

UC Santa Cruz

UC Santa Cruz Electronic Theses and Dissertations

Title

The Mediating Effect Of Peers, Teachers, And English-Language Status On The Belongingness-Achievement Relationship Among Mexican And Filipino Immigrant High School Students

Permalink

<https://escholarship.org/uc/item/44t900qn>

Author

Sánchez Ordaz, Arnold E.

Publication Date

2018

Peer reviewed|Thesis/dissertation

UNIVERSITY OF CALIFORNIA
SANTA CRUZ

**THE MEDIATING EFFECT OF PEERS, TEACHERS, AND ENGLISH-
LANGUAGE STATUS ON THE BELONGINGNESS-ACHIEVEMENT
RELATIONSHIP AMONG MEXICAN AND FILIPINO IMMIGRANT HIGH
SCHOOL STUDENTS**

A dissertation submitted in partial satisfaction
of the requirements for the degree of

DOCTOR OF PHILOSOPHY

in

EDUCATION

by

Arnold E. Sánchez Ordaz

March 2018

The Dissertation of Arnold E. Sánchez Ordaz is
approved:

Eduardo Mosqueda, Ed.D., Chair

Kip T. Téllez, Ph.D.

Rebecca Covarrubias, Ph.D.

Catherine Cooper, Ph.D.

Tyrus Miller
Vice Provost and Dean of Graduate Studies

Copyright © by
Arnold E. Sánchez Ordaz
2018

Contents

List of Figures.....	vi
List of Tables.....	vii
Abstract.....	viii
Dedication.....	x
Acknowledgments.....	xi
Chapter 1: Introduction.....	1
Statement of the Problem: Academic Achievement Among Immigrant Students.....	1
Chapter 2: Globalization & immigration—A Contextual Perspective for Understanding Belongingness in School.....	7
Immigrant Youth in the United States.....	7
Globalization.....	12
Historical Perspectives of Immigration for Informing Belongingness.....	14
Heterogeneity Among Immigrants and Implications for Belongingness.....	17
Immigration from Mexico a Historical Perspective.....	20
Immigration from the Philippines a Historical Perspective.....	23
Common Histories and Distinct Language Background Among Filipinos and Mexicans.....	25
English Instruction in the Philippines as it Relates to Belongingness in U.S. Schools.....	27

Belongingness: A Comparison Among Filipino and Mexican Immigrant Students.....	28
Chapter 3: Belongingness.....	31
Origins of Belongingness.....	31
Defining Belongingness.....	34
Emotions and Belongingness.....	36
Belongingness and Academic Achievement	39
Belongingness Interventions.....	45
Belongingness and Immigrant Student Experiences.....	47
Chapter 4: Conceptual Framework.....	50
Theoretical Considerations for Understanding the Belongingness and Achievement Relationship Among Immigrant students.....	50
The Linguistic Habitus as it Relates to School Belongingness.....	54
Language, Power, Belongingness & Access.....	57
Chapter 5: Inquiry and Research Questions.....	62
Chapter 6: Data and Methods.....	75
Data Source.....	75
Variables in the Study.....	76
Analytical Sample.....	87
Analytic Strategy.....	90
Chapter 7: Results.....	102
Sense of Belongingness as an Outcome Variable.....	103

Immigration Status and its Effect on Sense of Belongingness.....	108
Chapter 8: Discussion.....	118
Summary of Findings.....	120
The Relationship Between Control Predictors and Ninth Grade GPA.....	136
Implications for Policy and Practice.....	140
Limitations & Future Research.....	149
Conclusion.....	155
Appendix: Additional Resources.....	157
References	165

List of Figures

Figure A.1. Data Channels, Preparation, and Analysis.....	157
Figure A.2. Quantifying Generational Status.....	158

List of Tables

Table 1. Descriptive Statistics for Variables in the Study.....	83
Table 2. Coding for Variables in the Extraction.....	85
Table 3. Descriptive Statistics of the Variables in the Analytic Sample.....	88
Table 4. School Sense of Belonging by Language Competence.....	104
Table 5. School Sense of Belonging by Generational Status.....	109
Table 6. Ninth-Grade Grade Point Average and School Sense of Belongingness.....	112
Table A.1. Extracted Variables and Descriptions.....	159
Table A.2. Student’s Race/Ethnicity Composite for Extracted Data Set.....	160
Table A.3. Student’s Hispanic/Latino/Latina Subgroup Composite Frequencies Extracted from Data Set.....	161
Table A.4. Student’s Asian Subgroup Composite Frequencies Extracted from Data Set.....	162
Table A.5. Student, Parent 1, and Parent 2 Places of Birth.....	162
Table A.6. Unrotated Principal Components Analysis Generated in STATA.....	163
Table A.7. Principal Components Eigenvectors Generated in STATA.....	164

Abstract

The Mediating Effect of Peers, Teachers, and English-Language Status on the Belongingness-Achievement Relationship Among Mexican and Filipino Immigrant High School Students

Arnold E. Sánchez Ordaz

The relationship between a students' sense of belongingness and their academic achievement in high school has been well established in the research literature. However, few studies have explored this relationship among immigrant students. This study hypothesizes that belongingness and achievement for immigrant students may be specifically-mediated by peer and teacher influences. Therefore, engagement with academically inclined peers, and teachers who share an ethos of commitment toward their students may result in both belongingness and achievement for immigrant students. In addition, a students' language status, which may help to develop social relationships, may also play an important role. Therefore, an investigation on the effect of peers, teachers and the English-Language status of immigrant students may clarify the link between belongingness and achievement. This dissertation uses the High School Longitudinal Study of 2009 (HSL:09) to test a model that accounts for premigration measures including language status, while including the effect of peers, and teachers, on sense of belongingness and academic achievement. The analysis for this study is organized into two parts. In Study 1, belongingness is treated as an outcome and the effects of peers, teachers and English-language status are regressed on sense of belongingness. In Study 2, belongingness is treated as a predictor variable

and the outcome is a student's high school GPA. In the first study, the results showed statistically significant results for the effect of peers and teachers on sense of school belongingness. In the second study, the effect of peers, teachers and sense of school belongingness were statistically significant predictors of academic achievement. The limitations of this study and the implications for future research are also discussed.

Keywords: *Sense of school belonging; English-language status; Immigrant students;*

HSL:09

Dedication

I dedicate this dissertation to my mother, Martina, and my siblings, Emily, Heidi, Richard, and Enrique. Gracias por el sacrificio que han hecho para yo poder continuar mis estudios. Los quiero mucho.

Acknowledgments

This dissertation would not have been possible without the guidance of my dissertation committee, Dr. Eduardo Mosqueda, Dr. Kip Téllez, Dr. Rebecca Covarrubias, and Dr. Catherine Cooper. First and foremost, I would like to thank Dr. Mosqueda, *Profe*. Thank you for your mentorship and commitment to my development as your graduate student. You have inspired me with your humility and dedication to your career. You will remain the quintessential example of the professional I hope to be. To Dr. Téllez, thank you for your guidance and your ongoing commitment to my work and for all of your writing advice. To Dr. Covarrubias, thank you for pushing my thinking and for encouraging me to strengthen my scholarship. I am also thankful to Dr. Catherine Cooper for her compassion and support. You have encouraged me to remain persistent and to embrace the writing experience with open arms.

I am also grateful to Saúl I. Maldonado, Edgar Martínez, Mecaila Smith, Ethan Chang, Kirsten Standeven, Priscilla Sung, and Emily Lovell for their kindness and moral support. Thank you all for facing the trials and tribulations of graduate school with me.

I am also thankful to Pablo G. Reguerín for believing in my potential and for investing in my professional development. Your humanistic approach to helping students achieve their educational aspirations is inspiring.

To Miguel and Kara Sánchez for their support throughout the years: Thank you both for your generosity and commitment to my education.

To my longtime friend Marina Hernandez, thank you for your friendship and ongoing support. Todos mereemos una amiga como tu.

To Adrian Cudal for his patience, support, and understanding and for making me laugh in the most stressful of times. I also extend my gratitude to Adrian's mother and father, Marissa and Rodolfo Cudal, for welcoming me into their family.

I am grateful to Emerson Lagpacan. The time we shared inspired me to learn more about the Filipino people and culture. Thank you for all that you did for me.

I would like to thank my mother for her unconditional love and support. You have taught me the importance of resilience and hard work. To my siblings, I hope that I have been a good role model to you and that I have inspired you to follow your dreams.

Last, I extend my gratitude to those who have been there for me in times of personal need, including Dr. Mosqueda, Anthony Canela, Daniel Newell, Miguel and Kara Sánchez, and Marina Hernandez.

My thirst for knowledge and the unconditional support of others have given me the opportunity to pursue higher education. It is now my responsibility to advocate for others in the way that you all did for me. To all of the people not mentioned here who believed in my potential, thank you. I will forever be indebted to you all.

Chapter 1: Introduction

Belongingness has been identified as a critical feature of the academic lives of students (Glasser, 1986). In fact, multiple corroborating studies have demonstrated that favorable perceptions of belongingness help increase academic motivation and achievement (Anderman, 1999; Goodenow, 1993a; Goodenow & Grady, 1993; Roeser, Midgley & Urdan, 1996; Wentzel, 1993, 1997), school-related affect (Anderman, 1999; Battistich, Solomon, Kim, Watson, & Schaps, 1995; Roeser, et al, 1996), and have prevented students from leaving schooling altogether (Finn, 1989; Lovitts, 2001; Wehlage, 1989). School belongingness has also resulted in increased academic effort (Sánchez, Colón, & Esparza, 2005), students' help-seeking behaviors, participation in the social life of school (Gibson, et al., 2004) and general student engagement (McNeely & Falci, 2004). Osterman (2000) suggested that students who experience feelings of inclusion and acceptance within schools are more engaged, motivated, and invested in their academic experiences. Although the relationship between belongingness and academic achievement is well established among the general student population, no studies to date have explored if the relationship is also true for immigrant students who begin school speaking a language other than English.

Statement of the Problem: Academic Achievement Among Immigrant Students

There exist several important developmental changes associated with adolescent development. For example, early-adolescence may “lead to an increased capacity for abstract and conceptual thought and a growth beyond the largely egocentric thinking of childhood” (Goodenow, 1993a, p. 23). The heightened self-

consciousness experienced during adolescence may also diminish motivation and achievement due to the threat of embarrassment that public exposure can induce among adolescents (Goodenow, 1993a; Nicholls, 1990). In addition, many adolescents grapple with issues of identity (Lopez & Stanton-Salazar, 2001; Ngo, 2009) and increased autonomy, which makes high school a unique time period for their development (Booker, 2006). Thus, adolescence becomes a critical “turning point in the educational lives of young people” (Goodenow, 1993a, p. 21), as the quality of their social relationships during high school may have profound implications for their current and future academic lives. The development of quality social relationships may be especially difficult for adolescent immigrant students.

