# English Acquisition and Japanese Language Maintenance 

# Among Japanese-American Youth 

Sayaka Kawamura

Franklin Goza

Bowling Green State University and Center for Family and Demographic Research


#### Abstract

In spite of the growing number of Japanese speaking immigrants in the U.S. and the pronounced linguistic dissimilarity between Japanese and English, few studies have specifically examined English proficiency levels or Japanese language maintenance among this group. We use 2000 data from the $5 \%$ IPUMS file to examine English proficiency and language maintenance patterns at home among first-, second-, and third-generation Japanese immigrant youth in the United States. Prior to presenting multivariate results for our two dependent variables, descriptive statistics are presented that detail numerous significant differences within and across generations. Furthermore, the second-generation is divided into subgroups based on the birthplace of each parent. This study also contrasts the results of Japanese-Americans with those of Korean- Americans, speakers of another language very distant from English, in an attempt to ground the significance of our findings. Preliminary findings provide support for many of the hypotheses advanced.


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## Introduction

One important consequence of the relatively recent surge in U.S. immigration from non-traditional nations is that research now increasingly focuses on issues of cultural adaptation (e.g., Bean and Stevens, 2003; Farley and Alba, 2002; Portes and Rumbaut, 2006). Perhaps the most important form of immigrant cultural adaptation is English acquisition, since language usually serves as the key means of communication, not only within families, but also in social realms outside the home, such as school and work.

Since 1990, Asians have comprised more that 30 percent of all legal immigrants to the U.S. (DHS, 2006). Most of these new arrivals come from countries where English, if spoken at all, is spoken as a second or third language. One such Asian group that has experienced a significant increase in U.S. immigration since 1990 is the Japanese. During the 1990s Japanese immigration was 50 percent higher than in the 1980s and the current decade is on pace to experience even more growth (DHS, 2006). In spite of the increased number of Japanese immigrants to the U.S., and the fact that the linguistic distance (Romaine, 1995) between Japanese and English is very pronounced (Chiswick and Miller, 2004), few studies have specifically examined English proficiency levels or language usage patterns among this group. This oversight is unfortunate, especially given the significant linguistic differences between English and Japanese (Padilla et al., 1985; Chiswick and Miller, 2004).

This study contributes to prior research on immigrant cultural adaptation by focusing on English proficiency and language maintenance patterns at home by examining the experiences of
first-, second-, and third-generation Japanese immigrant youth in the United States. To do this we will analyze 2000 U.S. census data from the 5 \% Integrated Public Use Microdata Series (IPUMS) (Ruggles et al., 2004). Next, we will compare the results for Japanese-Americans with those of Korean- Americans, speakers of a language also very distant from English, in an attempt to ground the significance of our findings. Furthermore, because many U.S. immigrants currently come from Asian nations with languages that are also linguistically very different from English (Chiswick and Miller, 2004), the findings of this study may yield policy recommendations that assist those groups more rapidly acquire English speaking skills.

We proceed by first reviewing relevant literature on English language acquisition and immigrant native language maintenance. Next, we present sections detailing our research hypotheses, data, and methodology. Finally, study results, conclusions and policy recommendations are presented.

## Theoretical Overview

## Cultural Assimilation Theory

Because cultural adaptation is so important to immigrant success, numerous scholars have addressed this issue. Nonetheless, disagreement remains and various paradigms have emerged. Some (e.g., Bean and Stevens, 2003) suggest that studies with this focus can be separated into two distinct viewpoints. The first, classic cultural assimilation theory, argues that all immigrants gradually become incorporated into mainstream culture by absorbing the cultural values and norms of the new society (Gordon, 1964). This perspective suggests there is essentially but one path through which immigrants can be integrated into mainstream society. The other perspective, however, argues that the assimilation model does not fully explain the integration experiences of immigrant groups who differ from the majority population. For
example, Portes and Rumbaut (2006) argue that there is no normative assimilation path because American society has become extremely heterogeneous. In Immigrant America, they explain that distinct racial/ethnic groups may experience different challenges with regard to their cultural integration. They also argue that parents' race/ethnicity, socioeconomic status, educational background, and community resources affect the cultural integration process. Similarly, Kuo (1995) argues that different ethnic groups cope with cultural integration difficulties, such as racial discrimination, in different ways. These arguments underline the importance of considering diversity in cultural adaptation across and within different immigrant groups. In the context of the present study, this suggests that the processes and speed with which English language ability is acquired should vary by immigrant group and generational status.

## New Language (English) Acquisition: Process and factors

Among the many past studies examining the process of immigrant linguistic adaptation, May's (2000) research is worth reviewing. May introduces three stages that newcomers pass through when experiencing a language shift. During the first stage, immigrants receive social pressure to speak the majority language in formal settings, such as schools. Nonetheless, during this stage their native language continues to be the one they most often speak in their daily lives. In the second stage, both native and majority languages are spoken. Although bilingualism occurs, at this stage fewer immigrants now fluently speak the native language. May suggests (2000) that this decline in usage affects younger speakers at a higher rate than older ones. In the third stage, the majority language replaces immigrants' native languages as they become virtually monolingual in the language of their adopted land. However, even in this stage, a few speakers will continue to use the minority language. May also posits that the third stage could occur as early as the first generation, but normally not until the second or third generation.

Prior research generally concurs that there are several key determinants of English acquisition among immigrants. First, age at immigration is strongly and negatively associated with English proficiency at adulthood (e.g., Espenshade and Fu, 1997; Stevens, 1999). As such, the younger an immigrant is at time of arrival, the higher his/her English proficiency is expected to be at adulthood (e.g., Stevens, 1999). Second, length of U.S. residence is positively associated with English acquisition (e.g., Espenshade and Fu, 1997; Portes and Schauffler, 1994).

