IMMIGRANT EDUCATIONAL ACHIEVEMENT: THE ROLES OF BILINGUALISM EXPECTATIONS AND GENERATION

by

Eman Basil Al-Taher

A thesis submitted to the faculty of
The University of North Carolina at Charlotte
in partial fulfillment of the requirements
for the degree of Master of Arts in
Sociology

Charlotte

2017

Approved by:

_____
Dr. Elizabeth Stearns

_____
Dr. Roslyn Arlin Mickelson

_____
Dr. Martha Cecilia Bottia

ABSTRACT

EMAN BASIL AL-TAHER. Immigrant Educational Achievement: The Roles of Bilingualism Expectations and Generation

.

(Under the direction of DR. ELIZABETH STEARNS)

In this study, I focus on three varying perspectives to understand the assimilation process of immigrants and how it affects their academic achievement. I draw from Classical Assimilation Theory, Segmented Assimilation Theory and the Immigrant Paradox. I utilize the High School Longitudinal Study of 2009 to assess whether academic performance increases or decreases across successive immigrant generations. I also assess how factors such as bilingualism, family socioeconomic status, parental and student expectations might affect the relationship between generation status and achievement. Results from OLS regression models with a Huber White correction find support for the Immigrant Paradox, which asserts that earlier immigrant generations outperform later immigrant generations. I also found that the level of bilingualism moderates the achievement gap between immigrant and third generation students. Specifically, the immigrant advantage is especially large when students have a medium level of bilingualism. Additionally, results show that family SES moderates generation status by reducing the achievement gap between immigrant and third generation students from higher SES backgrounds. Data show that parental and student expectations are strong predictors of student achievement. When interacted with generation status, I find that the immigrant advantage is reduced for children of parents who have high educational expectations.

TABLE OF CONTENTS

List of Tables

List of Figures

Introduction

Immigration to the United States has increased rapidly since the 1960s. Children of immigrants are among the fastest growing groups within the American education system and currently constitute almost one fourth of school-aged youth (Capps et al. 2009, U.S. Census Bureau, 2011). This rapid growth has led to an increase of scholarly interest in the assimilation processes due to the diverse ethnic backgrounds of these immigrants. Assimilation refers to the processes of becoming more similar to something. In the case of immigrants it is becoming more similar to the population of their host country. Recently, scholars have been interested in the educational progress of immigrants and their children as a method of assessing their future socioeconomic prospects and of analyzing the complexities involved in the assimilation process (Portes and Rumbaut 2006, Feliciano 2006, and Kronberg 2008). The overall assimilation process of these new immigrants differ according to the condition of their social and economic background prior to migration. There is a variety of success regarding assimilation for immigrants today (Portes and Zhou 1993).

Educational attainment is a general necessity in determining an individual's life chances, therefore it is important to study the school-related outcomes of immigrants and their children. There is a great diversity in children of immigrants' English proficiency, language spoken at home, culture of origin, as well as parental educational and socioeconomic background. These varying factors are associated with differing academic achievement. Every immigrant group has unique characteristics and distinct ethnic differences. These ethnic differences are explained, in part, by how social networks are based on ethnic ties within communities and can provide support to certain disadvantaged

groups (Zhou 2001). Social and economic resources that are available to ethnic group members that are outside their family contexts can help facilitate individual achievement (Feliciano 2006).

This study explores the relationship between aspects of immigrant youths' cultural experiences in this country, generation, the assimilation process and their educational outcomes. This research contributes to previous literature on children of immigrants' education achievement by understanding the assimilation process of immigrants. This research is different from previous research because I focus on three varying perspectives; Classical and Segmented Assimilation Theory as well as the Immigrant Paradox. Classical Assimilation Theory states that distinctive ethnic traits, such as old cultural ways, native language or ethnic enclaves are typically sources of disadvantages that negatively affect assimilation (Zhou 1997). Classical Assimilation Theory asserts that with every successive generation, as ties with one's ethnic culture dissipate, upward mobility and assimilation become accessible. Segmented Assimilation Theory states that immigrants' social mobility depends on the reception of their ethnic group as well as their individual level of social and human capital (Portes and Zhou 1993). This research also utilizes the Immigrant Paradox, which asserts that early generations perform better academically than later generations despite linguistic and cultural barriers putting them at an initial disadvantage (Han 2012, Turley and Kao 2012). The implication of the Immigrant Paradox is that as immigrants assimilate more and become more assimilated, their educational achievement begins to decline. These perspectives appear to contradict one another. In this paper, I examine what generational patterns exist among children of immigrants' academic outcomes and which perspective

best accounts for these outcomes. I also assess whether factors such as bilingualism, family socioeconomic status, students' and parents' expectations play a significant role in explaining the different academic outcomes of children of immigrants.

Theoretical Background

In this section I discuss the three main theories that guide my research; Classical Assimilation Theory, Segmented Assimilation Theory and the Immigrant Paradox. These three perspectives present different assumptions about immigrants' assimilation and education achievement based on trends that have been found in past research. I conclude this section with a fourth perspective called Voluntary and Involuntary Minorities. The purpose of this final section is to understand the different minority groups' classifications and their influence on student academic achievement.

I. Classical Assimilation Theory

From the Classical Assimilation standpoint, distinctive ethnic traits such as traditional cultural ways, native languages or ethnic enclaves are typically sources of disadvantages that negatively affect assimilation, but the effects are greatly reduced in each of the successive generations (Zhou 1997). This would imply that later generations, who are less connected to their ethnic origins, will do better in schools than their first (immigrant) or second (native-born children of immigrants) generation peers. Immigrant families face the challenge of not only maintaining their cultural traditions, but passing it on to their children. Their children then face new struggles of trying to balance demands of the American lifestyle while maintaining their ethnic culture. Despite these challenges, Classical Assimilation Theory associates the process of assimilation with upward mobility for immigrants and their children, allowing them to become more similar to the White American middle-class. As such, from this perspective I can expect achievement

levels will rise each generation, given the association between educational attainment and occupational attainment.

II. Segmented Assimilation Theory

Research on recent immigrant groups tends to challenge the association between assimilation and upward mobility (Portes and Zhou 1993). Segmented Assimilation Theory has inspired much of the research examining the educational outcomes of new immigrant groups (Portes and Rumbaut 2006, 2001; Portes and Zhou 1993). Segmented Assimilation Theory posits that integration trajectories are greatly influenced by immigrants' modes of incorporation (Portes & Zhou, 1993). This essentially means that immigrants' assimilation process is influenced by their pre-migration condition as well as their social capital in their new home. The Segmented Assimilation perspective rejects the idea of a single process of assimilation and attempts to explain the various educational and economic outcomes within and between immigrant groups. This theory takes into consideration the diversity of American society and recognizes that there are different paths available for new immigrants to assimilate into (Portes and Rumbaut 2001; Portes and Zhou 1993). Segmented Assimilation suggests that upward and downward mobility are both possible assimilation trajectories (Portes and Zhou 1993). Whereas Classical Assimilation Theory only suggests upward mobility.

The assimilation process of recent immigrants differs according to their social and economic standing prior to immigrating. There is a variety of success for immigrants today. According to Segmented Assimilation Theory, immigrant groups who receive a favorable reception or have high levels of human or social capital at the time of

immigration may experience upward mobility and integration into U.S. society. Other groups with fewer resources and lower levels of capital at the time of immigration may not experience such upward mobility but rather may assimilate into the "under- class" (Portes and Zhou 1993; Zhou 1999). Thus, from a Segmented Assimilation perspective, educational outcomes will vary significantly depending upon the students family resources.

III. Immigrant Paradox

Although early research on immigrant achievement emphasized the challenges faced by immigrant youths that lead to disadvantages in academic achievement (Zhou 1999), more recent studies suggest the opposite effect (Han 2012, Hernandez 2012). Recent findings suggest that many immigrant youth exhibit better health, behavioral, and educational outcomes than native youths, despite exposure to a greater number of risk factors (Georgiades, Boyle, & Duku, 2007). This finding became so prevalent that the term "Immigrant Paradox" was created to describe the phenomenon. The Immigrant Paradox asserts that despite having fewer socioeconomic resources, a lack of English proficiency, as well as feelings of isolation that accompany being a new arrival in the United States, immigrants and their children exhibit resilience and sometimes outperform their native born counter parts (Turley and Kao 2012). However, success of immigrants is not sustained by later generations. There is a generational decline, wherein earlier generations exhibit better outcomes than later generations. As later generations become more removed from their parent's native culture, they begin to lose touch with that culture's protective aspects (Han 2012). This could include the sometimes high value

placed on education and familial respect. Older studies lend the groundwork for the Immigrant Paradox. For example, in 2002 Portes and Hao found that longer periods of U.S. residency lowers academic performance, regardless of school context. This points to the influence of acculturation, which has been shown to contribute to the decline of the initial achievement drive of immigrant youth. Thus, from the Immigrant Paradox perspective, educational outcomes will decrease with each generation of immigrants.

IV. Voluntary and Involuntary Minorities

In order to better understand immigrants and minorities, it is important to understand their classification in accordance to Ogbu's work (Gibson and Ogbu 1991). Ogbu classifies minorities into two primary groups: Voluntary and Involuntary Minorities. These classifications are determined mainly by the reasons they came or were brought to America, and the nature of White American involvement with their becoming minorities. Voluntary minorities are those who willingly moved to the United States because they expect better opportunities than they had in their home countries. These are typically immigrants, but also include refugees. The opportunities they come here seeking include political and religious freedom as well as better jobs. Voluntary minorities typically experience hardships in school when they first arrive, but it is not long lasting. Involuntary minorities are not immigrants. They are defined as people who have been conquered, colonized, or enslaved. Involuntary minorities did not choose to become a part of the United States; they were forced against their will. Involuntary minorities are less economically successful than voluntary minorities, and usually face greater or more persistent cultural and language difficulties and do less well in school.

Examples of involuntary minorities in the United States include American Indians, Alaska Natives, early Mexican Americans in the Southwest, Puerto Ricans, and Black Americans who were brought to the United States as slaves. These groups were colonized, conquered or enslaved people who did not chose to become part of the United States (Ogbu 1998). While it is important to understand these classifications, this paper will focus only on voluntary immigrant minorities, and will not address involuntary minorities. It is also important to understand that not all immigrants want to assimilate. Some groups accommodate American norms, without fully assimilating. This means they maintain their ethnic identity while actively engaging schooling (Gibson and Ogbu 1991).

In this research I test if voluntary immigrant students perform better, the same, or worse academically in comparison to non-immigrant students. To assess this, I utilize Classical Assimilation Theory, Segmented Assimilation Theory and the Immigrant Paradox as sources of explanations for the different possible academic outcomes. Classical Assimilation tells us that to assimilate successfully into the American culture, successive generations must abandon their old ethnic traditions, whereas the Immigrant Paradox shows us that immigrant and second generation children outperform their third and greater generation counterparts in school. Segmented Assimilation Theory suggests that there is more than one path of assimilation for immigrants. By identifying what generational pattern exists among immigrant, second and third generation students, I am able to determine which perspective is supported. This will help me to understand which perspective best accounts for educational outcome trajectories of immigrant youth. I also assess what factors play an influencing role on this potential generational trajectory.