Furthermore, the changes associated with the transition from elementary- and middle school are typically contrasted with the less personalized contact that students experience in high school. Specifically, the time that students spend with individual teachers in a typical school day reduces as students age. This structural change, a consequence of the need for content specialist teachers and school funding, may hinder the prospects of forming meaningful relationships, thereby weakening the belonging and achievement relationship. In fact, prior research by Goodenow (1993a) suggested that students have less personalized contact with high school teachers, leading to fewer interpersonal relationships, which, in turn, may affect students’ perceptions of belongingness. Beyond academic achievement, prior research has demonstrated that a high sense of belonging tends to correlate positively with other psychological benefits such as wellbeing, increased self-esteem, and positive mood

(Begen & Turner-Cobb, 2015; Newman, Lohman, & Newman 2007). Other psychological factors have also been associated with improved educational outcomes. For example, Goodenow (1993a) suggested that self-reflection and identity exploration, which are part of the adolescent experience, may lead to intellectual interest, self-regulated learning, and a commitment to education.

The aforementioned studies suggest that optimizing immigrant students' psychological well-being may be critical for their achievement within the context of U.S. schools. In fact, Suárez-Orozco and his colleagues (2008) contend that the quality of social relationships promote emotional support, guidance, role modeling, positive feedback, tangible assistance, access to information, and a sense of belongingness for immigrant students. Yet a variety of factors may lead students to experience confusion about who they are, making “the teenage years particularly sensitive to the development of a sense of belonging in the high school environment” (Booker, 2006, p. 4). However, the underlying assumption of this work is premised on the notion that when focusing on investigations involving immigrant youth, their communicative abilities with peers and teachers, underscores the importance of language, the relationships with peers and teachers premised on language use, and the effect of those relationships on the belongingness and achievement relationship.

Taken together, because belongingness in schools may be mediated by relationships with peers and teachers, which is in turn influenced by the capacity to communicate effectively, (Goodenow, 1993a), the language status of immigrant students deserves empirical attention. If English-language status is related to the

psychological experiences of immigrant students, then accounting for its effects should be central to research investigating the belongingness and achievement relationship among immigrant youth. However, at the core of this argument is the extent to which the prospect of building quality social relationships may not be a given for immigrant students who attend schools where peers and teachers do not communicate or teach in the native language of immigrant students. This may result in limited opportunities for building social relationships, due to language barriers, with academically inclined peers and teachers.

To better understand how language background, belongingness, immigration status, and academic achievement interact for immigrant high school students, this dissertation will compare Filipino immigrant students' attitudes and experiences with Mexican descent students. Using the High School Longitudinal Study of 2009 (HSLS:09), this dissertation first tests a model of premigration measures among Mexican and Filipino immigrant high school students' language status, the effect of peers, and teachers, on sense of belongingness. The second model explores the effects of peers, teachers and sense of belongingness on academic achievement.

By comparing Filipino and Mexican immigrant students, it is expected that this study will shed light on a paradoxical finding among-Filipino youth: Middle-class profiles of Filipino families results in counterfindings with respect to their youths' psychological well-being (Espiritu & Wolf, 2001; Rumbaut, 1994; Rumbaut, 1999; Wolf, 1997). More specifically, Filipino students tend to come from families who are socioeconomically stable, they tend to be well acculturated and assimilated

well into the U.S. mainstream, and yet they tend to experience lower self-esteem and higher depression when compared to other immigrant groups. Little is still understood as to why Filipino youth tend to experience troubling psychological profiles despite their educational achievement and English competency (Espiritu & Wolf, 2001; Wolf, 1997).

Lastly, in investigating the belonging and achievement relationship, it is paramount that immigrant student experiences be understood relative to the historical context of their home countries. Hence, the review of the literature in chapter two first focuses on the experiences of immigrant youth in the U.S., patterns of immigration within the global context are then discussed, followed by a historical overview of immigration from Mexico and the Philippines. The importance of language for guiding patterns of adaptation and incorporation to U.S. schools are also discussed. Ultimately, the focus of the literature review in chapter two is to highlight the unique challenges associated with immigration for both Mexican and Filipino students.

Chapter three offers a comprehensive review of the belongingness literature. The origins and definitions of belongingness are discussed. Emotions, though not directly investigated in this dissertation, are also discussed relative to the belonging literature to better assist in the interpretation of the results. The literature on belongingness and academic achievement as well as the interventions designed to optimize this relationship are also discussed. The final focus of chapter three is to draw from this review of the literature to exemplify the relevance of school belonging on immigrant student experiences in U.S. schools. Chapter four argues for the

application of social reproduction theory and its tenets for understanding the belongingness and achievement relationship. Chapter five outlines the research questions, chapters six focuses on the data and methods followed by the results in chapter seven and a discussion of the findings in chapter eight.

Chapter 2: Globalization & Immigration—A Contextual Perspective for Understanding Belongingness in Schools

Immigrant Youth in the United States

Leaving their home country, regardless of the cause, results in the physical departure from familiar people and places for immigrants. This sacrifice is often an attempt to improve their extended families' quality of life through social, political, or economic means. As a result, threats to the humanitarian rights of people from around the world have affected the disenfranchised and have led to the mass exodus of those fleeing persecution. In other cases, the need for a larger labor force has led businesses and industries to hire, sometimes without the state-sanctioned documentation, workers from a range of countries (Portes & Rumbaut, 1996).

The United States has become a popular destination for immigrants. As a result of globalization, national borders continue to dissipate due to advancements in communication and technology (Suárez-Orozco, 2001), and accessibility to information and the prospects of a better life relative to their home countries have resulted in the emigration of diverse people from around the world (Portes & Rumbaut, 1996). The life opportunities beyond people's country of origin has positioned the United States as one of the leading nations where immigrant aspirations of social mobility can be attained. However, politics in some countries is often hostile toward immigrants. In the United States immigration opponents have contested whether enough is being done for the country's own native-born citizens. These beliefs are often premised on the notion that immigrants deplete the country of

resources and fuel anti-immigrant sentiments. The framing of immigration has also resulted in mixed opinions about the legal rights of immigrants and their children (Lakoff & Ferguson, 2006).

Fortunately for the school-aged children of immigrants, attending school may shield them from anti-immigrant policies and nativist sentiments. Protected by the 1982 U.S. Supreme Court ruling of *Plyler v. Doe*, immigrant children cannot be denied access to a public K—12 education. However, despite their legal access to public schooling in the United States, immigrant students face barriers consistent with nonimmigrant students such as socioeconomic status (SES) and gender that mediate their academic achievement. For example, Lew (2007) demonstrated that students are often excluded from access to educational resources on the basis of their parents' SES status. This holds implications for the rapidly growing number of students in U.S. public schools who are linguistically diverse and low-income. However, the achievement and belongingness relationship among immigrant students may be better understood through relationships, premised on English-Language status, with peers and teachers. Therefore adhering solely to English-based instruction may reinforce the structural inequities that hinder the progress of immigrant students. However, immigrant students who have some familiarity of the English-language may have an advantage over non-English-speaking immigrants. Consequently, immigrant students from English-speaking countries may readily adapt to the U.S. mainstream in ways that non-English speaking immigrant students do not.

An investigation on the English language-status of immigrant students may lend insight into the role of language on the immigrant experience. More specifically, investigating the effect of language within the context of schools may offer evidence to explain the variations on the belongingness and achievement relationship among immigrant youth in lieu of their premigration variabilities, while accounting for the barriers they share with nonimmigrant students such as SES and gender. The social, cultural, and historical lives of immigrants were taken into account when determining comparison groups for this study. Because the Philippines has established English as the primary language of instruction, it was hypothesized that Filipino immigrant students in the sample would be more likely to build positive relationships with peers and teachers resulting in a greater sense of school belongingness and greater academic achievement. In contrast, Mexican immigrant students who had not received English instruction in Mexican schools would have difficulties building relationships with peers and teachers thereby negating the belongingness and achievement relationship.

Mexico and the Philippines were also identified as the most appropriate options for this comparison because the Philippines has as much Hispanic influences as does Mexico. Like Mexico, the Philippines was under Spanish rule for more than 300 years. Consequently, the Spanish left a long-lasting imprint in the Philippines and Mexico that still resonates in the lives of the nations' citizens today. Filipinos and Mexicans continue to resemble each other's cultural, historical, religious, culinary, and linguistic lives (Ocampo, 2016). Throughout the colonial period, Spanish was the

official language of government, education, and trade. As a result, Spanish words made their way into the native language of the Philippines, Tagalog. Interestingly, Mexican indigenous words of Nahuatl origin, which were not a part of European Spanish, made their way to the Philippines as well. However, the governance of the United States from 1898 to 1902 had a profound effect on the language of the Philippines, leading schools to adopt English as the primary language of instruction.

The striking similarities among the Mexican and Filipino people as well as the differences in the languages of instruction in their schools lend themselves as a useful model for assessing the effect of language on the socioemotional and academic lives of immigrant youth in U.S. schools. Despite their English competency, like Mexican students, Filipino students are often considered to be racial minorities in the context of U.S. schools today. Yet the parents and guardians of Filipino children, relative to Mexican children, are more likely to be college educated, more likely to become naturalized U.S. citizens, have higher income, and are less likely to be uninsured (McNamara & Batalova, 2015). The historical similarities and language differences as well as other pre- and post- migration variations that immigrant students from both nations bring with them are useful for understanding their immigrant experiences in U.S. schools.

The English-language status of Filipino and Mexican immigrant students in U.S. schools may mediate their social, emotional and academic experiences. These experiences, in turn, may mediate the academic achievement of adolescent Filipino and Mexican immigrant students. Children, both immigrants and nonimmigrants

alike, must learn to come of age in schools that may or may not meet their developmental needs. Adolescence is a unique period when youth may grapple with issues of identity and increased autonomy (Rumbaut, 2005). This may complicate the high school experience, making it a critical period for developing a sense of belongingness (Booker, 2006; Gillen-O'Neel & Fuligni, 2013).