Conversely, Portes and Schauffler (1994) found that parental educational attainment, occupational status, and social class are not associated with English language fluency among Latin American immigrants in Florida. Likewise, Stevens (1999) found that neither the influence of family background nor the educational attainment of second-generation immigrants affected English acquisition levels. One possible explanation for this is that almost all second-generation immigrants are exposed to the host society language, regardless of their socioeconomic background. Another explanation is the weight of the social forces immigrants encounter. For instance, Portes and Rumbaut (2006) argue that parents who try to educate their offspring in their native language experience negative social pressures. Similarly, Bean and Stevens (2003) state "the perception that immigrants and their youth are, or should be, obligated to learn English is widespread" (p.168). Thus, new language acquisition not only stems from internal immigrant motivations but also from powerful, external social pressures.

## Linguistic Distance

The pace at which immigrants learn English is affected by their prior linguistic abilities, especially the way in which their first language is related to English (Romaine, 1995). Although prior research on immigrant language acquisition examined the influence of social and human capital on immigrant language adaptation (e.g., Portes and Schauffler, 1994; Stevens,
1999), only recently have studies of immigrant language adjustment begun to consider the importance of linguistic distance between the languages spoken in the countries of origin and destination (Chiswick and Miller, 2004). This concept is crucial because the greater the linguistic difference across languages, the more difficult it is to learn the new language (Chiswick and Miller, 2004; Romaine, 1995). The notion of "linguistic distance" takes into consideration that distinct languages may be similar or very different. Hart-Gonzalez and Lindemann (1993) used this idea to develop a scale for quantitatively measuring the difference, or distance, between languages. Using English as the base, they developed a measure of the difficulty English speakers have in mastering 43 other languages. This distance measure has since been by used by others to predict difficulty levels that may be experienced by various immigrant groups attempting to learn English (e.g., Chiswick et al., 2006; Chiswick et al., 2005; Chiswick and Miller, 1999).

If a foreign language is structurally similar to the original language, acquisition should be easier than in cases where the foreign language is very different (Chiswick and Miller, 2004; Romaine, 1995). Therefore, Chiswick and Miller (2004) argue that one reason for distinct language acquisition levels among different immigrant groups is due to the distance between the language spoken in the home country and that of the destination. They used this idea to modify Hart-Gonzalez and Lindemann's work (1993) into a scale that incorporates U.S. census codes for 43 languages. According to their instrument, linguistic distance can be summarized with a linear scale where scores range from 1.0 to 3.0. A score of 1.0 reflects the greatest amount of linguistic distance or difficulty in learning the language. Examples of extreme scores range from 1.0 for Japanese to 3.0 for Afrikaans. As such, the latter language would be the least difficult for English speakers to learn. Conversely, because the score for Japanese is 1.0, this suggests that English
acquisition will generally be more difficult for Japanese immigrants than for immigrants speaking languages with higher distance scores. Examples of intermediate distance scores are 2.5 for French and 1.5 for Mandarin.

Level of English Proficiency versus Language Use Patterns
Those examining English acquisition among U.S. immigrants have oftentimes used U.S. census data measuring English language proficiency (e.g., Portes and Schauffler, 1994; Stevens, 1999). In the IPUMS data, English proficiency categories are speaks only English, very well, well, not well, to not at all. Since this score is self-reported, it does not provide an objective measure of English language proficiency. It is also difficult for a respondent to differentiate between very well and well or well and not well without any specific guidelines, something that might occur with a standardized English proficiency test. Thus, although we will also utilize this oft-used measure of English proficiency, it may be insufficient for fully understanding immigrant English acquisition.

Regardless of immigrants' English proficiency levels, they may continue to speak their native language (Lieberson and Curry, 1971; Portes and Rumbaut 2006; Stevens 1992). Furthermore, some scholars suggest that language usage patterns serve as better indicators of cultural adaptation than English proficiency levels. In keeping with the commonly used definition of language usage (e.g. Steven, 1992), this study also will define it as the language spoken at home.

Stevens (1992) argues that studying immigrant language use patterns is more important than examining their English fluency levels. She also suggests that studying the language spoken by immigrants at home is important to understanding how they linguistically and culturally adapt to a new society. She emphasizes this point by stating that first-generation immigrants are not
necessarily more likely to use their native language at home, nor are second and higher generation immigrants are more likely to speak only English at home (Stevens 1992).

Similarly, Portes and Rumbaut (2006) show that second-generation children usually speak their native language at home, and at the same time, are proficient in English. This suggests that the second-generation Japanese-American youth to be examined below should speak both English and Japanese. However, if Romaine's (1995) hypothesis holds true, then English will completely replace Japanese among the higher generations, an outcome he expects because of the linguistic dissimilarity between the English and Japanese languages.

## Maintenance of Native language

As discussed above, immigrants continue to use their native languages even once they begin to use a new language. Native language maintenance has especially important implications for immigrant youth in terms of nurturing their ethnic identity and retaining the cultural values of their country of origin. Furthermore, language plays a significant role in the process of socialization within the family (Gecas, 1981; Shibata, 2000; Yaeo Siegel, 2004).

Past research has identified the importance of several key factors associated with native language maintenance among immigrants. First, the linguistic similarity between the new language and the native language is associated with language maintenance (Romaine, 1995). If Romaine's (1995) hypothesis is correct, then because the Japanese language is very different from English, we would expect to see significantly fewer Japanese speakers in higher generations, a result that should be significantly different among immigrant groups that speak languages linguistically closer to English.

Second, the nativity status of parents is an important determinant of their children's language acquisition. More specifically, if both parents share a language it is expected that
second- generation youth will then speak their parents' native language (Stevens, 1985). On the other hand, if the both parents do not share a native language then their children will be more likely to acquire their mother's language since mothers typically spend more time with their children. Stevens (1985), however, did not find any effect of parents' gender or nativity status on the language acquisition of the second-generation youth she studied. Meanwhile, Portes and Schauffler (1994) did find gender differences in language use patterns as second-generation female youth were more likely to retain the parental language than their male counterparts.