Primarily, I focus on how bilingualism, family socioeconomic status, student and parental expectations moderate generational trends.

Literature Review

I. Individual and Family Characteristics

There are many factors that influence the academic achievements of children of immigrants, including individual, family and school characteristics. Researchers found that gender plays a role in student engagement as well as reports of family cohesion (Rumbaut 2005, Bui 2009). Researchers found that girls were more engaged in school, spending more time on their homework while watching less television than their male counterparts, similar to all girls irrespective of ethnicity and nativity (Rumbaut 2005).

It is very common to find gender differences within academic achievement. A female advantage in achievement has been prevent for many years (Mickelson 1989). Recent studies have shown that a female advantage in completion of secondary education is also prevalent among children of immigrants (Fleischmann et al 2014). Similarly, in a study about Latinos educational achievement it was found that Latina girls have better grade point averages than their male counterparts (Lutz and Crist 2009). For this reason, I control for gender in my analysis.

Family socioeconomic status has a significant impact on academic achievement not only for children of immigrants, but for all children (Portes and Hao 2004). Socioeconomic status has the potential to affect achievement through family cultural and human resources, social norms and community standards for education (Kroneberg, 2008). Family socioeconomic status is another important predictor of immigrant youths' outcomes (Kronberg, 2008). In previous immigration streams immigrants were overwhelmingly European and White; however, the current flow of immigrants is predominately non-White (Zong & Batalova 2016). Media portrayals of countries that are

not predominately white tend to present them as developing countries. This often leads White Americans to attribute the qualities of a developing nation to both the countries and their people, and thus to assume that immigrants from those countries are poor and trying to escape those conditions (Portes and Rumbaut 2006). However, this is not always the case; most immigrants were not poor in their native countries. Not all immigrants come for economic purposes; some come as political refugees, or are fleeing domestic violence or religious intolerance. It is more common that they are middle class families who migrate in hopes of advancing themselves economically (Portes and Rumbaut 2006). The most frequent explanation for immigration is that immigrants felt there was a gap between their aspirations and their local realities (Portes and Rumbaut 2006). This gap motivates them to be determined to succeed in their new environment. In other words, most immigrants come to America seeking better opportunities for growth and upward mobility. On average, recent immigrant families make roughly ten thousand dollars less annually than the average non-immigrant American family (Lahaie 2008). In general, research has shown that children of immigrants with the highest test scores were from higher socioeconomic families and were attending suburban schools, and those with the lowest test scores were students from lower socioeconomic backgrounds (Rumbaut 2005). For this reason, I assess family SES and its association with student achievement.

To understand generational progress in achievement it is necessary to consider family background as well as race and ethnicity. There is a vast difference in education levels and occupational skills between adult immigrants from Asian and Latin American countries that has been well documented and that translates into marked differences in socioeconomic status (Hao & Ma 2012). The relative advantage of children of

immigrants can be traced back to differences in individual characteristics as well as parent-child relationships (Kao 2004). Differences in family structure help shape children of immigrants' goals and aspirations. Immigrant parents are more likely than native-born parents to talk about college with their children, and their children report that they are closer to their parents than youth of native-born parents (Kao 2004).

i) Bilingualism and Linguistic Trends

The first thing new immigrants must do in order to adapt and grow within America is learn the English language (Portes and Rumbaut 2006). Immigrants who are unable to learn English face more obstacles than those who immigrate already knowing English. English is a necessary skill that allows immigrants to participate outside their communities. Strong English skills help immigrants get an education, get a job, obtain access to health care or social services, and apply for citizenship (Portes and Rumbaut 2001). Bilingualism in America among immigrants has been unstable and transitional in recent years (Portes and Rumbaut 2006). According to Portes and Rumbaut, the typical pattern is as follows; the first-generation immigrants learn as much English as they need to survive while continuing to speak their native language at home with their family. The second generation, children of the immigrants, grow up speaking their native language at home, and English outside of the home. By the third generation, those grandchildren of the original immigrants, individuals will primarily speak English (Portes and Rumbaut 2006).

Children living with bilingual parents have the opportunity to develop or maintain bilingual language skills. Parental English fluency has important implications for their

children as well as their lifestyle. Parents who are still learning English are less likely than fluent English speakers to find well paid, fulltime employment (Hernandez et al 2012). Also, parents who have limited English abilities are less able to help their children with their homework, or study for subjects taught in English.

Children of immigrants who maintain bilingual proficiency are likely to provide a valuable competitive edge as the United States seeks success in the increasingly competitive global economy. Maintaining their ethnic language allows them to be well positioned to act as language ambassadors, connecting the United States to nations throughout the world (Hernandez et al 2012).

Previous studies have also shown the benefits of bilingual fluency. Bilingual fluency has been linked to positive academic outcomes, as well as higher self-esteem and stronger family cohesion (Portes and Hao 2002). Also, researchers have linked bilingualism to greater cognitive flexibility and abstract thinking skills. Additionally, bilingual children have more access to cultural capital within their families and communities (Portes and Rumbaut 2006, Portes and Zhou 1993). In a more recent study of Latino students, researchers found that bi-literate and bilingual students outperform their limited Spanish proficient peers in English and Math tests (Lutz and Crist 2009). When comparing the raw reading scores for K-5 students based on their generational status, Han found a paradoxical pattern. In general, first and second generation children with non-English language backgrounds exhibited notably better reading and math scores as well as faster trajectories in reading and math scores in comparison to their 3rd or higher generation peers (Han 2012).

As mentioned earlier, there is a linguistic trend with immigrant families across generations where English becomes the primary or only language spoken (Portes and Rumbaut 1996, Gandara et al 2000, Skutnabb-Kangas 2008). This language trend seems to follow the same pattern as the Immigrant Paradox, where later generations lose their native language and begin to perform less well in school. Interestingly, while immigrants were initially pressured to forget their native language, their children who are fluent bilinguals are reported to outperform their monolingual peers academically. There is growing evidence of positive benefits associated with speaking more than one language (Portes and Rumbaut 2006, Kronebeg 2008). Students classified as bilinguals typically excel in school, surpassing the performance of both English monolinguals and limited bilinguals (Portes and Rumbaut 2006, Kronebeg 2008). For this reason, I assess bilingualism and its association with student achievement.

ii) Parental and Student Expectations

When the average parental education and occupation level is high, parental expectations for youth achievement are also likely to be high, and school and community attitudes tend to support education (Kroneberg 2008). Immigrant parents have relatively high expectations for their children's achievement, especially among those whose children maintain their ties to their family's linguistic and cultural communities of origin (Raleigh & Kao 2010, Kao & Tienda 1995, Feliciano 2006). Talking about college helps children understand their parents' expectations. Similarly, children of immigrants who think their parents have high educational aspirations will work harder in school, and children of immigrants who have high aspirations for themselves will also work harder

and do better in school (Rumbaut 2005). Rumbaut and Kao's findings are complementary to one another. Other studies have found that students' and parents' expectations are strong predictors of academic achievement (Zhang et al 2011 and Vernez and Abrahamse 1996). Zhang et al found that previous student achievement influences parents' educational expectations for the student. Then parent expectations influence the students own expectations. Both student and parental expectations are strong predictors of student achievement (Zhang et al 2011). When student expectations and aspirations are low, student achievement is negatively affected. Whereas when student expectations or aspirations are high, student achievement is positively affected (Khattab 2015).

It was also found that youth whose mothers want them to go to college do so at higher rates than those whose mothers do not have these aspirations for their child (Vernez and Abrahamse 1996). Also, Wells found that children of immigrants are more likely to expect to obtain a graduate degree than their American peers (Wells 2010). These high expectations are associated with higher academic achievement (Zhang et al 2011). Parental expectations and college talks have been shown to be strong predictors of student achievement. For this reason, I assess parental and student expectations and its association with student achievement.

II. School Characteristics

School context is a large factor in academic performance for immigrant youth. Characteristics of the school play a vital role in predicting achievement. Students who attended schools with higher rates of segregation were significantly more likely to be low achievers (Suarez-Orozco et al 2010). Additionally, students attending schools with

greater proportions of low-income students were significantly more likely to be low achievers than high achievers (Suarez-Orozco et al 2010). Low income schools typically have fewer resources available to them than high income schools. This results in low income schools producing lower achievement among their students whereas high income schools produce high performing students. Typically, students with the highest performances attend schools that are the least segregated and had the fewest students qualifying for free lunch (Suarez-Orozco et al 2010).

Another important school characteristic to consider is school locale. There are vast differences in the quality of life and education in regards to location. Schools in America's inner cities and rural places lack many of the resources that promote educational achievement and attainment (Roscigno et al 2006). Typically, families in these locales have lower family income, less parental education and more siblings per household. Inner city and rural schools have high concentrations of poor students and minority students (Roscigno et al 2006). In addition, Wells found that schools in the south and urban schools are associated with higher educational achievement and expectations (2010).

Due to their cultural backgrounds, and language fluency, immigrant students are often seen as outsiders by their American peers. This has the potential of making their school careers more challenging. Immigrant minority youth are disadvantaged regarding school activity participation relative to the average student in high- compared to low-SES schools (Okamoto et al 2013). Activity participation among children of immigrants can be viewed as a type of student integration into school. This integration is a sign of assimilation into American cultural norms. Past studies have shown that there is a

positive correlation between participating in school activities and high achievement (Okomato et al 2013). Children of immigrants go to schools with higher percentages of immigrant students as well as higher percentages of racial/ethnic minority students than non-immigrant students (Wells 2009).

These results are similar to that of Suarez-Orozco et al (2010) mentioned in the previous section. In high-SES schools, immigrant youth are less similar to their peers in terms of socioeconomic, race, and immigrant status: social comparison and ranking processes contribute to lower levels of social integration of immigrant youth into the school setting (Okamoto et al 2013). Researchers found that as percent minority rises in high-SES schools, participation also increases, however, the opposite pattern appears in low-SES schools: when percent minority increases, extracurricular activity participation among immigrant minority students declines (Okamoto et al 2013). The main implication of their results is that racially diverse, higher-SES schools are the most favorable contexts for the social integration of immigrant minority youth as well as third- and later-generation blacks and Hispanics.

Children of immigrants' educational outcomes are influenced by several factors, such as family socioeconomic status as well as school characteristics. It has been shown that students who use a language other than English at home perform significantly better in schools with higher levels of institutional diversity (Min and Goff 2016). This is fitting considering a more diverse environment will likely make children of immigrants feel like less of an "outsider" and essentially help build their learning capacity. Min and Goff also found that students who use a language other than English at home perform significantly

better in math than their English only speaking peers (2016). In my analysis, I control for school characteristics including school-SES, region, locale, and diversity.