The quality of social interactions is one of the most critical elements for student development during adolescence (Newman, Lohman, Newman, Myers, & Smith, 2000). For instance, alienation from schooling is thought to increase as youth transition from middle into high school (Rumberger, 1995). Concurrently, there is an increased need for positive and supportive relationships with peers and nonparental adults (Anderman, 2003; Eccles, Early, Fraser, Belansky, & McCarthy, 1997). The adolescent experience is complicated by the pressures associated with an increased focus on grades and academic performance (Anderman, 2003). In addition, Walton and Cohen (2007) suggested that members of socially stigmatized groups may be more likely to question their social belonging in mainstream institutions such as schools. Mexican immigrant students, who are least likely to be English proficient and who are already a racially stigmatized student group, may exacerbate their experiences, relative to Filipino immigrant students, in U.S. schools. An investigation involving the complex interplay of variabilities among these students including income, gender, ethnicity and language status could ultimately lend insight for understanding their school belongingness.

Arhar, and Kromrey (1993) argued that “achieving membership in school is a complex process because student experiences in school and the way those experiences are interpreted by students are affected by many factors, often beyond the control of individuals teachers or even an entire staff” (p. 5); thus focusing solely on language would not be representative of the factors that may complicate school belongingness. For this reason, also analyzing the effect of peers and teachers, as well as SES and gender, may result in a more comprehensive analysis. Given that belongingness has been described as a fluid and dynamic construct (Cartmell & Bond, 2015), it is reasonable to assume that the unique context of schools transforms the relationship between these mediating factors and school belongingness.

Globalization

Globalization has had a profound impact on the psychological adaptation of immigrant students in U.S. schools. Suárez-Orozco (2001) argued that understanding youths’ sense of belonging in this global era is paramount. Suárez-Orozco (2001) defined globalization as a

processes of change, generating at once centrifugal (qua the borders of the nation state) and centripetal (qua the post-national) forces that result in the deterritorialization of important economic, social, and cultural practices from their traditional moorings in the nation state. (p. 347)

Hence investigating issues related to immigrant students in schools within the global context depends on a holistic approach that accounts for immigrant variations (Suárez-Orozco & Suárez-Orozco, 2001; Suárez-Orozco, 2001). Research on Filipino and Mexican immigrant students must then investigate sense of school belongingness

through psychological, sociological, sociocultural, and sociolinguistic approaches to account for the challenges the global era presents.

Globalization may undermine “the once imagined neat fit between language, culture, and the nation” (Suárez-Orozco, 2001, p. 346). Globalization lends itself to a transnational economic, social, and cultural blend (Suárez-Orozco, 2001) that showcases the push-and-pull factors as well as the macro and micro forces leading people to leave their home countries. Youth in the global context will eventually benefit from higher order critical thinking skills, metacognitive abilities, and the knowledge of cultures and languages of others (Suárez-Orozco & Sattin, 2007). The advancements in technology have bolstered the global era because people in other nations now have access to a vast amount of information. Consequently, national borders are now more ambiguous and less demarcated (Suárez-Orozco, 2001). The access to information may result in an awareness of the lives of others and may serve as a reference point for situating oneself in the global context. Among one of Suárez-Orozco’s three pillars of globalization is the unprecedented levels of immigration. Suárez-Orozco added that globalization is “the reason that immigrant children are entering U.S. schools in unprecedented numbers” (p. 345).

Consequently, languages spoken by immigrant children, if not consistent with the dominant language of the schools in the host nation, may complicate communicative abilities and preclude the formation of social relationships. These communicative abilities may exacerbate the psychological experiences associated with the acceptance of peers and teachers. Because immigration has become central

to understanding today's global society, researchers interested in the psychological experiences of immigrant students must consider premigration factors leading to the educational prospects of these students. Arguably, this new global era has yielded social, racial-ethnic, language-minority, and immigrant dimensions that are inextricably connected to the psychological experiences of immigrant students in U.S. schools. A study of Mexican and Filipino immigrant students in the United States must, then, consider how these dimensions shape the students' academic aspirations, expectations and realities (Lopez & Stanton-Salazar, 2001).

Historical Perspectives of Immigration for Informing Belongingness

Understanding the differences among immigrants today in comparison to those of the pre-1965 era (i.e., before the Immigration Act) complicates the interpretability of a study on modern-day immigration. The patterns of immigration in today's social and political contexts are strikingly different. Specifically, two major waves of immigration have changed the course of American history. According to Foner (2005), Italian and Jewish immigrants characterized the first wave of immigration. Immigration post-1965, by contrast, primarily comprised of immigrants of color of African, Asian, and Latin- American descent. Despite that the first wave of immigrants from 1880 to 1920 were of Jewish and Italian ancestry, they were not considered White, like the Anglo-Saxons and Nordics from Northern and Western Europe. Unlike Jewish and Italian immigrants, the post-1965 wave of immigrants were people of color, such as West Indians, Hispanics, and Asians, who, because of their noticeable phenotypic differences, were perceived as outsiders. Even Asians,

who were often perceived as White, were still ostracized by their physical features despite being born in the United States. The post-1965 immigration wave was important because it dramatically diversified the immigrant communities across the United States.

Ethnic White immigrants were able to integrate into the American mainstream as the population of immigrants of color became more pronounced. For example, Jews' and Italians' racial status changed over time with the influx of other immigrant groups (Foner, 2005). Because of the juxtaposition of a noticeable group of people who were physically distinct from the earlier arrived European immigrant groups, the White complexions of Jews and Italians were normalized with the increased presence of other, non-White immigrants. Furthermore, because Jews and Italians shared phenotypical White characteristics and resembled other European groups, they were not subject to the discrimination that newly arrived immigrants faced (Foner, 2005). This pattern is consistent among British immigrants who have phenotypic characteristics most commonly associated with being an American (Gaertner & Dovidio, 2000; Spears Brown, 2011). The differences among the newly arrived immigrants and the established Jewish and Italian groups resulted in several hierarchical changes among new and old immigrant groups, such as labor- and race-based differentials that exacerbated power dynamics. For instance, Jewish women hired African American domestic workers (Foner, 2005), which augmented their power differences and socially set them apart from one another. This resulted in group boundaries that further marginalized new immigrant groups.

The immigrant population has changed significantly over the past half-century (Portes & Rumbaut, 1996). Immigrants who arrived post-1965 were more likely to be of color without documentation and to be of non-European descent. In the earlier, but still highly relevant work of Portes and Rumbaut (1996), the authors stated that “never before has the U.S. received immigrants from so many countries, from such different social and economic backgrounds” (p. 7). Immigrants from both the new and old immigration waves have resulted in the settlement of immigrants in urban destinations and in port cities, most of whom are employed in labor-intensive jobs (Portes & Rumbaut, 1996). The meritocratic ideals that shaped the success of the pre-1965 immigrants no longer apply to the most current immigrant wave because there are more barriers for social mobility, contingent on race, literacy, SES, and education (Portes & Rumbaut, 1996). Group-based hierarchies and differentials are often entrenched in group differences relative to the historical trajectories of immigrants that are still evident today. In today’s global era, understanding immigration as it relates to race, ethnicity, and class and gender is central to the immigrant experience (Suárez-Orozco, 2001).

However, immigrant trajectories are multifaceted and complex which may hold implications for the psychological experiences of immigrant students in schools today. Portes and Rumbaut (1996) reshaped the misconception that only the poor immigrate to the United States. In fact, leaving the home country is monetarily costly, and it is often an expense that the poor cannot afford. Contrary to mainstream beliefs, fleeing poverty is not the leading factor in the resettlement of immigrants in the

United States. Portes and Rumbaut credited the scarcity of well-paid jobs in the home country, and not the absence of jobs, with attracting immigrants to the United States and its culture of consumerism. Such immigrants aspire to achieve in the United States what they have difficulty achieving in their homelands.

Immigrants' *expectations* are what individuals can realistically pursue given their circumstances. *Aspirations* are the broad goals that immigrants hope to achieve. Eventually, aspirations and expectations are shaped by the fact that immigrants arrive in new countries and are categorized as outsiders regardless of whether they think of themselves in this manner (Lopez & Stanton-Salazar, 2001). Also important are the languages of immigrants. This is especially true given that the majority of immigrants arriving to the United States are from Latin America and Asia and other non-European, non-English-speaking countries (Ocampo, 2016; Suárez-Orozco, 2001). However, Filipino immigrants, having been exposed to English in Filipino schools, may be less likely to experience the detrimental effects associated with the transition to U.S. schools. Immigrants from Latin America and Mexico, are primarily employed in low-paying service-sector jobs and settle in impoverished, highly segregated communities. As a result, their children are most likely to attend underresourced schools. In contrast, immigrants from the Philippines typically speak English and are economically stable (Espiritu & Wolf, 2001).

Heterogeneity Among Immigrants and Implications for Belongingness

Global markets and transnational patterns have diversified the immigrant community and have subsequently offered a multifaceted representation of people

and their language proficiencies. As a result, the heterogeneity of immigrants today predisposes them to a subset of opportunities, which results in multiple immigrant pathways. Because there is no single path for immigrants who arrive to the United States, a more comprehensive theoretical perspective that accounts for the impact of broader global patterns is necessary (Suárez-Orozco, 2001).

Portes and Rumbaut's (1996) immigrant typologies challenge the assumption that immigrants constitute a homogeneous designation. The four immigrant typologies include (a) labor immigrants, or those who work low-paying labor jobs, enter the country with or without the necessary documentation, benefit from provisions of the 1965 immigration law, such as the family reunification process, or work as seasonal contract laborers; (b) professional immigrants, who arrive to the United States legally, often move in the hope of bridging the disparities between available salaries and work conditions, seek an improvement in their quality of life, and maintain connections with the homeland; (c) entrepreneurial immigrants, whose cultural enclaves grant them access to capital, business experience, and the labor force; and (d), refugees and asylees who tend to arrive to the United States with no educational or job skills. Refugees and asylees primarily leave their countries because of ideological and political opposition to their countries' regimes or because of the economic hardships invoked by the regimes. Refugees and asylees vary on the social hierarchy from elites to individuals of modest background, and the U.S. government often provides assistance to help them enter the workforce.