Past research also reveals that living in co-ethnic communities facilitates the maintenance of the parents' native language (Espenshade and Fu, 1997; Portes and Rumbaut, 2006; Romaine, 1995). For example, Portes and Schauffler (1994) find that parents pass on their native language to youth only in places where ethnic groups are highly concentrated, such as among the Cubans in Miami. Bean and Stevens (2003) also argue that "maintaining a language first learned in childhood requires individuals to have high levels of motivation as well as access to opportunities and resources to continue to use the language, some of which must be available in or provided by the surrounding community" (p.144). However, Portes and Schauffler (1994) argue that highly educated immigrant parents are not always eager to pass on their native language to their children. They suggest that regardless of where immigrants live English will replace the native language within two or three generations unless bilingualism is promoted (Portes and Schauffler, 1994). This is likely related to the aforementioned social pressure on U.S. immigrants to learn English. These studies suggest that it in order for second-generation youth to maintain their parents' native language they must be motivated to use it and provided with opportunities to use this language in social spheres beyond the household, such as school and the broader community.

## Present Study

As discussed above, relatively little research has examined English acquisition and Japanese language maintenance among first-, second-, and third-generation Japanese immigrant youth, in spite of the increasing number of Japanese speakers in the United States. Furthermore, prior research suggests that it is important for researchers to consider the ethnic specific process of cultural adaptation since each ethnic group may have a different experience (e.g., Kuo, 1995; Portes and Rumbaut, 2006). As earlier mentioned, Japanese is linguistically very distant from English (Chiswick and Miller, 2004), suggesting that Japanese immigrants will have more difficulties learning English than immigrants from many other linguistic backgrounds. In addition, even within a single ethnic group, it is possible that each generation will experience diverse patterns of language acquisition (e.g., Portes and Rumbaut, 2006). Hence this study will compare levels of English proficiency and language spoken at home among first-, second-, and third-generation Japanese-American youth.

We limit our focus to those between the ages of 5 and 18 . We begin at age 5 because data on language spoken is not recorded for those younger than 5 . We stop at age 18 because our desire is to monitor this important aspect of cultural adaptation among those who are most directly affected by the U.S. educational system. That is, immigrant youth tend to be exposed to, if not immersed in, the English language in a manner that directly promotes their English acquisition. The results for this generation can then serve as a baseline against which to monitor the transitions occurring among the successive generations. Furthermore, English acquisition is a key part of the cultural adaptation of immigrant youth since it influences subsequent academic and occupational success in the U.S. (e.g., Stevens, 1985; Portes and Rumbaut, 2006). At the same time, native language maintenance is essential for maintaining ethnic identity and learning
cultural values (e.g., Gecas, 1981; Stevens, 1985; Shibata, 2000; Yaeo Siegel, 2004). As such, this study will contribute to prior research on cultural adaptation by examining English acquisition and Japanese language maintenance among Japanese-American youth in the United States. Furthermore, in order to ground our findings, the results found for Japanese-Americans will be contrasted with those of Korean-Americans, another group speaking a language that is equidistant from English, as both of these languages have the highest possible distance score, a score of 3.0 (Chiswick and Miller, 2004).

## Hypotheses

Below we present several key hypotheses that will be evaluated in an attempt to better understand the processes of English acquisition and Japanese language maintenance among Japanese-American youth living in the United States.
I. Earlier studies determined that age at immigration and length of U.S. residence are associated with English acquisition, regardless of family background characteristics, such as parents' education and occupational status (Portes and Schauffler, 1994; Espenshade and Fu, 1997; Stevens, 1999). Accordingly, we hypothesize that second- and third-generation youth have higher levels of English proficiency than first-generation youth. Among first-generation youth, we hypothesize that duration of U.S. residence will be positively related to English proficiency levels, regardless of family background.
II. Because linguistic dissimilarity between native and new languages makes it difficult to maintain the native language (Romaine, 1995), we expect that second- and third-generation youth will be less likely to speak Japanese at home than first-generation youth and that they will also be more likely to speak only English at home.
III. In keeping with a possibility suggested by Portes and Schauffler (1994), we
hypothesize that Japanese- American female youth will be more likely to speak Japanese at home than males.
IV. As an extension of Stevens' research (1985), we hypothesize that second-generation youth will be more likely to speak Japanese at home if both parents are from Japan than when only one parent is. Furthermore, in families where only one parent is from Japan we expect that those with a Japanese mother will be more likely to speak Japanese at home, than will occur when only the father is from Japan.

## Data and Methods

This study uses IPUMS data from the $5 \%$ sample of the 2000 U.S. Census of Population (Ruggles et al., 2004) to analyze English proficiency and language use patterns among first-, second-, and third-generation Japanese-American youth. The IPUMS data includes the two dependent variables analyzed in this study, English proficiency and language spoken at home. In addition, the IPUMS family-linkage feature enables us to match and combine parental measures (e.g., father's education and place of birth) to respondent records enabling us to monitor the effects of various theoretically important independent measures.

This project's focal group consists of Japanese-American youth who were between the ages of 5 and 18 in 2000. In this study, first-generation youth refers to those born in Japan, and for whom both parents were also born in Japan. The second-generation group consists of those born in the U.S. with at least one parent born in Japan. The second-generation is then subdivided into three categories based on their parents' birthplaces. These groups are as follows: (1) both parents born in Japan, (2) father born in the U.S. and mother born in Japan, and (3) father born in Japan and mother born in the U.S. The third-generation consists of those who identified their primary ancestry as Japanese, but also indicated that they and both parents were born in the U.S.

## Descriptive Results

## Dependent variables

The dependent variables used in this study are English proficiency and language spoken at home. The first, English proficiency, is coded such that 1 represents does not speak English at all, 2 not well, 3 well, 4 very well, and 5 speaks only English. As expected, English proficiency varied across the three generations examined. The descriptive statistics presented in Table 1(a) reveal that average English proficiency among first-generation youth was 2.95, a figure significantly lower than those of second- and third-generation youth ( $\mathrm{p}<.001$ ). Among second-generation youth, English proficiency varied by parents' nativity. When both parents were born in Japan the mean score was 3.84, significantly lower than the means of youth with one U.S.-born parent, as well as third-generation Japanese-Americans. Also of note is that second-generation youth whose mothers were born in Japan had significantly lower ( $\mathrm{p}<.001$ ) English proficiency scores than those whose mothers were born in the U.S. Moreover, among third-generation youth, the mean English proficiency score was 4.95 , indicating that nearly this entire cohort was fluent in the English language. However, this score was not significantly higher than that of second-generation youth with a Japan-born father (4.92).