Research Objectives

There are four main take aways from the literature. First, a generational decline has been commonly found in regards to academic achievement among children of immigrants, but is not always the case. Second, there is substantial evidence that bilingual students out perform their monolingual peers, holding all things constant. Third, family socioeconomic status is a strong predictor of student academic achievement. Fourth, parental and student expectations are also strong predictors of academic achievement. For this study, I investigate the role of generation status on academic achievement. I focus on the potentially moderating effects of bilingualism, expectations (parental and student), and family socioeconomic status might have on this relationship. My first research question is: Is there a generational decline in academic achievement among successive generations? Answering this question will make apparent which theoretical perspective, Classical Assimilation, Segmented Assimilation or the Immigrant Paradox, is supported. My second research question is: Does bilingualism moderate the effects of generational patterns of achievement? My third research question is: Does family socioeconomic status moderate the role effect of the potential generational decline? My fourth research question is: does student and parent expectations moderate the effect of generational status?

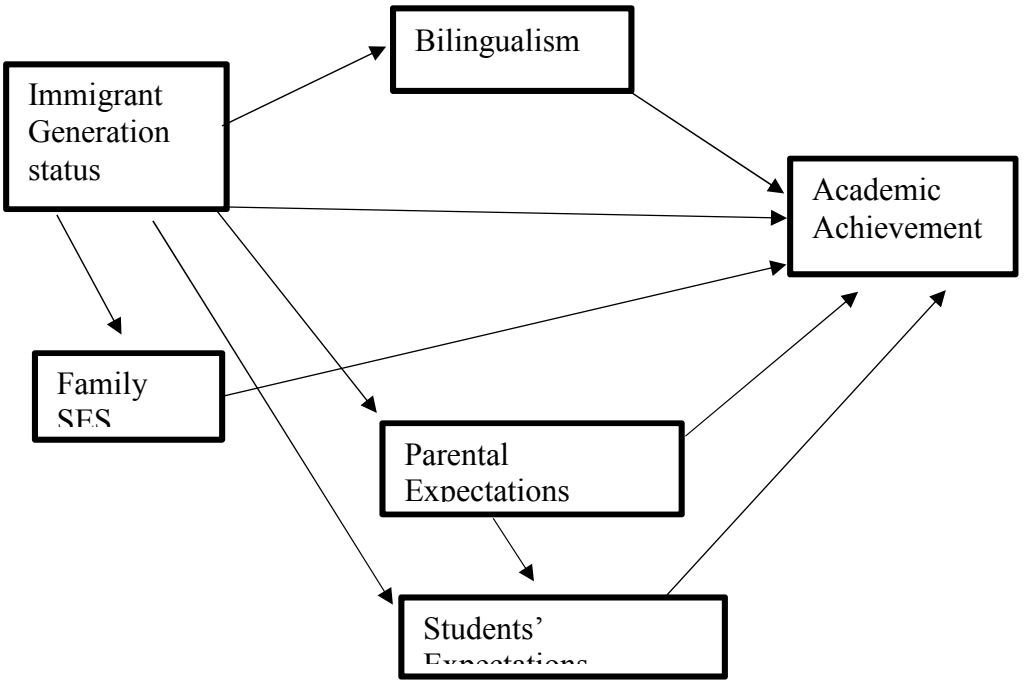

Figure 1. Heuristic Model

Figure 1 describes the conceptual model utilized in this paper. There is a direct relationship between immigrant generation status and academic achievement as differently supported by various theories. Classical Assimilation Theory suggests that later generations will outperform earlier generations, whereas the Immigrant Paradox suggests the opposite pattern. Additionally, there also exists an indirect relationship between generation status and achievement that is moderated by students' level of bilingualism, students' socioeconomic status, and by students' and parents' expectations.

Family socioeconomic status also has a direct impact on student achievement (Kroneberg 2008, Portes and Hao 2004). Students from higher SES backgrounds have

higher achievement than those from lower SES backgrounds. In my analysis, I test how family SES moderates the effect of generation status and achievement.

Past research has shown that bilingual students outperform their monolingual peers (Portes and Hao 2002, Kroneberg 2008, Lutz and Crist 2009, & Han 2012). Generation status also influences level of bilingualism. As mentioned earlier, later generations are less likely to be bilingual than earlier generations. The model shows that bilingualism will have a direct association with achievement, as well as a moderating effect on generation status and achievement.

Parental and student expectations have a direct relationship with student achievement. Research has shown that earlier generations hold high expectations for their children's school performance: these high expectations create high expectations for the student to have of themselves which leads to higher achievement (Kroneberg 2008). Therefore, there should also be a moderating effect of parental expectations in the relationship between immigrant generation status and academic achievement. Similarly, low expectations result in low achievement. In my analysis, I assess how parental and student expectations moderate the effect of generation status on achievement.

Specifically, I am testing the following hypotheses;

H1: Immigrant and second generation students will have higher academic achievement than third generation students.

H2: Immigrant or second generation students who are bilingual will have higher academic achievement than their same generation monolingual peers.

H3: Immigrant or second generation students who are from higher socioeconomic backgrounds will have higher academic achievement than third generation students from the same socioeconomic background.

H4a: Immigrant or second generation students who have high educational expectations will have higher academic achievement than third generation students with similar educational expectations.

H4b: Immigrant or second generation students who have high parental educational expectations will have higher academic achievement than third generation students with similar educational expectations.

Data

The data used for this study come from the High School Longitudinal Study (HSLS) data set. HSLS is a longitudinal study from the National Center for Education Statistics (NCES) that tracks a nationally representative sample of high school students. The sample design is a stratified, two-stage random sample design with schools selected at the first stage and students randomly selected from schools at the second stage. The sample is representative of ninth grade students in public and private schools in the United States in 2009. Schools in 10 states were selected, and 944 schools participated. Within each school, a stratified random sample of students was selected based on race/ethnicity. An average of 25 ninth-graders per school were selected, for a total of about 24,000 students. After accounting for missing variables, the final sample size for this study is 17,640 students. Missing data primarily came from missing information on where students and their parents were born. Since this data set is longitudinal I was able to recover some of the missing variables by accessing it from the second round of data collection. I repeated this approach for missing data on family socioeconomic variables as well.

I. Dependent Variables

For this study, the outcome variable is academic achievement and is measured by the student's overall grade point average (GPA) on a four-point scale (un-weighted).

II. Independent Variables

The primary independent variables for this study are generation, family socioeconomic status, bilingualism, and parental and student expectations. In order to differentiate generation status in this sample, I recoded participants into three categories; immigrant (or first generation), second generation and third or higher generations. To do this I used a set of dichotomous variables that identified if the student and parents were born in the United States or in a foreign country. I identified immigrants (or first generation) as foreign born students with foreign born parents. Second generation students were categorized as students born in the United States with at least one foreign born parent. Third and higher generation students were categorized as students who were born in the United States, with both parents born in the United States. By separating students according to their generation status, I am able to compare academic achievement of students depending on their immigrant generation status in order to answer my research questions.

To capture family socioeconomic status, I included the SES index that was constructed from five component variables. The first and second component of the index are each of the parents' highest level of education. This was self-reported by the parents. Each parent indicated their highest education level with answers ranging from less than high school to a doctorate degree. The third and fourth components of the index are the occupational prestige score for each parent. Parents were asked to identify their occupation. Each occupation is associated with a prestige score. The fifth component of the SES index is the annual family income variable. Five z scores were calculated for each of these SES components by subtracting the mean value from the component value

and dividing by the standard deviation. The indices were then generated by taking the unweighted average across the non-missing z scores. This new SES variable is split into quintiles with the first indicating the lowest SES level and the fifth indicating the highest (Ingels et al 2011).

To measure the variable for students' bilingualism, I utilized an index created by three variables. The first is a dichotomous variable asking the student if there is another language spoken at home other than English. If they indicated that they speak another language at home, they were asked to indicate how often they speak their home language with their mother and friends. Answer choices ranged from 1(never) to 5 (always). I recoded the frequency of language use variables to be 0 for never, and 1 for any use of their native language. The second two variables used to create this additive index were the recoded frequency of language use variables. The Bilingual index is coded 0 for no use of a language other than English, 1 for minimum use of their native language, 2 for moderate use of their native language, and 3 for high use of their native language.

Lastly, to measure family educational expectations, students and both of their parents were asked what they expect the respondent's highest degree attainment will be. Answer choices were as follows; I don't know (0), less than high school (1), High school diploma (2), Associates degree (3), Bachelors' degree (4), Masters' degree (5) and PhD (6). This variable is an ordered categorical variable.

III. Control Variables

In addition to the previously mention variables and to be consistent with previous research and factor that are important in predicting students' academic achievement, I

control for gender, race, and school characteristics. Gender is coded 0 for male and 1 for female. The variables for race consist of three dichotomous variables; White (non-Hispanic), Black (non-Hispanic) and Hispanic. White is coded as 0 if the student is not White and 1 if the student is White (non-Hispanic). Black (non-Hispanic) and Hispanic are coded similarly. Race variables are self-identified.

Additionally, I included a dichotomous variables that ask students if they speak with their parents about college, coded as 0 for no and 1 for yes. These are important control variables because Kao (2004) found that students who talk to their parents about college are more likely to have higher educational expectations and educational expectations are significantly related to student academic achievement.

I also control for school characteristics. School locale codes are based on an address's proximity to an urbanized area, a densely-settled core with densely settled surrounding areas (NCES 2017). School locale classifies territory into four major types: city, suburban, town, and rural. According to the NCES, cities are defined as a territory inside an urbanized area and inside a principal city. A suburb is defined as a territory outside a principle city and inside an urbanized area. A town is defined as a territory inside an urban cluster, and rural is defined as not in an urban area, and can be anywhere from 5-25 miles from an urban cluster (NCES 2017). Each major type is a dichotomous variable coded 0 for no and 1 for yes. School region was originally coded as Northeast (1), Midwest (2), South (3), and North (4). I recoded the school region variable to be four dichotomous variables. School size is also included and is measured by the number of students in each school.

I also control for school diversity and school socioeconomic status. School diversity is based on the percent of White students with-in the school. Schools with 0-50% White students are considered predominantly minority. This is the reference group and is coded as 1. Schools with 51-79% White students are considered diverse schools, and are coded as 2. Schools with 80-100% White students are considered predominantly White schools and are coded as 3. School socioeconomic status is based on percent of students receiving free or reduced price lunch (FRPL). Schools with 40-100% of students receiving FRPL are considered low-SES schools. This is the reference group coded as 1. Schools with 21-39% of students receiving FRPL are considered middle SES schools, and are coded as 2. Schools with 0-20% of students receiving FRPL are considered high-SES schools and are coded as 3.