As a result, the pathway for seeking legal residence and citizenship in the United States is not predetermined, as immigrants vary considerably. As a result, some immigrant students may experience an additive psychological stress when they come to discover their legal positionalities. For example, Gonzales (2011) stated that for the subset of immigrants who are undocumented, there exist additional transitional periods that youth encounter as they come of age, such as the discovery stage that generally occurs during adolescence and high school. During the discovery stage, some immigrant students may find out about their undocumented status as they begin to seek employment or when they apply for a driver's license. Consequently, this is when most students discover that they are undocumented and are thus restricted from the privileges from which their U.S-born peers benefit from. Immigrant designation is difficult to capture given the multifaceted nature of immigration, which complicates its operationalization. Because of the sensitive nature of immigration status, most research of the quantitative kind cannot capture whether the students are undocumented. For this reason, this study does not take into account concepts of illegality that are pertinent to Mexican and Filipino immigrant students.

In this study, immigrant students are those who were born outside of the United States or in non-U.S. territories. Immigrant patterns of adaptation and incorporation suggest a need for investigation of the language competency that may protect Filipino immigrant students against feelings of exclusion. Patterns of adaptation and incorporation are those that allow immigrant students to navigate or cope with the pressures a foreign educational system places on them. Cartmell and

Bond (2015), as well as Ozer, Price, Wolf, and Kong (2008), are among some of the investigators who believe that school belongingness is an influential factor in the resettlement of immigrant and refugee children. However, research has yet to detail the extent to which the language that is acquired in the homeland predisposes immigrant students to distinct patterns of adaptation and incorporation in relation to psychological features, and demographic characteristics of students in U.S. schools. Illustrating the historical features of both the Filipino and Mexican immigrant population lends a comprehensive perspective conducive for understanding the factors that are most pertinent for inquiry on these immigrant communities today.

Immigration from Mexico a Historical Perspective

Portes and Rumbaut (1996) have stated that in the 19th century, the United States was a growing industrializing country in need of labor. However, the economic opportunities in the United States that promoted a better quality of life were unknown to most parts of the world. For this reason, the United States engaged in a deliberate recruitment of laborers from around the world, including Mexico. The increase in crop production in the Southwest between the 1850s and 1880s led to a wave of Mexican migrant workers to the United States. Ultimately, the need for foreign labor was deemed a necessity as the agricultural economy expanded, and several years later, the Mexican Revolution in 1910 had a detrimental effect on the lives of the Mexican people, as the Mexican government was unable to improve the living conditions of its citizens.

While the agricultural economy of the Southwest expanded, the agricultural economy of Mexico struggled, and the opportunities during the 1930s for employment diminished. During World War I (1914-1918), the majority of the U.S. labor force traveled overseas, which created a notable “pull” factor for Mexican immigration to the United States (Pedraza, 2006). Soon agencies began to actively recruit for the railway and agricultural industries in the United States. However, despite the opportunities for employment for Mexican laborers, most of whom were men, the labor conditions were still inadequate. In 1920, the Mexican government formulated a contract that granted Mexican workers some rights, which included the opportunity of Mexican laborers to bring their families to the United States during an active labor contract.

Immigrants were largely exploited by employers. The rate of pay, work schedule, and placement of employment were monitored, and soon the litigation of rights and the managerial conditions of the Mexican workers became known as the first Bracero Program between Mexico and the United States. Furthermore, the U.S. Immigration Patrol was created to oversee the movement of Mexican citizens from Mexico into the United States. However, what was first perceived to be an opportunity for employment that would alleviate the struggling economic crisis of the conditions of Mexican citizens turned out to be one of the most polemic events involving U.S. and Mexican relations.

Fast-forward several years and the shifts in U.S. demographics were partly attributed to the rise in birthrates among immigrant groups. Mexican immigrants and

citizens of Mexican descent have been most prominent in the southwestern states. Consistent with Portes and Rumbaut's (1996) immigrant typologies, Mexican immigrants could most notably be categorized as occupying the labor sector. In addition, "Mexicans are considered by many to hold the lowest status within the already devalued ethnic group termed *Hispanics*" (Morales, Herrera, & Murry, 2009, p. 3). Similarly, research in psychology shows that Americans tend to hold more negative stereotypes toward Hispanic/Mexican immigrants (Lee & Fiske, 2006; Short, 2004). Castro-Salazar and Bagley (2010) added that "the negative perceptions and castigation of people of Mexican origin are interrelated with the power relations and social structure in the United States" (p. 35).

In 1994, ballot initiatives to establish a state-run citizenship screening system that would prohibit undocumented immigrants from using public services such as health care, and public education was proposed as California Proposition 187, also known as the "Save Our State", or SOS, initiative (Rumbaut, 2005). Anti-immigrant sentiments were prominent as the immigrant community, many of whom were either Mexican immigrants or the children of Mexican immigrants, were deemed a threat to the State of California's public service infrastructure. The state's citizens who were unable to prove their legality would be subject to the denial of basic services. Today, anti-immigrant sentiments persist, and Mexican immigrants continue to be the community condemned for the wailing social and political troubles of the United States. (See Pedraza, 2006, for a comprehensive review of immigration to the United States.)

Immigration from the Philippines a Historical Perspective

Immigration from the Philippines to the United States occurred in three major waves. The first wave can be traced back to 1899, when the United States began sponsoring selected Filipinos for studies in U.S. colleges and universities (McNamara & Batalova, 2015). This wave extended into 1906 and 1934 and can be attributed to the United States' restrictive immigration policies with China and Japan that leveraged the need for immigrant laborers from other nations, which included the Philippines. At this point in time, Filipinos were well positioned to fit the needs of the western U.S. labor force, leading to an influx of young men who filled an agricultural labor void in the Pacific coastal regions of the United States and Hawaii (Espiritu & Wolf, 2001; McNamara & Batalova, 2015; Ocampo, 2016). Eventually, the first wave diminished due to the onset of the Great Depression and resulted in White resentment against Filipino laborers in the United States (Espiritu & Wolf, 2001). The first wave also came to an end when U.S. colonialism in the Philippines ceased in 1946 (Ocampo, 2016).

However, World War II (1939-1945) was largely responsible for the onset of the second wave of immigration from the Philippines. According to McNamara and Batalova (2015), Filipino immigrants served as “war bridges” to U.S. servicemen and as recruits to the U.S. armed forces. At this time, Filipinos were also instrumental for training health care workers. By the end of World War II, there was a modest influx of Filipino immigrants who were primarily educated professionals. The decline in the second wave of immigrants from the Philippines can also be attributed to the

Tydings-McDuffie Act, which granted the Philippines independence in 1945 (McNamara & Batalova, 2015).

Several years later, the Immigration Act in 1965 reopened the borders to immigrants from around the world, including the Philippines, resulting in the third wave. This third wave of immigration from the Philippines constituted men and women who were primarily college educated, middle class, and working professionals in the Philippines (Espiritu & Wolf, 2001; Foner, 2005; Ocampo, 2016; Wolf, 1997). Unlike other immigrants, these premigration differences have allowed Filipinos to blend into the U.S. mainstream (Espiritu & Wolf, 2001). The third wave is characterized by the following: the removal of the national-origin system, the governmental and business relationships between the United States and the Philippines, economic and educational opportunities in the United States, and a Filipino culture that encouraged remittances and facilitates labor migration (McNamara & Batalova, 2015). As a result, the children of Filipino immigrants whose parents are more educated may have been able to evade underserved schools and impoverished communities when they settled in the United States.

The classes of Filipinos that were able to migrate to the United States and the patterns of incorporation upon their arrival are in part due to the historical remnants associated with the Filipino people, their history, and their acquired competency in the English language. In reference to Portes and Rumbaut's (1996) immigrant typologies, Filipinos could most accurately be categorized as professional immigrants. Currently Filipinos are the third-largest immigrant group following

Mexicans and Chinese (Ocampo, 2016). However, rarely do we hear that there exists a Filipino immigrant problem (Portes & Rumbaut, 1996). Filipinos constitute the professional immigrant sector and are less likely to encounter issues of assimilation (Portes & Rumbaut 1996; Wolf, 1997). Adding to this notion is the fact that most Filipinos arrive to the United States having received some degree of formal education in English from their home country. Therefore, the post-1965 wave of Filipino immigrants were better suited to immerse themselves in the normative English-speaking and Eurocentric culture of the United States. Filipinos today primarily occupy a skilled workforce that is commonly contrasted with that of poor working Mexican immigrants (Pedraza, 2006). Understanding the common historical perspectives of colonization, and how the English movement in the Philippines was established, lends contextual insight while investigating the belongingness and achievement relationship in the context of U.S. schools.

Common Histories and Distinct Language Background Among Filipinos and Mexicans

Although Filipino and Mexican peoples share a common history of European colonization, they differ in their national languages. Spanish was brought to Mexico in the 16th century, and despite variations in accents and intonations, it remains the most widely spoken language among Mexicans today. Pre-Columbian civilizations, who inhabited the region known as Mexico, spoke more than 130 indigenous languages. Sixteenth-century churchmen were in part responsible for indoctrinating Christian principles among the native peoples. In doing so, the churchmen used the

native languages to facilitate communication with the natives of Mexico, and eventually Philip II proposed that Nahuatl be the official language. Ultimately, Charles II banned the use of any languages other than Spanish. This led to the integration of an educational system whose primary purpose was to institute Hispanic culture and linguistic practices.

Similar to Mexico, the colonization of the Philippines by Spain also had a long-lasting effect on the language that Filipinos speak today. Spanish was the official language of the Philippines in the late 16th century and through the Spanish-American War in 1898. After the Spanish-American War, Spain gave control of the nation to the United States and “Thomasites,” the name given to American teachers, were largely responsible for introducing English through the educational system in the Philippines (Espiritu & Wolf, 2001; Ocampo, 2016). Today, English has replaced Spanish as the dominant language and is perceived as a symbol of status and power among Filipinos.

English Instruction in the Philippines as it Relates to Belongingness in U.S.

Schools

The educational system in the Philippines was dramatically changed during the U.S. colonial period (Ocampo, 2016). Involuntarily, native populations were exposed to the English language, and as a result of the English-dominant history of the Philippines today,

Filipinos have the unique ability to culturally straddle the line between their immigrant communities and mainstream America. English therefore plays a major component in the lives of the Filipino immigrant students today. The vast majority of Filipino immigrants have a high school degree (more than 80 percent), and nearly half have at least a bachelor's degree" (p. 31).

In addition, "in an effort to 'civilize' the Filipino people, the Americans established a public education system and made English the medium of instruction" (p. 20).