When examining parallel results for three generations of Korean-Americans, similar English proficiency patterns emerged (see Table 1b). However, first-generation KoreanAmerican youth had a significantly higher $(\mathrm{p}<0.001)$ mean proficiency score (3.33) than that of their Japanese-American counterparts (2.95).

The second dependent variable, language spoken at home, is coded as a dichotomous measure so that 0 represents English and 1 represents Japanese. Among U.S.-born Japanese-American youth, fewer than 2.1 percent spoke languages other than English or

Japanese at home. These included Spanish, German, French, Portuguese, Chinese, Korean, Vietnamese, Indonesian, or Filipino. Meanwhile, among youth born in Japan, less than 1 percent spoke a language other than English or Japanese at home. For clarity of focus, these cases are excluded from our analyses.

As hypothesized, there were significant differences in Japanese usage at home across the three generations (see Table 1a). Among the first-generation cohort, almost all youth spoke Japanese at home ( $97.0 \%$ ), and among his cohort there were no significant gender differences.

Among the second generation cohort, however, significant differences did emerge. The subgroup with two parents born in Japan was the one most likely to speak Japanese at home (79.8 \%). Consistent with Stevens (1985), the proportion of second-generation youth speaking Japanese at home declined significantly when one parent was born in the United States $(\mathrm{p}<.001)$. However, while Stevens (1985) found the effect of a foreign-born parent's gender to be insignificant, we did not. More specifically, those with mothers born in Japan spoke significantly more ( $\mathrm{p}<.001$ ) Japanese at home than did those with fathers born in Japan.

Although there was not a gender gap in Japanese usage among first-generation youth, gender differences were significant among several second-generation subsets (see Table 2a). For instance, when both parents were born in Japan, significantly more ( $\mathrm{p}<.001$ ) females spoke Japanese at home ( 82.7 \%) than males ( $75.5 \%$ ). The proportion of second-generation youth speaking Japanese at home declined to 13.0 percent for females with only a Japan-born mother, and declined even further among their male counterparts (10.9 \%). These gender differences were also statistically significant ( $\mathrm{p}<.001$ ). In case of second-generation youth with only a Japan-born father, males were a little more likely to speak Japanese ( $2.8 \%$ ) at home than females ( $2.6 \%$ ), however, these differences were insignificant.

Consistent with previous research (Portes and Rumbaut, 2006; Portes and Schauffler, 1994; Romaine, 1995), and as earlier hypothesized, there was a significant decline in Japanese language usage among the third-generation, as relatively few members of this cohort spoke Japanese at home ( $2.8 \%$ ). However, as noted in earlier generations, third-generation females continued to be significantly more likely than males to speak Japanese at home $(\mathrm{p}<.001)$.

First-generation results reveal that $97 \%$ of each ethnicity spoke their respective Asian language at home. However, among the second- and third generations more Korean-American youth spoke their parents' language at home (see Table 1a and 1b). Nonetheless, similar usage patterns emerged for both groups as the proportion of second-generation youth who spoke Japanese or Korean at home declined dramatically when one parent was born in the United States. Furthermore, and just like the Japanese-Americans, those whose mothers were born in Korea spoke significantly ( $\mathrm{p}<.001$ ) more Korean at home ( $18.0 \%$ ) than those whose fathers were Korea-born (9.6 \%).

When examining gender differences in language usage at home, we generally found similar patterns for both ethnicities. Although there were gender differences among first-generation Korean-American youth, these were insignificant (see Table and 2b). However, statistically significant gender gaps emerged among all three second-generation KoreanAmerican sub-groups. For instance, when both parents were born in Korea, significantly more (p $<.001$ ) females $(89.5 \%)$ spoke Korean at home than males $(86.0 \%)$. However, among females with only a Korea-born mother the proportion who spoke Korean at home declined to 20.7 percent, while among their male counterparts it fell to $14.1 \%$. These gender differences were statistically significant ( $\mathrm{p}<.001$ ). Similar to Japanese-Americans, those males with only a Korea-born father were slightly more likely to speak Korean (10.7 \%) at home than females
(8.1 \%). However, this difference was significant ( $\mathrm{p}<.01$ ).

## Independent variables

The independent variables used to predict English proficiency are years in U.S., gender, age, father and mother's English proficiency, and father and mothers' educational attainment. The variable years in U.S. is only relevant for first-generation youth and ranged from 0 to 18 . Years in U.S. is calculated by subtracting years since immigration from age in 2000. Mean number of years in the U.S. were four for first-generation youth. The mean for first generation Korean-American youth was 5.5 years. Although longer than that of their Japanese-American counterparts, this difference was insignificant.

## Individual characteristics

Gender is equally distributed in the sample, except in the case of second-generation youth for whom both parents were born in Japan. In that subgroup, there are slightly more males (55\%) than females. Gender is also equally balanced among the Korean-American youth sample.

The mean age of first-generation Japanese youth was 10 years old, making this group slightly younger $(\mathrm{p}<.05)$ than the second- and third-generation youth. Age differences among second-generation youth, regardless of parental nativity status, and third-generation youth were not significant. The mean age of the Korean-American first-generation was 12, making them significantly $(p=0.001)$ older than their Japanese counterparts.

## Parental characteristics

Measures for father and mother's English proficiency are coded as they are for the respondents. Among first-generation Japanese youth, mean English proficiency scores for fathers and mothers were 3.0 and 2.5 , respectively. Among second-generation youth for whom both parents were born in Japan, fathers' and mothers' mean levels of English proficiency were 3.4
and 3.1, respectively. In those cases where the father was born in the U.S. and the mother in Japan, the mothers' mean English proficiency score was 4.6, or near fluency. For those with a mother born in the U.S. and a father born in Japan, the fathers' mean English proficiency score was 4.5 . On average, these findings suggest that the second-generation generally had two parents who were able to speak English very fluently, regardless of where they were born.