Analysis Method

My first hypothesis states: Immigrant and second generation students will have higher academic achievement than third generation students. To address this I begin my analysis with a series of T-tests. A T-test will allow me to compare the student's achievement based on their generation status, and will tell me if the academic achievement of students in each different immigrant generation group are statistically different from one another. This hypothesis is also tested with the Ordinary Least Squares (OLS) regression.

In order to properly examine the relationship between predictors and my dependent variable, overall GPA, I use Ordinary Least Squares (OLS) regression. This method is commonly used for estimating the unknown parameters in a linear regression model. Since my outcome variable is a continuous linear variable it is appropriate to use OLS regression. OLS regressions assumes that all observations are independent. However, because students are clustered into schools, they are not completely independent. In order to account for the possibility of clustering I use a Huber White correction to produce robust standard errors. I use STATA to run my analysis. Robust standard errors can deal with a number of small concerns in regards to failure to meet assumptions. For example, using the robust option addresses problems about normality, heteroscedasticity as well as some observations that exhibit large residuals.

I ran seven models. Model 1 includes only student level variables. Model 2 includes both student and school level variable, excluding bilingualism and parental and student expectations. Model 3 includes all student and school level variables. Models 4 through 8 include interaction terms to test the possible moderating roles of students' level

of bilingualism, SES and expectations. Model 4 includes student and school level variables as well as the first interaction term; level of bilingualism and generation status. Model 5 also includes student and school level variables as well as the second interaction term; socioeconomic status and generation status. Model 6 includes all student and school level variables and the fourth interaction term; parental expectations and generation status. Model 6 includes all student and school level variables and the fifth interaction term; student expectations and generation status.

Hypothesis Two states: Immigrant or second generation students who are bilingual will have higher academic achievement than their same generation monolingual peers. The interaction term included in Model 4, bilingualism and generation status will test Hypothesis Two. Hypothesis Three states: Immigrant or second generation students who are from higher socioeconomic backgrounds will have higher academic achievement than third generation students from the same socioeconomic background. The interaction term in Model 5, socioeconomic status and generation, will test Hypothesis Three.

Hypothesis Four-A states: Immigrant or second generation students who have high educational expectations will have higher academic achievement than third generation students with similar educational expectations. Hypothesis Four-B states: Immigrant or second generation students who have high parental educational expectations will have higher academic achievement than third generation students with similar educational expectations. Model 6 includes an interaction term for parent expectations, which will test Hypothesis Four-A. Model 7 includes an interaction term for generation and student expectations and generation, which will test Hypothesis Four-B.

Different criteria is needed to determine which theoretical perspective is supported. If my analysis shows that students from different generations are significantly different from one another and have GPAs that get higher with every successive generation, then the analysis would show support for Classical Assimilation Theory. If my analysis shows that students from different generations are significantly different from one another and have GPAs that get lower with every successive generation, then the analysis would show support for the Immigrant Paradox. However, if my analysis does not show that students from different generations are significantly different from one another, and differences only occur with other control variables, such as family socioeconomic status, then the analysis would show support for Segmented Assimilation Theory.

Descriptive Results

The descriptive statistics for my primary independent and dependent variables are summarized in Table 1. There are three dichotomous variables that indicate the respondent's generation status. Six and 4/10 percent of this sample are immigrants, while 14% percent are second generation and the remaining 79.6% percent are third or higher generation. Thirty percent of students in this sample are in the highest SES bracket. Twenty percent are from the second highest bracket. Another 20% are at a medium SES level. The remaining 30% are in the lowest two brackets. The mean grade point average of the students in this sample is 2.695 with a standard deviation of 0.86.

Seventy eight percent of this sample reported not having a second language present at home. They are considered monolingual. Eight and a half percent of this sample have a low usage of their native language, while 5.1% have a medium usage and 8.3% have a high usage of their native language.

Table 1: Descriptive Statistics N=17, 640

		Full sample				By Immigrant Generation		
						1st	2nd	3rd
Variable	**Description**	**Mean**	**SD**	**Min**	**Max**	**Mean**	**Mean**	**Mean**
Dependent Variable								
Overall GPA	Students overall un-weighted GPA	2.695	0.86	0	4	2.69	2.75	2.67
Independent Variables								
SES	The SES index is divided into 5 categories; low (1) to high (5)							
	1- Low	0.173	0.378	0	1	.314	.253	.139
	2- Lower Middle	0.167	0.373	0	1	.139	.148	.176
	3-Middle	0.18	0.348	0	1	.133	.141	.186
	4- Upper Middle	0.197	0.398	0	1	.151	.178	.223
	5- High	0.284	0.451	0	1	.263	.28	.276
Level of Bilingualism	The level of bilingualism index has 4 categories							
	0 - Monolingual	0.781	0.413	0	1	.106	.255	.929
	1- Low use of second language	0.085	0.279	0	1	.156	.269	.048
	2- Medium use of second language	0.051	0.219	0	1	.275	.171	.011
	3- High use of second language	0.083	0.276	0	1	.463	.305	.012
Generation Status								
Immigrant	Immigrant is identified as foreign born with at least one foreign born parent (1=Immigrant 0=other)	0.065	0.246	0	1			
Second generation	Second generation is identified as US born with at least one foreign born parent (1=Second generation 0=other)	0.139	0.346	0	1			
Third generation	Third or higher generation is defined as US born with US born parents (1=Third generation 0=other)	0.796	0.403	0	1			
Control variables								
Gender	0= male 1=female	0.495	0.499	0	1	.489	.493	.495
Race								
White	Student is White (0=No 1=Yes)	0.571	0.495	0	1	.396	.463	.839
Native American	Student is Native American (0=No 1=Yes)	0.008	0.063	0	1	.084	.086	.074
Asian	Student is Asian (0=No 1=Yes)	0.071	0.257	0	1	.439	.403	.023
Black	Student is Black (0=No 1=Yes)	0.102	0.302	0	1	.122	.134	.167
Hispanic	Student is Hispanic (0=No 1=Yes)	0.244	0.429	0	1	.405	.389	.1
Hawaiian/ Pacific Islander	Student is Hawaiian/ Pacific Islander (0=No 1=Yes)	0.005	0.068	0	1	.062	.06	.018

Table 1 Continued: Descriptive Statistics N= 17,640

Family Expectations								
Parental expectations of student	This variable asks parents what highest degree they expect their child to obtain.							
	Not sure (0)	0.116	0.320	0	1	.243	.191	.167
	Less than High school (1)	0.007	0.084	0	1	.005	.005	.008
	High School Diploma (2)	0.062	0.241	0	1	.057	.046	.065
	Associates Degree (3)	0.125	0.331	0	1	.085	.082	.135
	Bachelors' Degree (4)	0.290	0.454	0	1	.212	.256	.3
	Masters' Degree (5)	0.187	0.390	0	1	.174	204	.184
	PhD (6)	0.158	0.364	0	1	.224	.216	.141
Student expectations of self	This variable asks the student what highest degree they expect to obtain.							
	Not sure (0)	0.18	0.384	0	1	.24	.197	.179
	Less than High school (1)	0.004	0.063	0	1	.007	.002	.004
	High School Diploma (2)	0.066	0.249	0	1	.074	.053	.068
	Associates Degree (3)	0.129	0.335	0	1	.102	.101	.135
	Bachelors' Degree (4)	0.261	0.439	0	1	.184	.223	.271
	Masters' Degree (5)	0.216	0.411	0	1	.213	.229	.212
	PhD (6)	0.144	0.352	0	1	.18	.195	.131
College talks with mom	Asks respondent if he/she talks to mom about college. (0=no 1=yes)	0.734	0.442	0	1	.475	.736	.735
School Characteristics								
School Locale								
City	0 = no 1= yes	0.288	0.453	0	1	.307	.345	.277
Town	0 = no 1= yes	0.118	0.323	0	1	.067	.071	.131
Rural	0 = no 1= yes	0.236	0.424	0	1	.228	.194	.243
Suburb	0 = no 1= yes	0.357	0.479	0	1	.397	.389	.349
School Region								
Northeast	0 = no 1= yes	0.157	0.364	0	1	.183	.185	.15
Midwest	0 = no 1= yes	0.265	0.441	0	1	.262	.217	.274
South	0 = no 1= yes	0.406	0.491	0	1	.404	.376	.411
West	0 = no 1= yes	0.172	0.377	0	1	.151	.221	.165
School Size	Number of students per school	1210	803	10	9850	1570	1473	1132
School SES	Based on percent of students receiving free/reduced lunch							
Low	40% or more of students receive free or reduced lunch	.33	.47	0	1	.374	.344	.322
Medium	21-40 % of students receive free/reduced lunch	.314	.464	0	1	.315	.28	.321
High	0-21% of students receive free / reduced lunch	.356	.479	0	1	.311	.376	.357
School Composition	Based on percent of students who are White							
Predominantly Minority School	50% or less of the Students are White	.224	.417	0	1	.375	.372	.185
Diverse School	51-79% of students are White	.351	.477	0	1	.378	.382	.344
Predominately White School	80-100% of students are White	.356	.479	0	1	.247	.246	.471

Students' educational expectations for themselves and parents' expectations for the student appear to be parallel to one another. The majority of parents and students expect to receive a Bachelor's degree or higher. Only 12% of parents are uncertain of their expectations for the student, while 18% of students are uncertain of their educational expectations. Six percent of parents and students only expect the student to attain a high school diploma, while roughly 12.5% expect the student to attain an Associate's degree. On average, schools in this sample have 1210 students with a standard deviation of 803. School size in this sample ranges from 10 to 9850. Fifty-seven percent of this sample are White, 7.1% are Asian, 10.2% are Black, 24.4% are Hispanic and the remaining are Native American or Pacific Islanders.

The majority of immigrant students in this sample are Asian (44%). Followed by Hispanics at 40%. Thirty-seven and 4/10 percent of immigrant students in this sample attend low-SES schools, 31.5% attend medium-SES schools, and 31.1% attend high-SES schools. Similarly, 37.5% of immigrant students in this sample attend predominantly minority schools, while 37.8% attend diverse schools and 24.7% attend predominantly white schools. This pattern of distribution of immigrant students is similar for second generation students in this sample.

Figure 2 displays the descriptive statistics for each of my primary independent variables by student generation status. For example, 46% of immigrants have a high use of their native language. This decreases to 30% for second generation students and then significantly decreases to 1.2% for third generation students. This follows the linguistic patterns mentioned earlier. Twenty-seven percent of immigrant students, 29.2% of second generation and 28.3% of third generation students in this sample come from a

high SES background. Twelve and 7/10 percent of immigrants, 15.7% of second generation and 21% of third generation students in this sample are from the upper middle SES level. Twelve and 2/10 percent of immigrants, 14.1% of second generation and 19.1% of third generation students in this sample are from the middle SES level. I also ran a Chi-squared test for each of my primary independent variables; level of bilingualism, SES, parent expectation, and student expectation. I find that these variables are not completely independent from generation status. This is significant at the $p<.001$ level for all of my independent level variables.