According to Ocampo (2016), by 1946, the United States no longer held jurisdiction over the Philippines but left a long-lasting cultural, political, and economic imprint. The United States was successful in establishing a public school system that kept English as the primary language of instruction. The Philippines yielded one of the most highly educated English-speaking populations in Asia and the world. Educated Filipinos encountered a labor market with limited opportunities in their own nation (Ocampo, 2016). Filipinos, having been immersed in American-style English-led schools, were well positioned to migrate to the United States. (Ocampo, 2016).

Like their other Asian counterparts, including the Chinese, Korean, and Japanese, Filipinos have academically excelled. However, "Filipinos are the only

ones whose educational institutions use English as the main language of instruction” (Ocampo, 2016 p. 32). Not surprisingly, then, Filipinos, besides being one of the largest Asian populations in the United States, are among the most English competent (Ocampo, 2016). In fact, “Filipinos report the highest level of English proficiency of any Asian immigrant group” (p. 32). According to Ocampo, 9 in 10 Filipinos speak English proficiently. This ratio exceeds the English proficiency levels among other Asian immigrants. Second-generation Filipinos also prefer speaking English only. The preference of second-generation Filipinos for the English language may result in distinct patterns of incorporation and adaptation. For example, English-language proficiency may explain the dispersal of Filipino families in ethnically diverse neighborhoods as opposed to traditional immigrant enclaves and their acquisition of jobs in the mainstream U.S. labor market as opposed to an ethnic-based economy. This may protect Filipino students from the adversity faced by immigrants who settle in ethnic enclaves or who are marginalized by poverty and are limited to under resourced schools.

Belongingness: A Comparison Among Filipino and Mexican Immigrant

Students

Belongingness is so central to human functioning that questions about its effects on diverse student populations should be taken into consideration. Guided by research that has stated that belongingness is a fundamental human need (Baumeister & Leary, 1995), that precedes other concepts of human functioning, such as self-actualization (Maslow, 1954), this dissertation compares the Filipino and Mexican

immigrant student experiences to tease apart the notion that language status mediates the belongingness and achievement relationship. In addition, Baumeister and Leary (1995) argued that the need to belong and to form interpersonal attachments is a fundamental human motive.

Belongingness in schools is also an important feature of this dissertation because evolutionary science has stated that beyond the basic human characteristics, such as walking upright, the early use of tools, the development of neural complexity in the brain, and the usage of language and symbols, are our social inclinations toward others, which is innately a part of who we are and how we come to understand ourselves in the social world (Ainsworth, 1989; Moreland, 1987). Specifically, the effects of language status on school belongingness for immigrant students should be clearly understood to maximize the features of public schools that may ultimately promote educational equity.

Immigrant students arriving to the United States from English-speaking countries, such as the United Kingdom, Canada, and Australia, may experience patterns of adaptation and incorporation distinct from students who arrive to the United States from non-English-speaking countries. Studies have suggested that language is important for the adaptation to and incorporation into English-dominant schools. For example, a study by Gibson, Bejinez, Hidalgo, and Rolón (2004) demonstrated that the unusually high level of participation by students in a school's migrant student association was attributed to the liberty that they had when expressing themselves in the language of their choice. However, immigrant students

do not readily attain English because the language of instruction in their home countries may be one other than English—with the Philippines being a notable exception. Therefore this dissertation is premised on the notion that Filipino immigrant students will experience higher levels of school belongingness which in turn will correlate with higher levels of academic achievement (as measured through ninth grade GPA). Because schooling in the Philippines has adopted English as the primary language of instruction, Filipino students will be better equipped to face the adversities that other non-English-speaking immigrants, such as Mexican-origin students, are more likely to encounter.

Chapter 3: Belongingness

Origins of Belongingness

Our need to belong is rooted in human evolutionary history (Baumeister & Leary, 1995). Evolutionary biology offers an early explanation for the origins of belongingness, and theorists from Darwin (1859) onward have argued that the processes of natural selection has shaped our species. Research in evolutionary biology has suggested that belongingness serves a survival function that is tied to people's social and emotional dependencies. In addition, early anthropological work has suggested that a common feature of all humans, regardless of differences across societies and cultures, is the predisposition to naturally form groups (Coon, 1946). Throughout the course of evolution, early humans depended on having close connections to survive and reproduce (Dewall, Deckman, Pond, & Bonser, 2011). For instance, during the early stages of human evolution, hunting in groups became a more effective mechanism for survival. Belonging to a group also allowed tribal members to share the workload and protect each other from external threats. Early humans were attempting to ensure their own survival, and all members of a tribe were invested in each other's well-being.

The competition for limited resources and the protection against external threats to survival exemplifies the significant advantages of communal social investments and, at the same time, highlights the disadvantages of acting alone (Baumeister & Leary, 1995). In fact, external threats may heighten the importance of forming meaningful bonds (Baumeister & Leary, 1995). Similarly, Tomasello,

Carpenter, Call, Behnem and Moll (2005) suggested that shared goals may be an innate human trait. However, Tajfel, Flament, Billig, and Bundy (1971) have speculated that group formations result in-group favoritism. Because each member plays an important role within a group, cohesive relationships are paramount (Shaver, Hazan, & Bradshaw, 1988). In today's Western culture, most people no longer belong to "hunting and gathering" tribes, but some people still display the remnants associated with protecting those within their groups and establishing relationships with others (Baumeister & Leary, 1995; Fiske, 2004).

For Hagerty, Lynch-Sauer, Patusky, Bouwsema, and Collier (1992), the energy required for involvement in a group, the potential and desire for meaningful involvement, and the potential for shared or complementary characteristics precede the establishment of relationships and serve as antecedents to social belongingness. Because humans mature over a long period of time in dyadic and group contexts, it is feasible to assume that the need for social acceptance is an important aspect of human existence. Being evolutionarily predisposed for caring, nurturing, and defending their kin, humans have been prone to forming social relationships. Unlike other species, humans receive most of what they need from their social group rather than directly from their natural environment, suggesting that the human strategy for survival depends on belonging to a strong social network that is vested in the person's well-being.

The evolutionary tenets of belongingness are foundational for grounding research findings that highlight the critical nature of the effects associated with the

presence or absence of belongingness. Because belongingness is a central component of human functioning, social exclusion has been reported to influence many behavioral, cognitive, and emotional outcomes. Therefore people have developed traits that serve to prevent rejection and foster acceptance (DeWall, Deckman, Pond, & Bonser, 2011). Evidence suggests that people are happier and healthier when they experience social belonging (Stillman & Baumeister, 2009). In contrast, the absence of belongingness and the presence of exclusion are thought to result in painful emotional experiences, such as shame, anger, and depression (Baumeister & Leary, 1995; Kia-Keating & Ellis, 2007; Newman et al., 2007). Belongingness may also prevent engagement in risk-oriented behaviors (Drolet, Arcand, Ducharme, & Leblanc, 2013; Ford, 2009; McNeely, Nonnemaker, & Blum, 2002; Resnick et al., 1997). According to Baumeister and Leary, (1995), “if belongingness is indeed a fundamental need, then aversive reactions to a loss of belongingness should go beyond negative affect to include types of pathology” (p. 500). In fact, the absence of belongingness has been tied to maladaptive social patterns, such as criminality (Baumeister & Leary, 1995), suicidal predispositions (Durkheim, 1897/1963; Hatcher & Stubbersfield, 2013; Trout, 1980), and mental illness (Baumeister & Leary, 1995). Ultimately, belongingness and the inextricable emotions and behaviors associated with it suggest that functional social relationships are fundamental to human existence (Baumeister & Leary, 1995).

Defining Belongingness

One of the challenges for empirically studying belongingness is that it is conceptualized, defined, and operationalized differently by researchers. Definitions of belongingness are nearly as numerous as the researchers who have considered using this construct in their research. Many factors have been conflated in the understanding of social belonging (Ryan & Deci, 2000; Walton, Cohen, Cwir, & Spencer, 2012), in part because belongingness may share conceptual similarities with other constructs, such as relatedness (Deci, Vallerand, Pelletier, & Ryan, 1991; Ryan & Deci, 2000). However, Baumeister and Leary (1995) stated that “the need to belong is something other than a need for mere affiliation” (p. 500), and others have argued that belongingness is unique from related constructs like attachment, loneliness, alienation, affiliation, and social support (Hagerty et al., 1992; Lee & Robbins, 1995).

The distinct nature of sense of belongingness has been understood through a number of conceptual perspectives. For example, Hagerty et al. (1992) suggested a psychological, sociological, physical, and spiritual perspective for understanding a sense of belongingness. Each perspective demonstrates a unique conceptual approach. For example, the psychological perspective, according to Hagerty and colleagues, is “an internal affective evaluative feeling”; a sociological perspective exemplifies the importance of membership “in groups or systems,” which magnifies the relevance of social networks; the physical perspective involves the possessions of “objects, persons, or places”; and the spiritual perspective involves the metaphysical

relationships that people have “with a being or place that exist at a universal level” (p. 174).

How belongingness becomes relevant for human functioning has been considered through prior inquiry. For example, Walton, et al. (2012) referred to the concept of mere belonging, which is characterized by a “minimal, even chance, trivial, or potential social connection with unfamiliar others” (p. 2). At its most rudimentary form, mere belongingness serves as an “entryway” or invitation of sorts to a variety of social relationships. The ease with which social bonds form has been established and is well documented (Baumeister & Leary, 1995). Small cues guiding social connections to another person or social group solidify the extent to which people experience mere belongingness (Walton, et al., 2012). Termed the *belongingness hypothesis*, Baumeister and Leary (1995) stated that once a minimum quota of social contacts has been established, the motivation to seek additional bonds tends to diminish.

Belongingness has also been described in more general relational terms. For example, Anant (1966) referred to belongingness as a recognition and acceptance by others. Hagerty et al. (1992) referred to belonging, from a psychological perspective, as “an internal affective or evaluative feeling, or perception” (p. 174). Baumeister and Leary, (1995) referred to belongingness as a person’s belief that others care about his or her well-being. These perspectives suggest that the quality and investment of social relationships matter. Consistent with this view, Baumeister and Leary, have stated that “relationships characterized by strong feelings of attachment, intimacy, or

commitment but lacking regular contact will also fail to satisfy the need [for belongingness]” (p. 500). Baumeister and Leary (1995), added that belongingness extends beyond frequent contacts with indifferent others, who may do little to promote a person's well-being. This suggests that routine quality exposure to another person is fundamental for belongingness to remain sustainable over time.

