late life (50 years and older) immigrant women, however while mid life migrants initially exhibit better health, they experience steeper increases in POMA limitations with age, with the most limitations evident by age 85.

DISCUSSION AND CONCLUSION

The life course perspective permits us to better examine the role of age in the immigration process. This theoretical perspective argues that experiences at early states in the life course impact health and well-being in the later of life. The data presented provide evidence of how the life experiences of Mexican elderly were shaped by nativity, and for immigrants, age at immigration to the U.S. What might account for these differences? I postulate that there are historical and social mechanisms at play that shape the disability status of Mexican elderly. The intersection between socialization and U.S. policies related to economic shifts illustrate how social and contextual conditions have shaped the lived experiences of the Mexican elderly. For example, U.S.-born elderly and early life migrants were largely socialized during the same era, so they faced somewhat similar social, political, and economic opportunities. This means that their experiences and opportunities were shaped by the Great Depression and immigration policies of the time that mostly relegated them to injury-promoting occupations (e.g., mining, farming, railroad construction, etc.) with higher risk of exposure to toxic materials and unsafe
equipment. Indeed, each age of migration group considered in this analysis is marked by its own particularities that have clear implications for disability status.

These results indicate significant differences in the health trajectories of the foreign-born after age 65 compared to the U.S.-born, resulting in much steeper health declines for objective disability measured by POMA limitations. However, virtually no differences by nativity are evidence in subjectively measured ADLs. For POMAs, differences by age of migration are largely as expected; migrants who migrated in mid life (20-49), who most likely had more difficulty assimilating and worked in physically taxing occupations, display steeper health declines compared to their U.S.-born peers. Whereas, migrants who arrived in early life (1-19), are most similar to the U.S.-born in their health trajectories, which may be attributed to their ability to more easily assimilate into mainstream society by arriving at younger ages, along with the opportunity to work in less physically demanding occupations. For the smallest age of migration group, those who arrived at older ages (50 years and older), the men also experience large late life declines in POMAs, which may reflect the physically demanding occupations worked while still living in Mexico.

Nonetheless, I acknowledge that the observed patterns in functional disability at 65 among the foreign-born may largely reflect the health selectivity of migration among working-age males (Palloni and Arias 2004; Palloni and Morenoff 2001). As such, U.S.-born and early life immigrant males tend to have the highest rates of disability compared to foreign-born individuals who came to the United States during late life or of working age. Thus, the lower prevalence of disability among the latter may be attributed to members of these groups being positively selected from the Mexico population on the basis of health giving support to the
healthy immigrant effect among mid life and late life male immigrants. Similarly, because Mexican men have been more likely to migrate to the United States for work-related reasons compared to women, we would expect to see less dramatic differences in levels of functional disability among women compared to men for different age of migration groups. This pattern is observed in the above analysis.

The life experiences and health status of the Mexican elderly are greatly shaped by nativity status and, for the foreign-born, age in which they immigrated to the United States. The goal of this chapter was to examine the heterogeneity within the Mexican-origin elderly population by nativity and, for the foreign-born by age of migration to assess whether the healthy immigrant effect in mortality extend to disability trajectories among foreign-born Mexican subgroups residing in the southwestern United States. I examine the extent to which age of migration affects disability status for this group as a way to contribute to discussions of the “healthy immigrant effect.” The results show that while the majority of elderly Mexicans are U.S.-born, nativity status, as measured by age of immigration, is crucial to our understanding of disability status. In general, foreign-born immigrants, have similar or lower disability rates than the U.S.-born. These results contribute to extant efforts that have attempted to unravel the epidemiological paradox. In particular, this analysis contributes to ongoing discussions related to the degree to which Mexican elderly immigrants exhibit positive or negative outcomes based on immigration status and time in the U.S.
Table 1: Nativity Trajectories of ADL and POMA Disabilities Among Adults 65 and Older: Linear Growth Curve Models by Gender

<table>
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<th></th>
<th>ADL Model 1</th>
<th>ADL Model 2</th>
<th>ADL Model 3</th>
<th>ADL Model 4</th>
<th>POMA Model 1</th>
<th>POMA Model 2</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>(0.0)</td>
<td>(0.0)</td>
<td>(0.0)</td>
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<td>(0.0)</td>
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<tr>
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<td>0.01</td>
<td>0.00</td>
<td>-0.02</td>
<td>0.02</td>
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</tr>
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<td>(0.0)</td>
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<td>(0.0)</td>
</tr>
</tbody>
</table>
| Notes: Standard errors in parentheses. *p<.05 **p<.01 ***p<.001

Table 2: Age at Migration Trajectories of ADL and POMA Disabilities Among Adults 65 and Older: Linear Growth Curve Models by Gender