In regards to parental expectations of the students' highest educational attainment, immigrant parents have higher expectations for their children than native born parents do. Specifically, 22.4% of immigrant parents expect their child to attain a PhD, while 21.6% of second generation parents, and 14.1% of third generation parents also expect their child to attain a PhD. Seventeen and 4/10 percent of immigrants, 20.4% of second generation and 18.4% of third generation parents in this sample expect their child to attain a Master's degree. Twenty-one percent of immigrants, 25.6% of second generation and 30% of third generation parents in this sample expect their child to attain a Bachelor's degree.

Students' educational expectations reflect those of their parents. Eighteen percent of immigrant students, 19.5% of second generation students and 13.1% of third generation students expect to attain a PhD. Twenty-one percent of immigrant students, 23% of second generation students and 21.2% of third generation students expect to attain a Master's degree. Eighteen and 4/10 percent of immigrant students, 22.5% of

second generation students and 27.1% of third generation students expect to attain a Bachelor's degree.

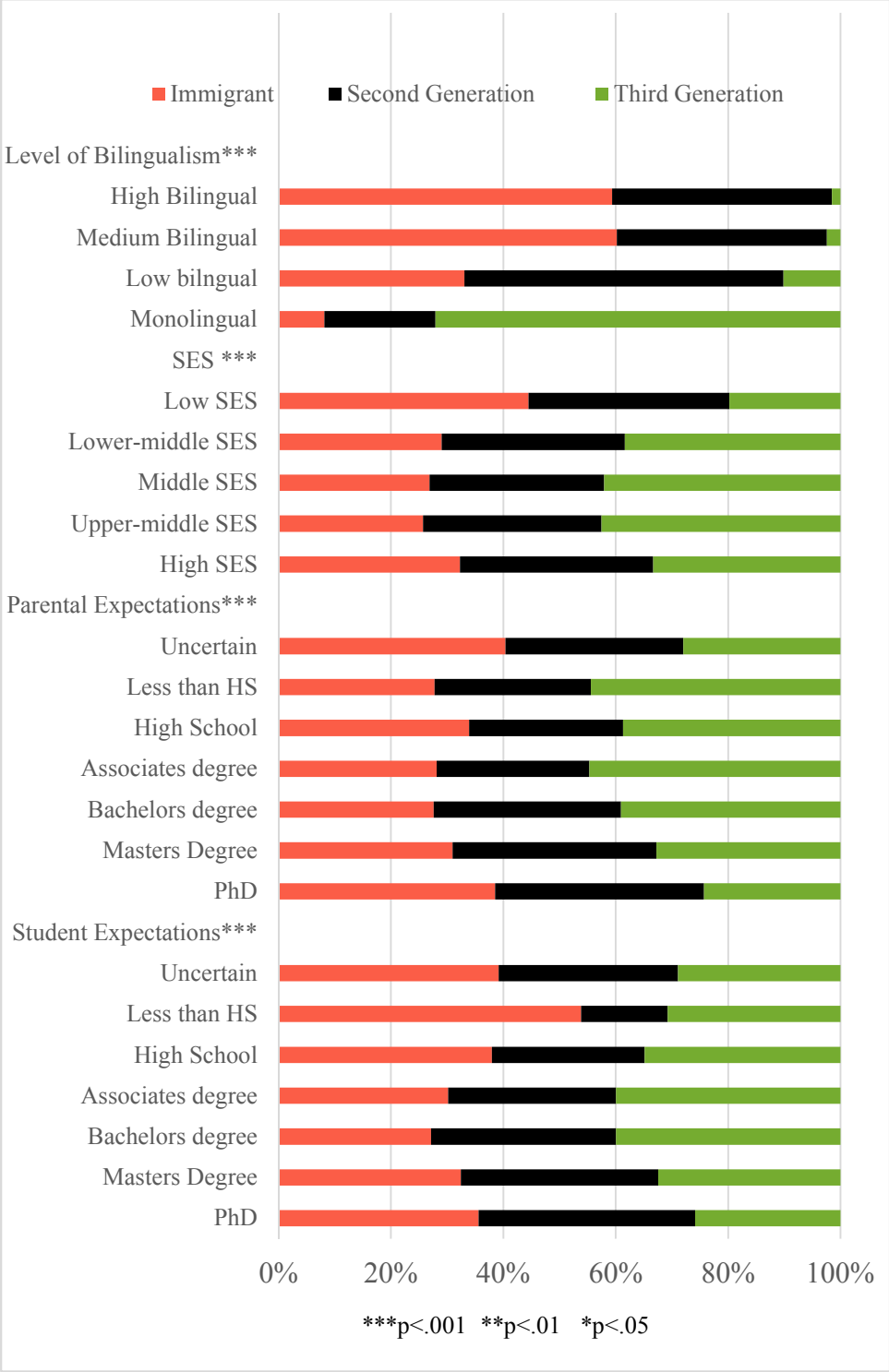

Figure 2: Chi-Squared Results by Generation Status

Table 2 presents the results from a series of t-test conducted to compare students' GPA based on their generation status. The first T-test compared immigrant students' GPA to second generation students' GPA. The two groups are not statistically different from one another. The second T-test compared immigrant students' GPA to third generation students' GPA. The two groups are statistically different from one another at the $p<.001$ level. The third T-test compared second generation students' GPA to third generation students' GPA. These two groups are statistically different from one another at the $p<.05$ level.

Table 2 displays a decrease in GPA from immigrant to third generation, and a decrease from second to third generation. This suggests that the Immigrant Paradox is present in this sample with a delayed effect. This answers my first research question: Is there a generational decline among successive generations? Although there is not a significant change from immigrant to second generation, there is a significant decline from immigrant to third generation and from second to third generation. This overall decline supports the Immigrant Paradox.

Table 2. Grade Point Average by Generation Status

	Mean	SD	Immigrant	Second Generation
Immigrant	2.808	.026	_	_
Second Generation	2.838	.017	.03	_
Third Generation	2.752	.007	-.056***	-.086*
	* p<.05	** p<.01	***p<.001	

OLS RESULTS

In this section I address the results from the OLS regressions. This section is split into three parts. First I discuss the results for SES and the interaction term for SES and generation status. Second I discuss the results for level of bilingualism and the interaction term for level of bilingualism and generation status. Third I discuss the results from the expectation variables and the interaction terms for expectations and generation status. I end the results section with results of my control variables.

I. SES Results

Table 3 shows the results of OLS regression that examines the relationships between generation status, SES, bilingualism, student and parental expectations on achievement (GPA). Model 1 includes all student level variables. Second generation students' GPA is significantly higher than that of third generation students. On average, second generation students' GPA is .087 GPA points higher than that of third generation students ($p<.001$). Similarly, immigrant students' GPA is .091 GPA points higher than that of third generation students ($p<.01$). In other words, students who are immigrant and second generation students perform better academically than their third-generation peers, net of other variables included in the models. This shows a decline in achievement across successive generations further supporting the Immigrant Paradox. Model 1 indicates that all SES background indicators have a significant effect on student GPA ($p<.001$) when compared to low SES students. High SES students' GPA is significantly higher than low-SES students. Specifically, high-SES students' GPA is .42 GPA points higher than that of low-SES students on average. Upper middle-SES students' GPA is .253 GPA points higher on average than that of low-SES students. Middle-SES students' GPA is .181

GPA points higher than that of low-SES students on average. Similarly, lower middle-SES students' GPA is .124 GPA points higher than that of low-SES students on average. Model 1 accounts for 33.24% of the variance.

Model 2 includes student and school variables, excluding level of bilingualism and expectation variables. Since these variables are excluded from Model 2, the SES variables have a larger positive association with GPA. Model 2 accounts for only 21.91% of the variance. Model 3 includes all student and school level variables. SES variables in Model 3 mirrors that of Model 1. Model 3 accounts for 34.45% of the variance. Model 4 adds the first interaction term; bilingualism and generation status. The SES variables in this model remain consistently positive and significant, however the coefficient for high SES is reduced from .42 to .241.

In order to answer my third research question regarding whether SES will moderate the effect of generation status, I include an interaction term in Model 5 for SES and generation status. I find that when generation status is interacted with SES, the gap between children of immigrants and third generation students' GPA is reduced. Specifically, the gap between second and third generation students' GPA is reduced for students from upper middle and high SES backgrounds (.172 -.16 $p<.05$). Similarly, the gap between immigrant and third generation students' GPA is reduced for students from high SES backgrounds (.206-.13 $p<.01$). As predicted earlier in the causal model, this data shows that SES does have a direct relationship with student achievement and also moderate the association between generation status and achievement. Specifically, SES moderates the effect of generation status by reducing the immigrant advantage for students from higher SES backgrounds. Model 5 accounts for 34.51% of the variance.

Table 3: OLS Regression of Predicted Change in GPA

Variables	Model 1	Model 2	Model 3
Generation (compared to Third Generation)			
Second Generation	0.087 ***	0.146 ***	0.017 ***
Immigrant	0.091 **	0.114 ***	0.11 ***
SES (compared to Low)			
Lower Middle	0.124 ***	0.212 ***	0.12 ***
Middle	0.181 ***	0.308 ***	0.171 ***
Upper Middle	0.253 ***	0.457 ***	0.246 ***
High	0.42 ***	0.693 ***	0.406 ***
Level of Bilingualism (comapred to monolingual)			
Low	-0.081 ***		-0.059 **
Medium	-0.071 *		-0.047
High	-0.052		-0.024
Female	0.195 ***	0.27 ***	0.196 ***
Parent expectations			
Less than High School	-0.327 ***		-0.35 ***
High School	-0.075 **		-0.08 **
Associates Degree	0.023		0.017
Bachelors Degree	0.214 ***		0.216 ***
Masters Degree	0.31 ***		0.311 ***
PhD	0.349 ***		0.352 ***
Student expectations			
Less than High School	-0.539 ***		-0.525 ***
High School	-0.203 ***		-0.203 ***
Associates Degree	0.074 ***		0.069 ***
Bachelors Degree	0.374 ***		0.37 ***
Masters Degree	0.479 ***		0.479 ***
PhD	0.566 ***		0.562 ***
Talks about college with mom	0.132 ***	0.2499 ***	0.131 ***
Race (compared to White)			
Native American	-0.297 ***	-0.364 ***	-0.278 ***
Asian	0.158 ***	0.182 ***	0.165 ***
Black	-0.458 ***	-0.343 ***	-0.395 ***
Hispanic	-0.206 ***	-0.185 ***	-0.171 ***
Hawaiian/ Pacific Islander	-0.176 *	-0.154 *	-0.14
School Characteristics			
Locale			
City		0.051 **	0.04 **

Table 3 Continued: OLS Regression of Predicted Change in GPA

Town		0.109 ***	0.1243 ***
Rural		0.127 ***	0.14 ***
Suburb (comparison group)		omitted	omitted
Region			
Northeast		0.008	0.027
Midwest		0.044 *	0.003
South		0.02	-0.034 *
West (comparison group)		omitted	omitted
School Size		-0.000	-0.000 *
School SES (compared to Low)			
Medium		0.062 ***	0.074 *
High		0.128 ***	0.049 **
School Composition (compared to predonminantly minority)			
Diverse School		0.056 ***	0.074 *
Predominantly White		0.128 ***	0.155 **
Constant	1.917 ***	1.836 ***	1.76 ***
R-Squared	0.3324	0.219	0.3445
N= 17,640 ***p<.001 **p<.01 *p <.05			

II. Bilingualism Results

Model 1 shows that bilingual students' GPA is lower than that of monolingual students. Specially, those with a low level of bilingualism have a GPA .081 points lower than that of monolingual students ($p<.001$), on average. Those with a medium level of bilingualism have a GPA .071 points lower than their monolingual peers on average ($p<.05$). However, having a high level of bilingualism is not statistically different from being monolingual.