Among first-generation Korean youth, mean English proficiency scores for fathers and mothers were 2.7 and 2.4 , respectively. Although lower than their Japanese counterparts, these differences are insignificant. Among second-generation youth for whom both parents were born in Korea, fathers' and mothers' mean levels of English proficiency were 3.1 and 2.9, respectively. These scores are significantly $(\mathrm{p} .=0.001)$ lower than those of their Japanese counterparts. In those cases where the father was born in the U.S. and the mother Korea-born, the mothers' mean English proficiency score was 4.0, again significantly (p. = 0.001) lower than Japan-born mothers. For those with a mother born in the U.S. and a father born in Korea, the fathers' mean English proficiency score was 4.6.

## Analytic Strategy

This section will proceed by presenting the results from OLS regression analyses designed to predict those factors that best determine English proficiency among first- and second -generation Japanese-American youth. Because, as documented above, almost all third-generation youth are fluent in English, we will not use regression analyses to examine that group. Initially, we planned to conduct regression analyses designed to predict Japanese language usage at home among second- and third-generation youth, since virtually all first-generation youth speak Japanese in the home. However, the item measuring English proficiency overlaps
the measure native language usage. More specifically, the item has responses "does not speak English at all" and "speaks only English." As a result, the correlation between English proficiency and Japanese usage at home ( $0=$ speak only English, $1=$ speak Japanese $)$ is very high. Thus, we were not able to undertake regression analyses to predict Japanese usage at home. As such, this variable is used only as a descriptor for documenting gender and intergenerational differences in Japanese usage at home.

As discussed above, we will conduct ordinary least squares (OLS) regression for each generation, and for each second generation sub-group. We will then repeat these analyses for first- and second-generation Korean-Americans. For the first generation, years in U.S. will be entered into the Model 1. Individual characteristics, gender and age, are then added into Model 2. Four parental characteristics, father and mother's English proficiency and educational attainment, are added into Model 3. For the second-generation, individual characteristics are entered into Model 1 and parental characteristics are added into Model 2. In those cases where one parent was born in the U.S., only the foriegn-born parent's English proficiency is entered into the model.

## Analytical Results

Ordinary least squares (OLS) regression is used in the analyses presented below. In order to test for multicollinearity, we first estimated the variance inflation factor (VIF) for all independent variables. The VIF result shows that the tolerance is in the range of 0.1 to 10 , indicating there are no multicollinearity issues (DeMaris, 2004).

Regression results for Japanese-American youth are shown in Table 3a. Model 1 in Table 3a shows, as hypothesized, that years in U.S. is significantly ( $\mathrm{p}<.0001$ ) and positively associated with the English proficiency of first-generation Japanese-American youth. In Model 2,
years in U.S. is still positively and significantly (p $<.0001$ ) associated with English proficiency, even after controlling for gender and age. Male gender was significantly ( $\mathrm{p}<.01$ ) and negatively associated with English proficiency. Age is also significantly ( $\mathrm{p}<.01$ ) and positively associated with English proficiency when controlling for U.S. tenure and gender.

Model 3 shows that years in the U.S. and gender retained their prior significance levels, while age increased in significance. In this the full model, the English proficiency of both parents was significantly ( $\mathrm{p}<.0001$ ) and positively associated with youth English proficiency. However, like Stevens (1999) and Portes and Schauffler (1994), we also found the educational attainment of both parents to be statistically insignificant predictors. The adjusted R-square in the final model was 0.46 , indicating that about $46 \%$ of variance was explained by those factors used in this analysis.

Then, we present results for second-generation youth. Here we contrast these results with those of the first-generation in terms of individual and parental characteristics, since duration in the United States is only relevant to the first-generation. We first present results for second-generation members for whom both parents were born in Japan. Results in Table 3a show that age was significantly $(\mathrm{p}<.0001)$ and positively associated with youth English proficiency among the second-generation; a result just witnessed among the first-generation. In this model, gender was not significant, a finding that is inconsistent with the first-generation results. When parental characteristics were added to Model 2, age retained its prior significance ( $\mathrm{p}<.0001$ ) and consistent with first-generation results, parental English proficiency was again significant and positively associated with English proficiency, while parental education was insignificant. The adjusted R -square in the final model was 0.25 , indicating that about $25 \%$ of variance was explained by those factors used in the analysis.

We next move to results for those second-generation members with a U.S.-born father and a mother born in Japan. Table 3a shows that none of the individual characteristics were significant in Model 1, a finding consistent with first-generation youth. When parental characteristics were added in Model 2, two reached significance. Mother's English proficiency was significant ( $p<.0001$ ) and positively associated with youth' English proficiency. On the other hand, mother's educational attainment was significant ( $\mathrm{p}<.0001$ ) and negatively associated with youth English proficiency. The adjusted R-square in the final model was 0.21 , indicating that about $21 \%$ of variance was explained by those factors used in this analysis.

Lastly, we present results for those second-generation individuals with a father born in Japan and a U.S.-born mother. Among this cohort, no individual characteristics were significant, a result earlier witnessed among the second-generation sub-group comprised of youth with a U.S.-born father and a Japan-born mother. In Model 2 father's English proficiency was significant ( $\mathrm{p}<.0001$ ) and positively associated with youth' English proficiency. Parental educational attainment was not significant. The adjusted R -square for the final model was 0.14 , indicating that about $14 \%$ of variance was explained by those factors used in the analysis.