Baumeister and Leary (1995) have proposed two main features for the sustainability and quality of belongingness: (a) People need frequent personal interactions with others that are ideally characterized by positive affect and (b) people need to perceive interpersonal relationships marked by stability, affective concern, and continuation into the foreseeable future. Lee and Robbins (1995) proposed that belonging is composed of three important dimensions: (a) companionship, (b) affiliation, and (c) connectedness. Hagerty et al. (1992) described two concepts that they believed to be central for belongingness: (a) valued involvement, such as the experience of feeling valued, needed, or accepted by others, and (b) fit, referring to the perception that a person's characteristics complement the system or environment. The emotional aspect of belongingness seems central to understanding its psychological effects.

Emotions and Belongingness

Emotions, though not directly investigated in this work, are discussed as they relate to belongingness to gain a thorough understanding of the belongingness and achievement relationship. Hagerty et al. (1992) provided a psychological perspective on sense of belonging as an internal affective, evaluative feeling or perception. Such a

view suggests that attending to emotional responses is central for understanding belongingness. Similarly, Walton et al. (2012) stated that sharing emotions is premised on the social connections people share with one another. Baumeister and Leary (1995) also suggested that “there are undoubtedly strong emotional mechanisms associated with belongingness...but these could be understood as mediating mechanisms rather than as essential properties” (p. 500). This assertion supports the notion that emotions may account for the variability in belongingness and not necessarily be the predictive features of belongingness itself. Baumeister and Leary further added that emotional reactions should follow directly from outcomes of belonging such that the formation of bonds results in positive affect and broken, threatened, or refused relationships result in negative affect.

Moreover, some theorists have argued that emotions are disruptive and generally lack the logic and rationality necessary for working through cognitively demanding tasks (Dewey, 1895; Hebb, 1949; Mandler, 1984). Others have posited that emotions are beneficial and help prioritize and organize ongoing behaviors that optimize adjustment to the demands of the physical and social environment (Barrett & Campos, 1987; Ekman, 1992; Johnson-Laird & Oatley, 1992; Lazarus, 1991; Levenson, 1994). More recently there has been a stronger emphasis on the adaptive functions of emotions. Both evolutionary theorists, such as Ekman (1992), and Tooby and Cosmides, (1990), and social constructionists such as Averill (1980), Gordon (1989), and Lutz and White (1986), have concurred that emotions serve to regulate the individual’s relations to the external environment (Buck, 1985; Tomkins, 1984).

The inquiry on emotions reinforces the importance of belongingness for adaptive social functioning.

In fact, empirical evidence concurrently supports the notion that the relationship between emotions and perceptions of belongingness are inextricable. As Baumeister and Leary (1995) suggested, “belongingness appears to have multiple and strong effects on emotional patterns and on cognitive processes” (p. 497). The association between belongingness and positive emotional affect is readily apparent among students (Cartmell & Bond, 2015; Sancho & Cline, 2012). Stenseng, Forest and Curran (2015) have stated that harmonious passion energizes engagement that is conducive to belongingness and, subsequently, higher positive emotionality. These findings reflect a broader consensus that reciprocal and secure social bonds are conducive to enjoyment, happiness, and satisfaction (e.g., McAuley et al., 2000; Smith, 2003; Smoll, Smith, Barnett, & Everett, 1993).

Other studies have examined the relationship between belongingness and love. Maslow (1968), for example, has posited that “love and belongingness needs” are foundational to his motivational hierarchy. The beneficial effects of belongingness also extend to other facets of human functioning. Baumeister and Leary (1995) suggested that people are driven to form and maintain a minimum quantity of lasting, positive, and significant interpersonal relationships. However, the failure to form and maintain such interpersonal relationships has been found to result in undesired emotional experiences, including social isolation, alienation, and loneliness (Furrer & Skinner, 2003). To achieve social gratification, people have developed a “limited

requirement for the frequency of social transactions and corresponding optimum group size” (Audy, 1980, pp. 123-124), indicating that the quota of individuals who can fulfill the need for belongingness is not limitless.

Pianta (1999) emphasized the relevance of emotions experienced in schools, stating that “no amount of focus on academics, no matter how strong or exclusive will substantially change the fact that the substrate of classroom life is social and emotional” (p. 170). This suggests that positive emotional experiences in school, such as greater enjoyment, enthusiasm, happiness, and confidence, are contingent on the extent to which students experience belongingness (Osterman, 2000). In contrast, for students who do not experience belongingness, negative emotional experiences, such as anxiety, frustration, and sadness, are thought to affect academic engagement, which in turn, results in diminished academic achievement in schools (Furrer & Skinner, 2003).

Belongingness and Academic Achievement

Belongingness has been shown to be a critical factor that helps us understand engagement and academic outcomes in schools (Walton & Cohen, 2011). Some researchers have conceptually understood sense of belonging as an experience that is directly tied to the environment where individuals seek to connote membership (Anant, 1966; Hagerty et al., 1992). This dissertation focuses on the experiences of belongingness for immigrant students within schools. However, as Slaten et al. (2016) suggested, the construct of school belongingness, in comparison to the understanding of belongingness in other settings, is still not well understood. Nonetheless, the

school environment has been shown to be related to a sense of belongingness of students and their achievement (Loukas, Roalson, & Herrera, 2010; Slaten et al., 2016).

Defining sense of belongingness, as it relates to schools, has also proven to be a point of contention. According to Gillen-O'Neel and Fuligni (2013), other constructs, such as school identity, school connectedness (Jose, Ryan, & Pryor, 2012; McNeely & Falci, 2004), and emotional engagement, are no more than variations in nomenclature for constructs intended to capture social and emotional connections with academic institutions or their people. Contrary to this belief, Hausmann, Schofield and Woods (2007) argued that there are empirical justifications for studying sense of belonging as a unique construct. Yet Booker (2006) highlighted a notable limitation of studying belongingness resulting from the multiple conceptual definitions of school belongingness itself.

Given the variation and nuanced conceptual perspectives related to operationalizing belongingness, this study follows a multidimensional definition that is informed by a psychological, sociological, sociocultural, and sociolinguistic approach. As suggested by Hagerty et al. (1992), the psychological and sociological perspectives acknowledge the significance of the “internal affective or evaluative feeling or perception” in “relation to various external referents” (p. 174), in schools. Thus Goodenow’s (1993b) definition of belongingness as “the extent to which students feel personally accepted, respected, included, and supported by others in the school social environment” (p. 80) is most suitable for emphasizing the

psychological, sociological, sociocultural, and sociolinguistic perspectives discussed in this research.

This definition has also been applied to educational research in the past (see Gibson et al., 2004; Ma, 2003). The sociocultural perspective, much like the sociological perspective, infers that students rely on connections to others to maximize learning motivation and engagement within the cultural parameters of schools (Vygotsky, 1978). The sociolinguistic perspective infers that to maximize learning motivation and engagement for students in school, the language status of students must also be considered. Walton and Cohen (2007), affirmed that belongingness is a fundamental part of a student's social life; however, the question of how social life is understood in schools, depends on the experiences that immigrant students bring with them.

As a result, there exists a reciprocal relationship between belongingness in schools and achievement. Having a high degree of school sense of belonging has consistently been regarded as an important predictor of adaptive social functioning and optimal learning (Connell & Wellborn, 1991; Deci et al., 1991; Finn, 1989; Goodenow, 1993a; Osterman, 2000). Researchers have therefore examined how school sense of belonging could be best conceptualized, applied, and measured in relation to educational outcomes. Belonging has been conceptualized through Kohut's (1984) self psychology theory (cited in Lee & Robbins, 1995), which posits that the "self" is the organizing center of experiences requiring grandiosity and idealization. Relatedly, the stage-environment fit theory suggests that a possible reason for the

drop in school belonging among high school-aged students may be due to a mismatch between the school environment and the developmental needs of students (Eccles & Roeser, 2009).

Sense of belonging has been assessed using a variety of measures, including: (a) the social inclusion survey (Nepi, Facondini, Nucci, & Peru, 2013), (b) Tyler and DeGoey's (1995) items on institutional engagement (Gillen-O'Neel & Fuligni, 2013), (c) the Psychological Sense of School Membership scale (Goodenow, 1993b; Goodenow & Grady, 1993; Hagborg, 1994; Knifsend & Graham, 2012; Ma, 2003; Nichols, 2006; Sari, 2012), (d) Bollen and Hoyle's (1990) cohesion to social groups items (Hausmann, Schofield, & Woods, 2007), (e) Hagerty and Patusky's (1995) Sense of Belonging Instrument, (f) Lee and Robbin's (1995) measures of aspects of belongingness and nonbelongingness as a whole through the Social Connectedness and Assurance scales, and, (g) the Class Belonging and Support scale (Goodenow, 1993a). Although nuanced distinctions exist across the aforementioned scales used to capture belongingness, a common feature of these measures is the degree to which social relationships play a key role in students' well-being. However, these relationships may ultimately be premised on the English-Language status of students. Eventually, the negative consequences associated with exclusion and rejection could result in detrimental educational outcomes.

Belongingness for students in schools is therefore contingent on the inclusive experiences that evoke feelings of respect and value by others with whom they come in contact, such as teachers and peers (Goodenow, 1993a). Additionally, students may

need to believe that they are accepted members of an academic community where their presence and contributions are recognized and valued (Good, Rattan, & Dweck, 2012). However, there are differences in how belongingness has been defined and operationalized in educational research. Booker (2006) stated that “in some research belonging is defined as student perception of teacher warmth, in other studies it involves the level of student classroom participation, and in some explorations it is defined as student engagement” (p. 2).

Belonging in schools has also been described as “students’ sense of being accepted, valued, included and encouraged by others (teachers and peers) in the academic classroom setting and of feeling oneself to be an important part of the life and activity of the class” (Goodenow, 1993a, p. 25). A body of literature has suggested that schools are places where the quality of relationships and social connections to peers and teachers have consequential effects on academic engagement and outcomes (Furrer & Skinner, 2003; Goodenow, 1992; Oseguera, Conchas, & Mosqueda, 2010; Sancho & Cline, 2012; Yeager & Walton, 2011). These findings also suggest that the context in which social relationships are experienced (e.g., schools) may illuminate the effects on belongingness for those who have trouble forming relationships.

Belongingness in schools is often premised on the features of the educational environment (Slaten et al., 2016). However, for low-income immigrant parents, who tend to live in impoverished communities, their most viable option is to send their children to schools that are under resourced and overcrowded (Suárez-Orozco, 2001).