<table>
<thead>
<tr>
<th>Intercept (Age=65)</th>
<th>ADL Model 1</th>
<th>ADL Model 2</th>
<th>ADL Model 3</th>
<th>ADL Model 4</th>
<th>POMA Model 1</th>
<th>POMA Model 2</th>
<th>POMA Model 3</th>
<th>POMA Model 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age at Migration (Ref=US born)</td>
<td></td>
<td></td>
<td></td>
<td></td>
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<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Panel A: Men (N=4,387)  
Panel B: Women (N=6,780)
<table>
<thead>
<tr>
<th>Age</th>
<th>Financial Strain</th>
<th>Less than HS</th>
<th>Ever Smoke</th>
<th>Ever Drink</th>
<th>Lives Alone</th>
<th>Chronic Conditions</th>
<th>Linear Slope</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-19</td>
<td>-0.36* (0.18)</td>
<td>-0.28 (0.17)</td>
<td>-0.04 (0.14)</td>
<td>-0.01 (0.13)</td>
<td>-0.05 (0.13)</td>
<td>0.00 (0.12)</td>
<td>-0.00 (0.12)</td>
</tr>
<tr>
<td>20-49</td>
<td>-0.14 (0.12)</td>
<td>-0.06 (0.11)</td>
<td>-0.45*** (0.09)</td>
<td>-0.41*** (0.09)</td>
<td>0.02 (0.08)</td>
<td>0.01 (0.08)</td>
<td>-0.20* (0.08)</td>
</tr>
<tr>
<td>50+</td>
<td>-0.04 (0.19)</td>
<td>-0.09 (0.18)</td>
<td>-0.44*** (0.14)</td>
<td>-0.49*** (0.14)</td>
<td>-0.21 (0.12)</td>
<td>-0.15 (0.12)</td>
<td>-0.05 (0.12)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Age</th>
<th>Financial Strain</th>
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<th>Chronic Conditions</th>
<th>Linear Slope</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-19</td>
<td>0.15 (0.08)</td>
<td>0.18* (0.08)</td>
<td>0.19** (0.07)</td>
<td>0.20** (0.07)</td>
<td>-0.05 (0.07)</td>
<td>-0.06 (0.07)</td>
<td>0.03 (0.06)</td>
</tr>
<tr>
<td>20-49</td>
<td>0.04 (0.11)</td>
<td>0.03 (0.11)</td>
<td>0.15 (0.11)</td>
<td>0.17 (0.11)</td>
<td>-0.27** (0.10)</td>
<td>0.26* (0.10)</td>
<td>0.09 (0.10)</td>
</tr>
<tr>
<td>50+</td>
<td>-0.17 (0.12)</td>
<td>-0.12 (0.09)</td>
<td>-0.17*** (0.09)</td>
<td>0.07 (0.08)</td>
<td>-0.09</td>
<td>0.08</td>
<td>-0.07</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Chronic Conditions</th>
<th>Cardio</th>
<th>Stroke</th>
<th>Hypertension</th>
<th>Cancer</th>
<th>Diabetes</th>
<th>Arthritis</th>
</tr>
</thead>
<tbody>
<tr>
<td>Less than HS</td>
<td>-0.03 (0.15)</td>
<td>0.03 (0.14)</td>
<td>0.15 (0.11)</td>
<td>0.17 (0.11)</td>
<td>-0.27** (0.10)</td>
<td>0.26* (0.10)</td>
</tr>
<tr>
<td>Ever Smoke</td>
<td>-0.20 (0.11)</td>
<td>0.26* (0.13)</td>
<td>0.55** (0.18)</td>
<td>-0.01</td>
<td>-0.01</td>
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</tr>
<tr>
<td>Ever Drink</td>
<td>0.04</td>
<td>-0.20 (0.11)</td>
<td>0.20 (0.13)</td>
<td>0.00 (0.11)</td>
<td>-0.07</td>
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<table>
<thead>
<tr>
<th>Linear Slope</th>
<th>Age at Migration(Ref=US born)</th>
<th>Less than HS</th>
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<th>Ever Drink</th>
<th>Lives Alone</th>
<th>Chronic Conditions</th>
<th>Linear Slope</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-19</td>
<td>0.02 (0.01)</td>
<td>0.01 (0.01)</td>
<td>-0.00 (0.01)</td>
<td>-0.01 (0.01)</td>
<td>0.00 (0.01)</td>
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<td>0.00 (0.01)</td>
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<tr>
<td>20-49</td>
<td>0.01 (0.01)</td>
<td>0.00 (0.01)</td>
<td>0.03*** (0.01)</td>
<td>0.02*** (0.01)</td>
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<td>0.00 (0.01)</td>
<td>0.02*** (0.01)</td>
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<tr>
<td>50+</td>
<td>-0.01 (0.01)</td>
<td>-0.01 (0.01)</td>
<td>0.02 (0.01)</td>
<td>0.02** (0.01)</td>
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<tr>
<td>Less than HS</td>
<td>0.00 (0.01)</td>
<td>0.00 (0.01)</td>
<td>0.00 (0.01)</td>
<td>0.00 (0.01)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ever Smoke</td>
<td>0.01 (0.01)</td>
<td>0.01 (0.01)</td>
<td>0.01 (0.01)</td>
<td>0.01</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ever Drink</td>
<td>-0.01 (0.01)</td>
<td>0.01 (0.01)</td>
<td>-0.01 (0.01)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lives Alone</td>
<td>0.01 (0.01)</td>
<td>0.01 (0.01)</td>
<td>0.01 (0.01)</td>
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<td></td>
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<tbody>
<tr>
<td>Less than HS</td>
<td>0.03*** (0.01)</td>
<td>0.01* (0.00)</td>
<td>0.01* (0.00)</td>
<td>0.01* (0.00)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Notes: T-Tests were used to evaluate significant differences between age at migration groups. A indicates that those migrating at ages 20-49 or 50+ are significantly different from those who migrated at ages 0-19. Standard errors are in parentheses. *p<.05 **p<.01 ***p<.001
Figure 1: Predicted Probability of POMA by Age at Migration for Men
Figure 2: Predicted Probability of POMA by Age at Migration for Women
References