Model 2 does not include the level of bilingualism variable. Model 3 includes all student and school level variables. In Model 3, having a medium level of bilingualism is no longer significant, and having a low level of bilingualism has a smaller negative association than in Model 1. Specifically, students with a low level of bilingualism on

average have a GPA .059 points lower than that of their monolingual peers. In Model 4, having a medium level of bilingualism is significant again. Students with a medium level of bilingualism on average have a GPA .179 points lower than monolingual students ($p<.01$). Students with a low level of bilingualism on average have a GPA .063 points lower than monolingual students ($p<.05$). Interestingly, being highly bilingual is not significantly different from being monolingual in any of my models.

To address my second research question regarding bilingualism and generation status, Model 4 includes an interaction term between level of bilingualism and generation status. I find that when level of bilingualism is interacted with generation status, the gap between monolingual students and students with a medium level of bilingualism is reduced by .225 on average (-.179+.225) ($p<.05$). As predicted early in the causal model, bilingualism does have a direct association with achievement, but is negative for low and medium bilingual students and not significant for high bilingual students. Also, as predicted in the causal model bilingualism moderates the effect of generation status, but only for second generation students who have a medium level of bilingualism. Model 4 accounts for 34.51% of the variance.

Table 4: OLS Regressions with Interaction Terms Results of Predicted Change in GPA

Variables	Model 4	Model 5	Model 6	Model 7
Generation (compared to Third Generation)				
Second Generation	0.067 *	0.17 ***	0.202 ***	0.183 ***
Immigrant	0.095	0.21 ***	0.229 ***	0.178 **
SES (compared to Low)				
Lower Middle	0.120 ***	0.15 ***	0.124 ***	0.125 ***
Middle	0.171 ***	0.19 ***	0.174 ***	0.176 ***
Upper Middle	0.281 ***	0.28 ***	0.248 ***	0.25 ***
High	0.246 ***	0.44 ***	0.408 ***	0.41 ***
Level of Bilingualism (comapred to monolingual)				
Low	-0.063 *	-0.06 **	-0.059 **	-0.06 **
Medium	-0.179 **	-0.05	-0.048	-0.05
High	-0.057	-0.04	-0.029	-0.03
Female	0.196 ***	0.2 ***	0.196 ***	0.193
Parent expectations				
Less than High School	-0.348 ***	-0.34 ***	-0.356 ***	-0.36 ***
High School	-0.080 **	-0.08 **	-0.054	-0.08 ***
Associates Degree	0.017	0.02	0.035	0.018
Bachelors Degree	0.216 ***	0.22 ***	0.248 ***	0.215 ***
Masters Degree	0.311 ***	0.31 ***	0.342 ***	0.312 ***
PhD	0.351 ***	0.35 ***	0.393 ***	0.353 ***
Student expectations				
Less than High School	-0.527 ***	-0.53 ***	-0.528 ***	-0.49 ***
High School	-0.204 ***	-0.2 ***	-0.202 ***	-0.2 ***
Associates Degree	0.068 ***	0.07 ***	0.067 ***	0.075 ***
Bachelors Degree	0.369 ***	0.37 ***	0.368 ***	0.387 ***
Masters Degree	0.479 ***	0.48 ***	0.478 ***	0.517 ***
PhD	0.562 ***	0.56 ***	0.561 ***	0.589 ***
Talks about college with mom	0.131 ***	0.13 ***	0.136 ***	0.131 ***
Race (compared to White)				
Native American	-0.276 ***	-0.27 ***	-0.276 ***	-0.27 ***
Asian	0.162 ***	0.19 ***	0.174 ***	0.178 ***
Black	-0.393 ***	-0.39 ***	-0.394 ***	-0.39 ***
Hispanic	-0.166 ***	-0.17 ***	-0.172 ***	-0.17 ***
Hawaiian/ Pacific Islander	-0.137	-0.14	-0.133	-0.14
School Characteristics				
Locale				
Suburb (comparison group)				

Table 4 Continued: OLS Regressions with Interaction Terms Results of Predicted Change in GPA

City	0.039 **	0.04 **	0.039 **	0.038 ***
Town	0.125 ***	0.12 ***	0.123 ***	0.123 *
Rural	0.140 ***	0.14 ***	0.139 ***	0.14 **
Region				
West (comparison group)				
Northeast	-0.025	-0.03	-0.027	-0.025
Midwest	-0.004	-0.002	-0.003	-0.003
South	-0.034 *	-0.03 *	0.034 *	-0.033 *
School Size	-0.000 *	-0.00 *	-0.000 *	-0.000 *
School SES (compared to Low)				
Medium	0.033 *	0.03 *	0.032 *	0.033 *
High	0.049 **	0.05 **	0.047 **	0.048 **
School Composition (compared to predonminantly minority)				
Diverse School	0.073 ***	0.08 ***	0.073 ***	0.074 ***
Predominantly White	0.154 ***	0.16 ***	0.155 ***	0.155 ***
SES X Generation				
Lower Middle X Immigrant		-0.06		
Lower Middle X Second Gen		-0.11		
Middle X Immigrant		-0.03		
Middle X Second Gen		-0.09		
Upper Middle X Immigrant		-0.09		
Upper Middle X Second Gen		-0.16 *		
High X Immigrant		-0.13 **		
High X Second Gen		-0.16 *		
Level of Bilingualism X Generation				
Low X Immigrant	0.065			
Low X Second Gen	-0.062			
Medium X Immigrant	0.225 *			
Medium X Second Gen	0.134			
High X Immigrant	0.051			
High X Second Gen	0.080			
Generation X Parent Expectations				
Immigrant X Less Than HS			0.132	
Immigrant X High School			-0.117	
Immigrant X Associates			-0.028	
Immigrant X Bachelors			-0.155 **	
Immigrant X Masters			-0.099	
Immigrant X PhD			-0.133 **	
Second Gen X Less than HS			0.051	
Second Gen X High School			-0.096	
Second Gen X Associates			-0.089	

Table 4 Continued: OLS Regressions with Interaction Terms Results of Predicted Change in GPA

Second Gen X Bachelors			-0.109	
Second Gen X Masters			-0.197 **	
Second Gen X PhD			-0.215 **	
Generation X Student Expectations				
Immigrant X Less Than HS				-0.58 *
Immigrant X High School				-0.04
Immigrant X Associates				-0.09
Immigrant X Bachelors				-0.06
Immigrant X Masters				-0.13 **
Immigrant X PhD				-0.13 *
Second Gen X Less than HS				0.194
Second Gen X High School				0.065
Second Gen X Associates				0.167 *
Second Gen X Bachelors				-0.11
Second Gen X Masters				-0.26 ***
Second Gen X PhD				-0.1
Constant	1.762 ***	1.73 ***	1.735 ***	1.74 ***
R-Squared	0.345	0.35	0.346	0.346
N= 17,640 ***p<.001 **p<.01 *p <.05				

Figure 3 displays the predicted GPAs for students based on their generation status and level of bilingualism. As mentioned earlier immigrant and second generation students have higher GPAs than third generation students. The interaction in Model 4 finds that the positive association for immigrant children is especially large for those who have a medium level of bilingualism. This finding is consistent with the immigrant paradox and is visually displayed in Figure 3.

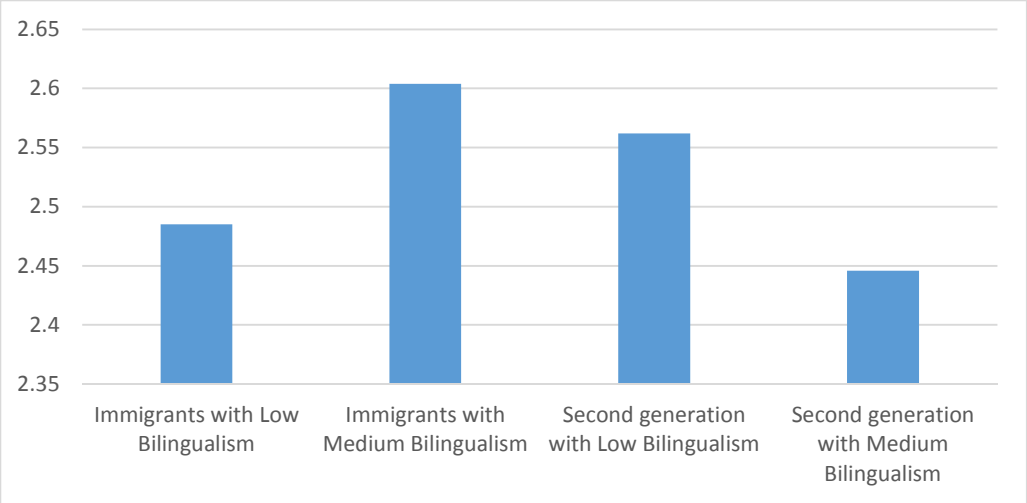

Figure 3: Predicted GPAs by Generation Status and Level of Bilingualism

III. Expectations Results

Almost all expectation variables are significant at the $p<.01$ or $p<.001$ level. The exception is when parents expect students to receive an Associate's degree. There is no significant effect for parents expecting an Associate's degree. Parental and student expectations have similar impacts on achievement. Students who only expect a high school diploma on average have a GPA .203 points lower than students who have uncertain educational expectations. Students who do not expect to attain high school diploma on average have a GPA .539 points lower than students who have uncertain educational expectations. Similarly, students whose parents only expect them to attain a high school diploma have a GPA .075 points lower than when the parents are uncertain of their children's educational expectations. Students whose parents do not expect them to attain a high school diploma have a GPA .327 points lower than when the parents are uncertain of their children's educational expectations.

Students who expect to attain an Associate's degree, on average, have a GPA .074 points higher than students who are uncertain of their educational expectation. Students who expect to attain Bachelor's degree, on average have a GPA .374 points higher than students who are uncertain of their educational expectation. Similarly, students whose parents expect them to earn a Bachelor's degree have a GPA .214 points higher than students whose parents are uncertain of their child's educational expectation.