Suárez-Orozco et al. (2008) emphasized the relational engagement that students develop with teachers, peers, and others in schools, as a central feature for the development of a sense of belongingness and for students' adaptation to schools. Belongingness can therefore be best understood as a fluid and dynamic construct (Cartmell & Bond, 2015) that fluctuates over time, is based on student needs, and is contextually affected by changes occurring at different levels of the social-ecological system (Bronfenbrenner, 1979).

Evidence of the variation in belongingness for students during the transition from childhood into adolescence has also been documented in research literature. For example, elementary school students report universally high levels of school belonging (Fredricks, Blumenfeld, Friedel, & Paris, 2005). In contrast, middle school students experience time-based fluctuations (Anderman, 2003), and their sense of belonging diminishes (Eccles et al., 1993; Whitlock, 2006). However, the way in which transitional experiences affect students' sense of belongingness has been inconclusive. On one hand, studies have shown that as students transition from middle school to high school, during their adolescence, they experience a notable decline in their school sense of belongingness (Anderman, 2003; Anderman & Anderman, 1999; Eccles et al., 1993; Gutman & Midgley, 2000), which tends to persist into adolescence (Anderman, 2002). On the other hand, studies have challenged prior research, noting that the larger size of high schools provides greater opportunities for building peer relationships, and teachers' investment in students contributes to an increase in school sense of belonging (Sancho & Cline, 2012).

Despite the fact that this study does not account for the contextual features of the schools that students attend, there is evidence that suggest that the school context has a profound impact on the extent to which students experience a sense of school belongingness and in turn how this experience affects students' achievement. Goodenow and Grady (1993) found that students in urban schools have a lower sense of school belonging which could arguably be correlated to the underperformance of youth in these contexts. This is consistent with other studies that suggested that belongingness tends to be higher for students from suburban schools as opposed to urban schools (Anderman, 2002; Goodenow, 1993a, 1993b). In addition, this study is limited to a single time-point measure of belongingness when students were ninth graders in 2009. Because most studies have relied on a single time point assessment as opposed to a longitudinal approach toward understanding school belongingness (Anderman, 2003), the long-term factors that affect it are not yet fully understood (Gillen-O'Neel & Fuligni, 2013).

Belongingness Interventions

This study does not assess the effect of social belongingness interventions. However, a line of inquiry has explicitly focused on optimizing the benefits associated with perceptions of belongingness within the educational environment. This research is especially critical in schools where students' academic performance may be dependent on the extent to which they feel belongingness. Walton and Cohen's (2007, 2011) experimental studies captured the effect of belongingness on students' academic achievement. They found that prompting students to attribute

worries about belonging to the transitional difficulty of college rather than to students' own personal or racial identities can prevent social exclusion, increase levels of belongingness, and in turn promote optimal academic motivation and performance. Results from this research demonstrate that students in the “social-belonging” treatment conditions earned higher grade point averages (GPAs) by the end of high school (Yeager & Walton, 2011). The pragmatic nature of social-belonging interventions may hold implications for school-related reform (Faircloth & Hamm, 2005). The interventions are thought to be most beneficial for students who may not fit the status quo because their backgrounds may suggest greater uncertainty about their placement in school (Walton & Cohen, 2007).

However, belongingness interventions are neither easy to engage nor lasting (Yeager & Walton, 2011, p. 293); brief interventions may or may not change students' outcomes months and years later. Instead, they are referred to as “powerful tools rooted in theory,” context specific and dependent on the nature of the educational environment (Yeager & Walton, 2011, p. 268). Instead, the interventions send into motion “recursive social, psychological, and intellectual processes in school” (Yeager & Walton, 2011, p. 286). Interventions that tap into recursive processes may change the trajectory of students' experiences and outcomes in school (Cohen, Garcia, Purdie-Vaughns, Apfel, & Brzustoski, 2009). If the interventions trigger an enduring perceptual change in the encoding of social experiences, the effects may persist over time. The short-term effects of such interventions may lead to long-term effects based on recursive gains in performance that reassure students of

their belonging in school. Ultimately, the momentum leads into a sustainable performance feedback loop (Cohen et al., 2009; Walton & Cohen, 2011). However, perceptions of belongingness may be complicated by the experiences of immigrant students as they seek to navigate English-dominant schools.

Belongingness and Immigrant Student Experiences

Researchers have dedicated considerable attention to investigating the effect of belongingness on a number of student communities, including elementary school students (Sari, 2012), students with developmental disabilities (Crouch, Keys, & McMahon, 2014; Stanković-Đorđević, 2013), students of different sexual orientations (Aerts, Van Houtte, Dewaele, Cox, & Vincke, 2012), and students of economically disadvantaged backgrounds and minorities from nondominant communities (Becker & Luthar, 2002). However, the immigrant student community is of particular interest because of the variability in their patterns of adaptation and incorporation (Gibson, 1998). Investigating school sense of belonging is, in part, premised on the notion that the human experience is fundamentally social and that the absence of positive social experiences can have negative implications for people's daily lives (Baumeister & Leary, 1995). This holds profound consequences for immigrant students who may experience some degree of language differences in schools. The extent to which immigrant students feel accepted, respected, included, and supported by others in schools may inform their perceived degree of belongingness contingent on language.

Belongingness has previously been identified as an influential factor in the resettlement of immigrant children (Cartmell & Bond, 2015; Ozer, Price, Wolf, &

Kong, 2008). Because patterns of adaptation and incorporation vary for immigrant students, research on school belongingness and achievement should account for the relationships that students develop in schools. Other scholars have also argued that

immigrant youth from ethnic minority backgrounds are likely to experience more barriers to forming a strong and positive affective connection to school due to the cultural and linguistic constraints they negotiate as they move across the “multiple worlds” that constitute their school, family and neighborhood settings. (Ozer et al., 2008, p. 440)

According to Cartmell and Bond (2015), immigrant students face unique challenges related to acculturation and integration with domestic students. Language use, ethnic identification, perceptions, feelings, and expectations of daily experiences seem to be related to how immigrant children relate with the host society (Zhou, 2001).

Because typical American classrooms are characterized by practices reflecting the dominant culture and its language, Delpit (1995) as well as Ryan and Patrick (2001) have suggested that school belonging may be a critical point of intervention for promoting the academic well-being of immigrant students. However, the way in which belongingness is understood may not be suitable as a means to capture the experience of students from diverse backgrounds (Cartmell & Bond, 2015). Multiple studies have affirmed that there is a limited understanding of belongingness among culturally and ethnically diverse students in schools (Anderman & Anderman, 1999; Connell & Wellborn, 1991). Thus overlooking the cultural and ethnic diversity of students, especially in today’s global era, could result in a limited understanding of the experiences that undergird belongingness in diverse schools (Faircloth & Hamm, 2005).

Because “there is a lack of clarity regarding what constitutes belonging and the role it plays in students’ motivation and achievement for diverse groups” (Faircloth & Hamm; 2005, p. 293) it is in the best interest of researchers to critically examine the features of immigrant student profiles. In fact, prior inquiry by Steele (1997) has argued that perceptions of respect for the cultural and ethnic group membership of students are paramount for understanding their belongingness in school. This reaffirms the possibility that the belongingness and achievement relationship of immigrant students who are also culturally, ethnically and linguistically diverse, may be jeopardized if they are unable to build relationships, with peers and teachers due to language barriers.

Chapter 4: Conceptual Framework

Theoretical Considerations for Understanding the Belongingness and Achievement Relationship Among Immigrant Students

Studies on belongingness have leveraged most from psychological research. However, investigations on belongingness in the context of education may benefit from social reproduction theory. Since the initial introduction of social reproduction theory (Marx, 1867-1883), its application to education has contended that inequalities persist because the educational system is embedded in a structure of privilege that favors the practices of those in the dominant group. Group dominance in schools could also be understood through linguistic variations among students. This dissertation applies the tenets of social reproduction theory because it accounts for the functional dynamics of languages within the social context of schools that may lend insight into the relationship between language, school belongingness, and achievement. English, having been established as the primary language of instruction in the public educational system of the United States, holds implications for understanding the effect of belongingness contingent on its relationship with language for immigrant students.

Researchers have already dedicated considerable attention toward investigating the effect of belongingness. However, little is still understood about the extent to which language, and the power dynamics associated with it, informs belongingness and achievement for immigrant students. Social reproduction theory is promising for informing an approach that delineates the language and power

dynamics of belongingness for immigrant students. Therefore group membership can be better understood for immigrant students under the tenets of this sociological theory that explains group stratifications.

Language consistency for immigrant students is relative to the value placed on the dominant language of schools. In U.S. public education, the opportunities for alternative language instruction raise concerns among those who seek to maintain the status quo. A theory that accounts for how the influence of the language of the dominant group comes to be at the upper echelons of society may also offer insight into the extent that immigrant students feel accepted, respected, included, and supported by peers and teachers in schools. Most importantly, this theoretical approach explicitly delineates the sociological effects of belongingness that have been understood through psychological inquiry.

Social capital is a central feature of social reproduction theory and may be useful for understanding belongingness among immigrant students. Oseguera et al. (2010) described social capital “as the less tangible resources gained through social relationships that positively influence educational outcomes” (p. 1137; also see Coleman, 1988). Social capital emphasizes the value of social relationships acquired through interpersonal networks who have a command over material or nonmaterial resources. Social capital is inextricably linked to school belongingness and achievement in that the information, support, and supervision rely on close-knit relationships. For instance, while the parents of children from affluent households generally provide them with the knowledge to do well in school, the children of poor

and working-class families depend on associations developed in schools with peers and teachers to gather the knowledge needed to achieve (Gibson et al., 2004; Oseguera et al., 2010). In this respect, conforming to the norms of a social network becomes essential (Coleman & Hoffer, 1987; Lew, 2007). Participation in social networks ultimately grants access to the resources that are valuable for upward mobility. Individuals who access networks of privilege emphasize the value of social relationships acquired through interpersonal networks. These types of relationships are most commonly understood as forms of acquired social capital. However, acceptance and participation are often dictated by the ability to communicate with those in the dominant and privileged group.

Social reproduction theory suggests that people within educational structures transmit knowledge relative to the stratified nature of social classes. Another important feature of social reproduction theory is cultural capital. Cultural capital is best understood as the nonfinancial social assets that promote upward mobility beyond economic means. Cultural capital may include education, intellect, speech, dress, physical appearance, skills, tastes, posture, clothing, mannerisms, material belongings, credentials, and so on, that a person requires for the engagement in a social class. Cultural capital can manifest itself in three different states: the embodied state, the objectified state, and the institutionalized state. A person's accent, dialect, or spoken language is an example of embodied cultural capital, while an art collection is an example of cultural capital in its objectified state. In its institutionalized form, cultural capital can be credentials, certificates, qualifications, and titles that represent

cultural status, placement in society, and authority over others. Ultimately, cultural capital creates a group identity and disposition.