In order to ground the significance of our findings we now contrast Japanese-American results with those of Korean-Americans, speakers of another language that is very distant from English (Romaine, 1995). Results for Korean-Americans are shown in Table 3b. For both first-generation groups, duration of stay in the U.S., age, and father and mother's English proficiency were significant predictors of youth English proficiency. However among the Korean-American first generation, gender was not a significant predictor as it was with the Japanese-Americans. Although parental educational attainment was insignificant among Japanese-Americans, for Korean-Americans mother's educational attainment was significant (p
$=.01)$ and positively associated with youth' English proficiency. The adjusted R-square in the final model for this Korean-American subgroup was only 0.29 , whereas among similar Japanese-Americans it was nearly twice as high (0.47). Results for the Korean-American second-generation with two foreign-born parents were almost identical to those of the corresponding Japanese-American sub-group. The lone exception is that gender was not a significant predictor for the Korean-Americans. Nonetheless, the adjusted R-square in the final model was much higher for Japanese-Americans (0.25) than Korean-Americans (0.07). Among second-generation youth with a U.S.-born father and a foreign-born mother, we found several ethnic differences. For Korean-Americans, male gender is significant ( $\mathrm{p}<.01$ ) and positively associated with English proficiency in the final model, while it was insignificant among Japanese-Americans. For Japanese-Americans, mother's educational attainment was significant ( $\mathrm{p}<.0001$ ) and negatively associated with English proficiency. We also noted a significant (p $=.1)$ and negative association between mother's educational attainment and youth' English proficiency among Korean-Americans. Again, the adjusted R-square in the final model was much higher for Japanese-Americans (0.21) than Korean-Americans (0.06). Finally, all predictors operated in the same way among second-generation youth with a foreign-born father and a U.S.-born mother, regardless of ethnicity. More specifically, only mother's English proficiency was significant for each ethnicity. For this sub-group, however, the adjusted R -square for the final model was higher among Korean-Americans (0.34) than Japanese-Americans (0.14).

## Conclusions and discussion

This study investigated both English acquisition and native language maintenance
across three generations of Japanese-American youth. We found significant variations in Japanese usage among second-generation youth depending on parents' nativity and gender status. Results indicate that those whose mother was born in Japan are more likely to speak Japanese at home than are those with a father born in Japan. This is probably because mothers typically spend more time with children. We found similar patterns in Japanese and Korean usage at home, but we also found that larger proportions of Korean-American youth spoke Korean across generations than did Japanese-Americans. Consistent with prior studies, this research found significant gender differences in language usage at home. A larger proportion of female youth spoke these Asian languages than did their male counterparts.

Regression results, consistent with prior research, found that the longer foreign-born immigrant youth are in the United States, the higher the expected level of their English proficiency. In addition, this research shows a significant association between parents' English proficiency and youth English proficiency. Our regression models were better able to explain the English proficiency of Japanese-American youth with the exception of the second-generation subset with a foreign-born father and a U.S.-born mother.

This study has various limitations. We could not measure whether or not immigrant youth has opportunities to speak Japanese or Korean outside the house. For example, Shibata (2000) found that Japanese Saturday Schools have a powerful influence on immigrant youth’ Japanese language maintenance. In addition, this study was not able to monitor any additional environment effects that might affect language acquisition other than formal education. For example, do the number of English only speaking friends relate to English proficiency levels? If yes, how so? Nevertheless, this research contributes to the literature on English acquisition and Japanese maintenance as well as gender differences in native language usage at home.

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Table 1a: Weighted Descriptive Statistics, By Generation, of Dependent and Independent Variables; Japanese- Americans

| Variable Names | First-generation |  |  | Second-generation |  |  |  |  |  |  |  |  | Third-generation Japanese ancestry |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Japan -born Parents |  |  | Japan-born Parents |  |  | U. S. -born Father Japan-born Mother |  |  | Japan-born Father U. S. -born Mother |  |  |  |  |  |
|  | Mean or \% | St. Deviation | Range | Mean or \% | St. Deviation | Range | Mean or \% | St. Deviation | Range | Mean or \% | St. Deviation | Range | Mean or \% | St. Deviation | Range |
| Dependent variables |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| English proficiency *** | $2.95^{\text {a }}$ | 0.99 | (1-5) | $3.84{ }^{\text {b }}$ | 0.86 | (1-5) | $4.81{ }^{\text {d }}$ | 0.52 | (1-5) | $4.92{ }^{\text {d }}$ | 0.38 | (1-5) | $4.95^{\text {d }}$ | 0.29 | (1-5) |
| Japanese spoken at home ${ }^{* * *}$ | $96.69^{\text {a }}$ | 0.18 | ( $0-100$ ) | $79.82^{\text {b }}$ | 0.40 | (0-100) | $11.82^{\text {c }}$ | 0.32 | (0-100) | $2.61{ }^{\text {d }}$ | 0.16 | (0-100) | $2.80{ }^{\text {e }}$ | 0.17 | (0-100) |
| Independent variables |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Gender ( $1=$ male $) \%{ }^{* * *}$ | 49.93 | 0.50 | ( $0-100$ ) | 54.75 | 0.50 | (0-100) | 51.9 | 0.50 | (0-100) | 50.05 | 0.50 | (0-100) | 50.37 | 0.50 | (0-100) |
| Years in U. S. | 3.87 | 3.3 | (0-18) | n.a |  |  | n.a |  |  | n.a |  |  | n.a |  |  |
| Age * | $10.41^{\text {a }}$ | 3.76 | (5-18) | $10.89^{\text {b }}$ | 4.02 | (5-18) | $11.04{ }^{\text {b }}$ | 3.89 | (5-18) | $10.92^{\text {b }}$ | 3.87 | (5-18) | $11.24^{\text {b }}$ | 3.89 | (5-18) |
| Father's English proficiency*** | $3.02^{\text {a }}$ | 0.79 | (1-5) | $3.45^{\text {b }}$ | 0.84 | (1-5) | n.a |  |  | $4.84^{\text {c }}$ | 0.49 | (1-5) | n.a |  |  |
| Mother's English proficiency*** | $2.48{ }^{\text {a }}$ | 0.78 | (1-5) | $3.12{ }^{\text {b }}$ | 0.91 | (1-5) | $4.60{ }^{\text {c }}$ | 0.72 | (1-5) | n.a |  |  | n.a |  |  |
| Father's education ${ }^{* * *}$ | $17.49^{\text {a }}$ | 2.54 | (0-18.5) | $16.01{ }^{\text {b }}$ | 3.01 | (0-18.5) | $15.52^{\text {b }}$ | 2.85 | (0-18.5) | $15.41^{\text {b }}$ | 2.85 | (0-18.5) | $15.87^{\text {b }}$ | 2.76 | (0-18.5) |
| Mother's education *** | $15.51^{\text {a }}$ | 2.75 | (0-18.5) | $15.03^{\text {a }}$ | 2.81 | (0-18.5) | $15.12^{\text {a }}$ | 2.71 | (0-18.5) | $14.82^{\text {a }}$ | 2.72 | (0-18.5) | $15.64^{\text {a }}$ | 2.73 | (0-18.5) |
| $N$ | $N=15592$ |  |  | $N=11465$ |  |  | $N=50135$ |  |  | $N=35056$ |  |  | $N=64600$ |  |  |