Students who expect to attain Master's degree, on average have a GPA .479 points higher than students who are uncertain of their educational expectation. Similarly, students whose parents expect them to earn a Master's degree have a GPA .31 points higher than students whose parents are uncertain of their child's educational expectation. Students who expect to attain a PhD, on average have a GPA .566 points higher than students who are uncertain of their educational expectation. Similarly, students whose parents expect them to earn a PhD have a GPA .349 points higher than students whose parents are uncertain of their child's educational expectation. In other words, having higher expectations is associated with better achievement, while having lower expectations is associated with lower achievement. These results are consistent throughout all the models.

My fourth research question was: how do student and parent expectations moderate the effect of generational status? To test this I included an interaction terms in Models 6 for parental expectations and generation status and an interaction in Model 7 for student expectations and generation status. Model 6 accounts for 34.55% of the variance. The interaction shows that the gap between immigrant and third generation students' GPA is reduced for those whose parents expect them to attain a Bachelor's degree (.229-.16

p<.01). Similarly, the gap between immigrant and third generations students' GPA is reduced for those whose parents expect them to attain a PhD (.229-.13 p<.01). The gap in GPA between second and third generations students' GPA is reduced for those whose parents expect them to attain a Master's degree by .2 GPA points on average (.202-.2 p<.05). The gap in GPA between second and third generations students' GPA is reduced by for those who expect their children to attain a PhD (.202-.215 p<.05). This means the immigrant advantage is disappears for students who have high parental expectations.

Model 7 interacts student expectations with generation status and accounts for 34.63% of the variance. The interaction shows that the gap between immigrant and third generation students' GPA is erased for immigrant students who do not expect to attain a high school diploma (.18-.6 p<.01). In other words, there is an advantage for third generation students among those who expect to attain a high school diploma. The gap between immigrant and third generation students' GPA is reduced for students who expect to attain a Master's degree (.18-.1 p<.01). Similarly, the gap between second and third generation students' GPA is also erased for those who expect to attain a Master's degree (.18-.3 P<.001). In other words, there is an advantage for third generation students among those expecting to attain a Masters' degree. The gap between second and third generation students' GPA is reduced for those who expect to attain a PhD (.18-.126 p<.05). The gap between second and third generation students' GPA is reduced for students who expect to attain an Associate's degree (.18-.167 p<.05). The immigrant advantage is also reduced or completely eliminated if the third generation students who hold high educational expectations.

Consistent with the causal model, parental and student expectations do prove to have a direct association with student achievement. Higher expectations translate into higher achievement, while lower expectations translate into lower achievement. The causal model also proposes that parental and student expectations could have a moderating effect on the relationship between generation status and academic achievement. Indeed, findings utilizing my data provides evidence that supports this moderating effect, which could be interpreted as a reduction in the immigrant advantage among students with the highest levels of educational expectations.

To finalize, other control variables that presented a significant effect with students' GPA include: On average, Black students' GPA are .458 points lower than White students' GPA ($p<.001$). Native American students' GPA are .297 points lower than White students' GPA on average ($p<.001$). Hispanic students' GPA are on average .206 points lower than White students' GPA ($p<.001$). However, Asian students' GPA are .158 points higher than White students' GPA on average ($p<.001$). Female students' GPA is .196 points higher than their male peers on average ($p<.001$). Students who attend school in the city have higher GPAs on average than those who attend schools in the suburbs (.051 $p<.01$). Students who attend school in a town have GPAs .109 points higher than those who attend schools in the suburbs ($p<.001$). Similarly, students who attend a rural school have GPAs .127 points higher than those who attend schools in the suburbs ($p<.001$). Students who attend schools in the Midwest have GPAs .044 points higher than those who attend schools in the West ($p<.05$). Students from high-SES schools have GPAs .128 points higher than students in low-SES schools ($p<.001$). Students from medium-SES schools have GPAs .062 points higher than students in low-

SES schools ($p<.001$). Students who attend predominantly White schools have GPAs .128 points higher than students in predominantly minority schools ($p<.001$). Students who attend diverse schools have GPAs .056 points higher than students in predominantly minority schools ($p<.001$). The significance of student and school demographic variables remain consistent through all the models.

Discussion

My first research question asked if there a generational decline in academic achievement among successive generation? I find that there is a decline in regards to achievement from second generation to third generation students as well as from immigrant to third generation students, but not from immigrant to second generation students. Immigrant and second generation students perform significantly better than their third-generation peers. This pattern is also consistent with Hans (2012) study of bilingualism and academic achievement. This result shows support for the Immigrant Paradox. In order to better assess the Immigrant Paradox in future research, it would be useful if the third or higher generation were split into third generation and fourth or higher generation. Another way to better assess these results is to separate immigrants into two categories based on how long they have been in the United States. The first category could be recent immigrants (less than 5 years in the United States) and the second can be immigrants who have been here longer (over 5 years in the United States). This will allow researchers to better differentiate how assimilated this group is.

My second research question asked if bilingualism moderates the effect of the generational patterns of achievement? Results indicate bilingualism does moderate the impact of generation status. After interacting level of bilingualism with generation status I found that the positive association for immigrant children is especially large when they have a medium level of bilingualism. I also found that having a high level of bilingualism is not significantly different from being monolingual in all my models. This difference in being a medium bilingual and highly bilingual could reflect differences in cultural capital

among these students. In this case, having some level of acculturation into the American culture could be beneficial for some children of immigrants.

I expected to find bilingualism to have a stronger positive association with GPA. Future research should aim to have more detailed measures of bilingualism, like measuring language proficiency instead of language use. An example would be to use a similar approach to that of Lee and Hatteberg's study of bilingualism and status attainment among Latinos (Lee and Hatteberg 2015). They measured language proficiency with the following categories; biliterate, fluent oral bilingual, passive bilingual, English dominant, and limited language proficient. These categories helped differentiated student's language ability by how well they are able to not only speak, but understand, read and write in their native language (Lee and Hatteberg 2015).

My third research question asked if family SES moderates the effects of the potential generational decline? Results indicate that students from higher SES backgrounds perform significantly better than those from lower SES backgrounds. However, when SES was interacted with generation status I found that the gap between children of immigrants and third generation students is reduced for higher SES children.

A potential reason for this could be that high SES students have more resources than immigrant and second generation students, in regards to social and human capital. High SES third generation students are surrounded in an environment with other high SES students where high academic performance is very common. These resources could explain why high SES third generation students have an advantage over high SES children of immigrants. As mentioned earlier in this paper, it is common that immigrants come to the United States in hopes of advancing economically because in their home

country they felt a gap between their aspirations and realities (Portes & Rumbaut 2006). These high aspirations could explain immigrant families' high educational expectations. Future research can investigate whether these high expectations are unrealistic and possibly hindering student achievement.

My fourth research question investigates if student and parent expectations moderate the effect of generational status? Results indicate that expectations are a strong predictor of student achievement. As expected, having low expectations is related to having a lower GPA, while having high expectations is related to having a higher GPA. Interestingly, when interacted with generation status the gap between children of immigrants and third generation students' GPA was reduced. Specifically, the gap between immigrant and third generation students is reduced for those whose parents expect them to attain a Bachelors' degree. This reduction in the gap is prevalent in second generation students whose parents expect them to earn a Masters' degree or a PhD. In other words, among students' whose parents have high expectations for them, immigrant and second generation students have less of an advantage over third generation youth.

This reduction in the immigrant advantage could be due to students and parents' having unrealistic or mismatched educational expectations. Zhang et al found that a perceived mismatch between student expectations and parental expectations results in lower student academic achievement (2011). Another explanation could be that there is a lot of pressure and stress placed on immigrant youth to excel academically. This stress could be a result of differences in the education system here in comparison to the students' home country. Some implications for future research are to identify what cultural standards exist within families, how these are related to stress experienced by

students, and how this stress affects the students' achievement. It would be interesting to see how these cultural patterns and stress indicators change from one generation to another. Alternatively, this gap could be due to non-immigrant students who have high parental expectations performing much better in general. This advantage for non-immigrant students could be a result of human, social, and cultural capital.

In the analysis, I controlled for various individual and school characteristics. The majority of immigrant students in this sample are Asian, followed by Hispanic. As commonly seen in other studies, Asian students have higher GPA's than White students. School characteristics play a vital role in student achievement. The analysis displayed that attending schools in cities or towns is better for students' GPA then attending schools in the suburbs. Roughly 30% of immigrant students in this sample attend a school in the city, while 22% attend a school in a town and 30% attended schools in the suburb. The analysis also showed that attending a racially diverse school is better for student GPA than attending a minority serving school. Roughly 38% of immigrant students in this sample attend a racially diverse school. These control variables are very important to include because the schools that students attend is directly associated with their academic performance.

I. Limitations

The biggest limitation of this study is that immigrant generation was not further divided into racial and ethnic groups. The assimilation process for immigrants vary depending on their racial and ethnic background. Similarly, the educational achievement of immigrants vary based on racial and ethnic background. Future research should

categorize immigrant and second generation students by race, ethnicity or even country of origin. Another limitation to this study is missing data. The original sample size for this study was 24,000. This was reduced to 17,640 after accounting for missing information. This reduction has the potential to make my findings less generalizable.

Conclusion

One-fourth of current school aged children come from immigrant families (Capps et al. 2009, U.S. Census Bureau 2011). In this study, I focus on the various perspectives and theories that predict and explain children of immigrants' educational achievement patterns. The three perspectives I focus on are Classical Assimilation Theory, Segmented Assimilation Theory and the Immigrant Paradox. Classical Assimilation Theory asserts that with every successive generation, as ones' ties with their ethnic culture dissipates, assimilation into main stream culture becomes more accessible, hence achievement improves. Segmented Assimilation Theory states that the reception of an immigrant group and their social and human capital at the time of immigration, will influence their upward or downward mobility. The Immigrant Paradox asserts that early generations perform better academically than later generations despite potential linguistic and cultural barriers that put them at an initial disadvantage (Han 2012 & Turley and Koa 2012). Along with examining what generational patterns exist among children of immigrants and determining which perspective is most prevalent, I also analyzed how level of bilingualism, family socioeconomic status, parental and student expectations play a role in explaining academic achievement among children of immigrants.

Each theory I tested has a different set of criteria that determines whether it is supported or not. Support for Classical Assimilation Theory would be displayed if there were significant increases in student GPA across generations. Support for the Immigrant Paradox would be displayed if there were significant decreases in student GPA across generations. While support for Segmented Assimilation Theory would be displayed if

there are not significant differences across generations, but instead differences occur through variables like family SES or bilingualism.

I found that my results are most consistent with the Immigrant Paradox. There is a generational decline between second and third generation students, as well as between immigrant and third generation students. However, immigrant students and second generation students are not statistically different from one another. This pattern is also found in Hans' 2012 study of bilingualism and academic achievement.