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Table 1b: Weighted Descriptive Statistics, By Generation, of Dependent and Independent Variables; Korean Americans

Source: 2000 The Integrated Public Use Microdata Series (IPUMS)
Note: statistical difference ${ }^{*} p<.05,{ }^{* * *} p<.01, * * * p<.001$. The same letter indicates there is no significant difference. For Gender, proportional difference within generation
$\stackrel{\Im}{N}$
Table 2a: Gender Differences, By Generation in Language Spoken at Home; Japanese- Americains

| Language | First-generationJapan -born Parents( $\mathrm{N}=15592$ ) |  | Second-generation |  |  |  |  |  |  |  | Third-generation <br> Japanese ancestry $(\mathrm{N}=64600)$ |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Japan-born Parents$(\mathrm{N}=11465)$ |  |  | U. S. -born Father Japan-born Mother$(\mathrm{N}=50135)$ |  |  | Japan-born Father U. S. -born Mother ( $\mathrm{N}=35056$ ) |  |  |  |  |
|  | male | female | male | female |  | male | female |  | male | female | male | female |  |
| English only | 3.45 | 2.92 | 25.46 | 17.31 | *** | 89.11 | 87.05 | *** | 97.22 | 97.39 | 97.21 | 96.59 | *** |
| Japanese | 96.55 | 97.08 | 74.54 | 82.69 | *** | 10.89 | 12.95 | *** | 2.78 | 2.61 | 2.79 | 3.41 | *** |
| Total \% | 100.00 | 100.00 | 100.00 | 100.00 |  | 100.00 | 100.00 |  | 100.00 | 100.00 | 100.00 | 100.00 |  |

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Table 2b: Gender Differences, By Generation in Language Spoken at Home; Korean-Americans

|  | First-generation |  | Second-generation |  |  |  |  |  |  |  | Third-generation |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Korea -born Parents$(\mathrm{N}=40938)$ |  | Korea-born Parents$(\mathrm{N}=73885)$ |  |  | U. S. -born Father Korea-born Mother$(\mathrm{N}=28982)$ |  |  | Korea-born Father U. S. -born Mother $(\mathrm{N}=4294)$ |  |  | Korean ancestry$(\mathrm{N}=6015)$ |  |  |
| Language | male | female | male | female |  | male | female |  | male | female |  | male | female |  |
| English only | 3.35 | 3.33 | 14.04 | 10.52 | *** | 85.90 | 79.26 | *** | 89.93 | 91.90 | ** | 96.49 | 97.46 | * |
| Korean | 96.65 | 96.67 | 85.96 | 89.48 | *** | 14.10 | 20.74 | *** | 10.67 | 8.10 | ** | 3.51 | 2.54 | * |
| Total \% | 100.00 | 100.00 | 100.00 | 100.00 |  | 100.00 | 100.00 |  | 100.00 | 100.00 |  | 100.00 | 100.00 |  |

Source: 2000 The Integrated Public Use Microdata Series (IPUMS)
Note: statistical difference ${ }^{*} p<.05,{ }^{* *} p<.01,{ }^{* * *} p<.001$.

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Table 3a: OLS Regression Models of Predictors on English Proficiency; Japanese- Americans

| $\overline{\text { Variable Names }}$ | First-generation |  |  |  |  |  |  |  |  |  | Sceond-generation |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Model 1 |  |  | Japan -borm Parents |  |  |  |  |  |  | Japan-born Parents |  |  |  |  |  | U. S. -born Father Japan-born Mother |  |  |  |  |  | Japan-born Father U. S. -born Mother |  |  |  |  |  |
|  |  |  |  |  | Model 2 |  |  | Model 3 |  |  |  | Model 1 |  |  | Model 2 |  |  | Model 1 |  |  | Model 2 |  |  | Model 1 |  |  | Model 2 |  |
|  | $b$ | B | SE | $b$ | B | SE | $b$ | ${ }^{B}$ | SE | Variable Names | $b$ | B | SE | $b$ | ${ }^{B}$ | SE | $b$ | B | SE | $b$ | B | SE | $b$ | B | SE | $b$ | ${ }^{B}$ | SE |
| Individual characterisitics |  |  |  |  |  |  |  |  |  | Individual characteristics |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Years in U. S . | 0.15 | 0.51 *** | ${ }^{0.01}$ | 0.14 | 0.47 *** | ${ }^{0.01}$ | 0.12 | 0.39 *** | ${ }^{0.01}$ |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Gender ( $1=$ male) |  |  |  | -0.16 | -0.08 * | 0.06 | -0.16 | -0.08 ** | 0.05 | Gender ( $1=$ male $)$ | ${ }^{0.03}$ | 0.02 | 0.11 | 0.001 | 0.001 | 0.07 | 0.03 | 0.03 | ${ }^{0.02}$ | 0.04 | 0.03 | 0.02 | -0.01 | $-0.01$ | 0.02 | -0.02 | -0.03 | 0.02 |
| Age |  |  |  | 0.03 | 0.11 ** | 0.01 | 0.03 | 0.11 *** | 0.01 | Agc | 0.05 | 0.24 *** | ${ }_{0} 0.01$ | 0.05 | 0.23 *** | 0.01 | 0.003 | 0.02 | 0.003 | 0.002 | 0.02 | 0.002 | 0.002 | 0.02 | 0.002 | 0.004 | 0.04 + | 0.002 |
| Parental characterisitics |  |  |  |  |  |  |  |  |  | Parental characteristics |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Fathers's English proficiency |  |  |  |  |  |  |  |  |  | Father's English proficiency |  |  |  | 0.26 | 0.25 *** | 0.05 |  |  |  |  | n.a. |  |  |  |  | 0.33 | 0.38 *** | 0.02 |
| Mother's English proficiency |  |  |  |  |  |  |  |  |  | Mothers Eng lish proficiency |  |  |  | 0.24 | 0.25 *** | 0.45 |  |  |  | 0.33 | 0.45 *** | 0.01 |  |  |  |  | n.a. |  |
| Father's education |  |  |  |  |  |  | $-0.02$ | $-0.04$ | ${ }_{0} 0.01$ | Father's education |  |  |  | -0.01 | ${ }_{-0.06 \dagger}^{+}$ | 0.01 |  |  |  | -0.004 | $-0.02$ | 0.004 |  |  |  | -0.001 | $-0.01$ | 0.003 |
| Mother's education |  |  |  |  |  |  | -0.001 | -0.002 | 0.01 | Mother's education |  |  |  | 0.01 | $-0.05$ | 0.01 |  |  |  | -0.02 | -0.08 *** | 0.004 |  |  |  | 0.0001 | 0.001 | 0.004 |
| Interept | 2.37 | 0 *** | 0.05 | 2.21 | 0 *** | 0.10 | 0.75 | 0 ** | 0.24 | Interept | 3.26 | 0 *** | 0.11 | 2.14 | 0 *** | 0.26 | 4.76 | 0 *** | 0.03 | 3.52 | 0 *** | 0.095 | 4.90 | 0 *** | 0.029 | 3.31 | 0 *** | 0.12 |
| Adjusted R-square |  | 0.2665 |  |  | 0.2714 |  |  | 0.4628 |  | R-square |  | ${ }^{0.0531}$ |  |  | 0.2482 |  |  | 0.0006 |  |  | 0.2067 |  |  | ${ }^{-0.0005}$ |  |  | 0.1433 |  |

Table 3b: OLS Regression Models of Predictors on English Proficiency; Korean-Americans

|  | First-generation |  |  |  |  |  |  |  |  |  | Second-generation |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Model 1 |  |  | Korea-borm Parents |  |  |  |  |  |  | Korea-borm Parents |  |  |  |  |  | U. S. - born Father Korea-born Mother |  |  |  |  |  | Korea-born Father U. S. -born Mother |  |  |  |  |  |
|  |  |  |  |  | Model 2 |  |  | Model 3 |  |  |  | Model 1 |  |  | Model 2 |  |  | Model 1 |  |  | Model 2 |  |  | Model 1 |  |  | Model 2 |  |
| Varriable Names | $b$ | B | SE | $b$ | B | SE | $b$ | B | SE | Variable Names | $b$ | B | SE | $b$ | B | SE | $b$ | B | SE | $b$ | B | SE | $b$ | B | SE | $b$ | B | SE |
| Individual characteristics |  |  |  |  |  |  |  |  |  | Individual characteristics |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Years in U. S. | 0.10 | 0.48 *** | 0.004 | 0.10 | 0.48 *** | 0.004 | 0.09 | 0.43 *** | 0.004 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Gender ( $1=$ male ) |  |  |  | -0.03 | $-0.02$ | 0.35 | -0.02 | $-0.01$ | 0.03 | Gender ( $1=$ male $)$ | 0.02 | 0.01 | 0.02 | 0.01 | 0.01 | 0.02 | 0.08 | 0.06 | 0.03 | 0.09 | 0.07 ** | 0.03 | -0.03 | -0.04 | 0.05 | 0.001 | 0.01 | 0.04 |
| Age |  |  |  | 0.001 | 0.01 | ${ }^{0.005}$ | 0.01 | 0.07 ** | 0.005 | Agc | 0.04 | 0.19 *** | 0.003 | 0.03 | 0.18 *** | 0.003 | 0.001 | 0.009 | ${ }^{0.004}$ | 0.005 | ${ }^{0.03}$ | ${ }^{0.004}$ | $-0.002$ | $-0.02$ | 0.01 | ${ }^{0.001}$ | 0.02 | 0.004 |
| Parental characterisitics |  |  |  |  |  |  |  |  |  | Parental characteristics |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Father's English proficiency |  |  |  |  |  |  | 0.12 | 0.12 *** | 0.02 | Father's English proficiency |  |  |  | 0.09 | 0.10 *** | 0.02 |  |  |  |  | n.a. |  |  |  |  | 0.32 | 0.6 *** | 0.031 |
| Mother's English proficiency |  |  |  |  |  |  | 0.17 | 0.16 *** | 0.02 | Mother's Eng lish proficiency |  |  |  | 0.09 | 0.1 *** | 0.02 |  |  |  | 0.18 | 0.25 *** | 0.02 |  |  |  |  | n.a. |  |
| Father's education |  |  |  |  |  |  | -0.004 | -0.02 | 0.01 | Father's education |  |  |  | 0.01 | 0.02 | 0.004 |  |  |  | 0.01 | 0.03 | 0.01 |  |  |  | 0.01 | 0.05 | 0.01 |
| Mother's education |  |  |  |  |  |  | 0.02 | -0.06 ** | 0.01 | Mother's education |  |  |  | -0.001 | $-0.02$ | 0.005 |  |  |  | -0.01 | $-0.05 \dagger$ | 0.01 |  |  |  | -0.004 | $-0.03$ | 0.01 |
| Intercept | 2.82 | 0 *** | 0.028 | 2.82 | $0^{* * *}$ | 0.06 | 1.84 | 0 *** | 0.12 | Intercept | 3.46 | 0 *** | 0.04 | 2.92 | 0 *** | 0.08 | 4.67 | 0 *** | 0.06 | 3.94 | 0 *** | 0.14 | 4.91 | 0 *** | 0.07 | 3.37 | 0 *** | 0.22 |
| Adjusted R -square |  | 0.2295 |  |  | 0.2290 |  |  | 0.2897 |  | R-square |  | 0.0351 |  |  | ${ }_{0} 0.0662$ |  |  | 0.0025 |  |  | 0.0573 |  |  | -0.008 |  |  | 0.3401 |  |