I found that level of bilingualism among children of immigrants does moderate the effect of generational patterns, but not for everyone. When I interacted level of bilingualism with generation status I found that the positive association for immigrant children is larger for those who have a medium level of bilingualism.

I found that family socioeconomic status plays an important role in student achievement. Students from higher SES backgrounds preform significantly better than those from lower SES backgrounds. However, when interacting SES with generation status I found that being from a higher SES background reduces the positive relationship between generation status and achievement. In other words, SES alone is associated with higher achievement. However, high SES reduces the positive relationship between generation status and achievement. This means that immigrant and second generation students from higher SES backgrounds are less advantaged in comparison to their third-generation peers.

Student and parental expectations were strong predictors of student achievement. Those with low expectations had a negative effect on their achievement, whereas those with high expectations had a positive effect on achievement. In other words, having high

expectations is associated with higher achievement, while having lower expectations is associated with lower achievement. When I interacted expectations with generation status, the positive relationship between high expectations and GPA was reduced. In other words, children of immigrants with high expectations have a smaller advantage among children with high parental expectations. This could be due to a perceived mismatch between student and parental expectations.

Children of immigrants currently constitute almost one fourth of school aged children, and are among the fastest growing groups within the American education system (Capps et al. 2009, U.S. Census Bureau, 2011). The United States is and continues to be a melting pot of different ethnicities and cultures. Immigration will continue to rise making it important to understand this growing population. Scholars continue to be interested in the educational progress of immigrants and their children as a method of assessing their future socioeconomic process (Portes and Rumbaut 2006, Feliciano 2006, and Kronberg 2008). This research contributes to previous literature on children of immigrants' educational achievement by understanding the assimilation process of immigrants. This research is different from previous research because I focus on three varying perspectives, then choose which is supported through my analysis. This study supports the notion of the Immigrant Paradox, where earlier generations perform better academically than later generations I also assesses the moderating roles of bilingualism, family SES and expectations on the relationship between immigrant generation status and academic achievement. Considering this population is reportedly outperforming non-immigrant students it is vital to understand what is causing these differences in academic achievement. Future studies on children of immigrants' academic

achievement need to focus on what factors distinguish children of immigrants from their third-generation peers that allows them to outperform those students academically. Once this is identified it is up to the schools to promote the diversity of their students' ethnic backgrounds in order to preserve what makes them unique.

References

Bui, Hoan N. 2009 "Parent—Child Conflicts, School Troubles, and Differences in Delinquency Across Immigration Generations." Crime & Delinquency 55 (3): 412-441.

Capps, Randy, Margaret, Simms, and Ajay, Chaudry. 2009 Children of Immigrants: National and State Characteristics. Washington, DC: Urban Institute.

Crosnoe, Robert and Turley, Ruth Lopez. 2011. K-12 Educational Outcomes of Immigrant Youth. The future of Children. 21 (1): 129-152.

Feliciano, C. 2006. Beyond the Family: The Influence of Premigration Group Status on the Educational Expectations of Immigrants' Children. Sociology of Education, 79 (4): 281-303.

Fleischmann, Fenella, Cornelia, Kristen, Heath, Anthony F., Brinbaum, Yaël, Deboosere, Patrick, and Granato, Nadia 2014. "Gender Inequalities in the Education of the Second Generation in Western Countries." Sociology of Education 87 (3): 143-170.

Fuligni, Andrew J. 2012. "The Intersection of Aspirations and Resources in the Development of Children from Immigrant Families." Pp. 299-308. In *The Immigrant Paradox in Children and Adolescents*. Edited by Cynthia Garcia Coll and Amy Kerivan Mark. Washington DC: American Psychological Association.

Fuligni, Andrew J., and Hirokazu, Yoshikawa. 2004. "Investments in Children Among Immigrant Families." Family Investments in Children's Potential: Resources and Parenting Behaviors that Promote Success. 139-162.

Gandara, Patricia, Maxwell-Jolly, Julie, Garcia, Eugene, Asato, Jolynn, Gutierrez, Kris, Stritikus, Tom and Curry, Julia. 2000. The Initial Impact of Proposition 227 on the Instruction of English Learners. Berkeley: California Policy Research Center.

Georgiades, Katholiki, Boyle, Michael H., and Duku, Eric. 2007 "Contextual Influences on Children's Mental Health and School Performance: The Moderating Effects of Family Immigrant Status." *Child development* 78 (5): 1572-1591.

Gibson, Margaret, and John U. Ogbu. 1991 Minority Status and Schooling: A Comparative Study of Immigrant and Involuntary Minorities. New York: Garla

Han, Wen-Jui. (2012). "Bilingualism and Academic Achievement: Does Generation Status make a difference?" Pp. 161-184 In *The Immigrant Paradox in Children and Adolescents*. Edited by Cynthia Garcia Coll and Amy Kerivan Mark. Washington DC: American Psychological Association.

Hao, Lingxin, and Yingyi Ma. (2012) "Immigrant Youth in Postsecondary Education." Pp. 275-298. In *The Immigrant Paradox in Children and Adolescents*. Edited by Cynthia Garcia Coll and Amy Kerivan Mark. Washington DC: American Psychological Association.

Hernandez, Donald J., et al. 2012 "Children in Immigrant Families: Demography, Policy, and Evidence for the Immigrant Paradox." Pp. 17-36. In *The Immigrant Paradox in Children and Adolescents*. Edited by Cynthia Garcia Coll and Amy Kerivan Mark. Washington DC: American Psychological Association.

Ingels, Steven J., Pratt, Daniel J., Herget, Deborah R., Burns, Laura J., Dever, Jill A., Ottem, Randolph, Rogers, James E. (2011) High School Longitudinal Study of

2009 (HSLS:09) Base-Year Data File Documentation https://nces.ed.gov/surveys/hsls09/pdf/2011328_1.pdf

Kao, Grace. 2004. Parental Influence on the Educational Outcomes of Immigrant Youth. The International Migration Studies of New York. 38 (2): 427-449.

Kao, Grace, Teinda M. 1995. Optimism and Achievement: The Educational Performance of Immigrant Youth, Social Science Quarterly, 76: 1-19

Khattab, Nabil. 2015 "Students' Aspirations, Expectations and School Achievement: What Really Matters?" British Educational Research Journal 41 (5): 731-748.

Kroneberg, C. (2008). Ethnic Communities and School Performance Among the New Second-Generation in the U.S.: Testing the Theory of Segmented Assimilation. Annals of the American Academy of Political and Social Science, 620: 138–160.

Lahaie, Cynthia 2008. School Readiness of Children of Immigrants: Does Parental Involvement Play a Role? Social Science Quarterly, 89 (3): 684-705.

Lee, Jennifer C., and Hatteberg, Sarah J. 2015 "Bilingualism and status attainment among Latinos." The Sociological Quarterly 56 (4): 695-722.

Lutz, Amy, and Stephanie Crist. 2009. "Why do Bilingual Boys get Better Grades in English-only America? The Impacts of Gender, Language and Family Interaction on Academic Achievement of Latino/a Children of Immigrants." Ethnic and Racial Studies 32 (2): 346-368.

Mickelson, Roslyn Arlin. 1989 "Why Does Jane Read and Write So Well? The Anomaly of Women's Achievement." Sociology of Education pp. 47-63.

Min, Sookweon, and Goff, Peter T. 2016 "The Relations of a School's Capacity for Institutional Diversity to Student Achievement in Socio-Economically,

Ethnically, and Linguistically Diverse Schools." International Journal of Inclusive Education. 1-16.

National Center for Education Statistics (NCES). 2017. "Common Core Data." Retrieved March 09, 2017 (https://nces.ed.gov/ccd/rural_locales.asp).

Okamoto, Dina G., Herda, Daniel, and Hartzog, Cassie 2013. Beyond Good Grades: School Composition and Immigrant Youth Participation in Extracurricular Activities. Social Science Research, 42 (1): 155-168.

Portes, Alejandro, & Hao, Lingxin 2004. The Schooling of Children of Immigrants: Contextual Effects on The Educational Attainment of the Second Generation. Proceedings of the National Academy of Sciences of the United States of America, 101 (33): 11920-11927.

Portes, Alejandro and Ruben Rumbaut. 2001. Legacies: The Story of the Immigrant Second Generation. Berkeley: University of California Press.

Portes, Alejandro and Ruben Rumbaut. 2006. Immigrant America: A Portrait. Third Edition Los Angeles: University of California Press.

Portes, Alejandro, and Min Zhou. 1993 "The New Second Generation: Segmented Assimilation and its Variants." The Annals of the American Academy of Political and Social Science 530 (1): 74-96.

Roscigno, Vincent J., Donald Tomaskovic-Devey, and Martha L. Crowley. 2006. "Education and The Inequalities of Place." Social Forces 84 (4): 2121-2145.

Rumbaut, Ruben G. (2005). Children of Immigrants and Their Achievement: The Roles of Family, Acculturation, Social Class, Gender, Ethnicity, and School Context. Addressing the Achievement Gap: Theory Informing Practice, 23-59.

Skutnabb-Kangas, T. (2008). Linguistic Genocide in Education-Or Worldwide Diversity and Human Rights? New Delhi: Orient Longman.

Suárez-Orozco, et al. 2010. Academic Trajectories of Newcomer Immigrant Youth. Developmental Psychology, 46(3), 602.

U.S. Census Bureau. (2011). Table 4.1: Population by sex, age, and generation: 2010.

U.S. Census Bureau, Current Population Survey, Annual Social and Economic Supplement, 2010. Retrieved from http://www.census.gov/population/foreign/files/cps2010/T4.1.xls

Vernez, Georges, and Allan Abrahamse. 1996. How Immigrants Fare in US Education. RAND, 1700 Main Street, PO Box 2138, Santa Monica, CA 90407-2138.

Wells, Ryan. 2009. "Segregation and immigration: An examination of school composition for children of immigrants." Equity & Excellence in Education 42 (2): 130-151.

Wells, Ryan. 2010 "Children of Immigrants and Educational Expectations: The Roles of School Composition." *Teachers College Record* 112 (6) :1679-1704.

Zhang, Yanyan, et al. 2011. "The Reciprocal Relationships Among Parents' Expectations, Adolescents' Expectations, and Adolescents' Achievement: A Two-Wave Longitudinal Analysis of the NELS Data." Journal of Youth and Adolescence 40 (4): 479-489.

Zhou, Min. 1997. Segmented Assimilation: Issues, Controversies, and Recent Research on the New Second Generation. The international Migration Review, 31 (4): 975-1008.

Zhou, Min. 1999. “Segmented Assimilation: Issues, Controversies, and Recent Research on the New Second Generation.” Pp. 196–211 in *The Handbook of International Migration: The American Experience*, edited by C. Hirschman, P. Kasinitz, and J. DeWind. New York: Russell Sage Foundation.

Zong, Jie, and Batalova, Jeanne. 2016. "Frequently Requested Statistics on Immigrants and Immigration in the United States." Immigration Policy. N.p., 26.