For immigrant students, the embodied cultural capital of language is a major source of social inequality because certain forms of cultural capital are valued over others and can help some, but not all, acquire social mobility. Language is a form of embodied cultural capital that creates dispositions that may differentiate immigrant students from their English-speaking counterparts in schools. Specifically, this work utilizes social reproduction theory because it accounts for the access to educational content, resources, and instruction promoting inclusivity vis-à-vis language relations. Gibson, et al. (2004) reported that “much like the literature on belonging, the social-capital literature points to the necessity for a bonding or ‘we-ness’ with school staff and with other students as a precondition to accessing school resources” (p. 130). Hence exclusion based on language differences in schools may deepen patterns of educational inequity by limiting access to resources. Adult and peer relations in schools may contribute to the knowledge useful for navigating the bureaucracy of the educational system (Conchas, 2001; Gibson, et al., 2004). The prospect of acquiring social or cultural capital is relative to the extent that students are able to establish membership in the language dominant group. The lack of social connections with English-speaking teachers and peers may limit access to a culture that values information sharing and networking.

Isolated cases of student success may occur for those who do establish relationships with peer and adult social capital (Gibson et al., 2004). However, these

isolated cases do little to systematically change the structural features that promote educational equity (Stanton-Salazar, 2001). Establishing relationships with peers and teachers in schools may be even more pertinent for immigrant students who may not readily have the information to help them excel in U.S. schools (Oseguera et al., 2010). The additive value for individuals who access social networks may also result in physical and mental health, safety, and community integration (Nawyn, Gjokaj, Agbényiga, & Grace, 2012).

Consistent with the idea that memberships and social networks are central features of social functioning (Hagerty et al., 1992), social reproduction theory contends that “fields” of practice marginalize people who possess a subset of dispositions (Bourdieu & Thompson, 1991). These fields, or what Haggerty et al. (1992) referred to as environments include schools where unique rules are accepted (Bourdieu & Thompson, 1991). Hence the environments where rules are applied may exclude those who have not acquired them. Schools have their own set of positions and practices, as well as their struggles for position as students, educators, administrators, parents, and so on, mobilize their capital to declare their demands within the educational system.

The Linguistic Habitus as it Relates to School Belongingness

Other features of social reproduction theory are, linguistic capital, and the habitus. The *habitus* is defined as a predisposition, taste, or affinity for cultural objects, such as art, food, and clothing. The lifestyle, values, and expectations of students that are acquired through the activities and experiences of everyday life

inform their approach to schooling. The habitus can function as an enduring set of dispositions that inform the placement of students in schools. However, schools may embrace or disregard the home languages of students, leading to different experiential circumstances. Therefore one of the most relevant features of social reproduction theory for understanding how language affects immigrants' belongingness and achievement is the linguistic habitus. The *linguistic habitus* is defined as "a sub-set of dispositions acquired in the course of learning to speak in particular context (the family, the peer group, the school, etc.)" (Bourdieu & Thompson, 1991, p. 17).

The linguistic habitus of members of the dominant group in schools is the primary language of instruction, student-to-student communication, and teacher-to-student communication. This concept is useful for understanding belongingness because English has permeated the educational infrastructure of the U.S. public educational system and has subsequently become the dominant language in schools. This may present a discontinuity for students whose home languages are not up to par with the dominant language of the school. Consistent with this notion, Anderman (2003) stated that "...sense of school belonging represents students' perceptions of the social context of schooling and their place in it." (p. 6). Within U.S. schools, English speakers may engage in linguistic exchanges that express relations of power (Bourdieu & Thompson, 1991). Variations in accent, intonations, vocabulary reflect the placement of students (Bourdieu & Thompson, 1991).

Bourdieu and Thompson (1991) stated that words may be used "as instruments of coercion and constraint, as tools of intimidation and abuse, as signs of

politeness, condescension, and contempt” (p. 1). Language is therefore an integral part of the lives of students in U.S. schools. However, theorists as well as researchers must reflect on the implications that language barriers have for immigrants’ perceived degree of belongingness. Linguistic utterances and expressions are forms of practice and can be understood as the product of the relation between a linguistic habitus and a linguistic market (Bourdieu & Thompson, 1991). When immigrant students cannot produce the utterances and expressions necessary to meet the value of the linguistic market, their acceptance relative to the English-dominant school community may be jeopardized.

For immigrant students, the failed attempts to produce the language valued in schools may signal them as linguistic outsiders. According to Bourdieu and Thompson (1991), the linguistic habitus is also inscribed in the body and forms a dimension of the bodily hexis. The “articulatory style” of immigrant students who attempt to meet the linguistic needs of school may predispose them to confirm their linguistic placement. According to Bourdieu and Thompson, different groups have different accents, intonations, and ways of speaking that are at the level of language of the socially structured characters of the habitus. Therefore inconsistent accents, intonations, and ways of speaking are marginalized.

Because linguistic utterances or expressions are always produced in particular contexts, and the properties of these markets endow linguistic products with a certain “value” it is feasible to assume that in English-dominant schools, students who do not meet these markets will be deemed invaluable. Part of the practical competency of

speakers is to know how to and be able to produce expressions that are highly valued in markets. Therefore the degree to which Filipino English-speaking immigrant students are able to avoid being marginalized carries some implications for their placement in schools. For non-English-speaking immigrant students, this practical competency may not be immediate, as the acquisition of language is far more complicated than changes to the bodily hexis, such as changes in clothing and mannerisms.

Language, Power, Belongingness & Access

Through a social reproduction lens, sense of school belongingness is the compatible or congruent relationship between the embodied accents, dialects, or spoken languages of students within schools. The lack of belongingness is therefore the incompatible or incongruent relationship between the embodied accents, dialects, or spoken languages of students. Therefore the everyday linguistic exchanges among immigrant students are situated encounters between agents endowed with socially structured proficiencies, making the prospect of teacher and peer relationships all the more pertinent for immigrant students. The similarities and differences that characterize the social conditions of existence of immigrant students will be reflected in the linguistic habitus, which may be relatively homogeneous among immigrant students from similar backgrounds. This relational language-based dynamic holds implications for research on immigrant communities that enter the educational system with prescribed familiarity of the dominant language. Taken together, social

reproduction theory and the tenets of the linguistic habitus may help investigations on belongingness substantiate the experiences of immigrant students.

While the linguistic habitus is a subset of dispositions acquired in the course of learning to speak in a particular context, linguistic capital can be understood as a form of embodied cultural capital in that it represents a means of communication and self-presentation acquired from one's surrounding environment. Fairclough (1989) contended that we live in a linguistic epoch where language is fundamentally social. Asserting language as a form of capital helps gauge how inequalities are produced and maintained among immigrant students. The forms and quantities of capital possessed by individuals in multidimensional fields hold implications for the individuals who are not part of the linguistically elite. As a result, linguistic capital may demarcate immigrant students, resulting in variations on the belongingness and achievement relationship.

Language is a social-historical phenomenon that acquaints the elite class through its linguistic unification, which favors those who already possess the dominant language (Bourdieu & Thompson, 1991). Those who do not possess the linguistic capital that is consistent with the elite class are subordinated, devalued, and excluded. The habitus of those who have developed the language valued by the school provides the mechanism that students use to orient themselves and build relationships in schools. In other words, the consistency between the linguistic habitus of students and the demands of the context in schools leads to affective experiences of belonging. The inconsistency between the linguistic habitus of

students and the demands of the context of schools leads to lack of belonging. The inconsistencies that underlie the confidence and fluency that students can engage in is reflective of a social divide. By theorizing about school sense of belonging through social reproduction theory, the dominant language of U.S. schools becomes the apparatus useful for understanding the degree of perceived belongingness as it relates to language. Prior studies that have demonstrated that students who experience feelings of inclusion and acceptance within the context of schools are more engaged, motivated, and invested in their academic experiences have not fully investigated the theoretical underpinnings for understanding belongingness among immigrant students, who also tend to be language minorities.

Social reproduction theory contends that individuals occupy a position in a multidimensional social world. Individuals within the multidimensional social world are then subject to the external context that guides social interactions. The linguistic capital that is valued, used, exchanged, and collected is often prescribed by the linguistically elite. In this respect, the discrepancies in linguistic capital pertaining to immigrant students with peers and teachers should be investigated. Specifically, attempts to communicate in a social field (i.e., schools) can merit linguistic capital to the established linguistically elite group, such as peer and teachers, and weaken the linguistic capital of the nonelite group, such as immigrant students. Consequently, perceptions of exclusion for immigrant students may be a result of the dominant language ideals held by schools.

Other work has corroborated this notion by stating that the opportunities to capitalize on the home language of students as well as the language of the receiving community result in greater immigrant integration and greater perceptions of school belonging (Cartmell & Bond, 2015; Nawyn et al., 2012). Zhou (2001) added “While acquiring English proficiency is undoubtedly crucial, maintaining fluent bilingualism is equally important and sometimes even more beneficial” (p. 219). With this respect, the value that is placed on the dominant language of schools may maintain or alter linguistic capital, resulting in the exclusion or acceptance of the languages that immigrant students use to connote memberships.

The schooling context may serve as the field where linguistic expressions are delineated through group membership. Such forms of functioning fundamentally change the relationships among student groups in schools. The social relationships that are stratified due to language induce a social experience that can be understood as a form of belonging or the lack thereof. However, the linguistic habitus as forms of capital that delineate groups is the link between membership, in the sense of an affective experience. It is the linguistically elite within schools who possess the communicative skills necessary to inform membership. The linguistic habitus guides a repertoire that is limited to a selective few. Linguistic exchanges between individuals (i.e., teachers, and peers) in schools inform the placement of the students in the social hierarchy of education. Linguistic interactions demarcate, stratify, include, exclude, place, and misplace students. Social interactions and the usage of

language, whether formal or informal, carry the traces of the social-historical human experience that value the language of the dominant group.

Chapter 5: Inquiry and Research Questions

The primary focus of this dissertation is to analyze the effect of peers, teachers and language status on the belongingness and achievement relationship among immigrant Filipino and Mexican students; however, a comprehensive examination of this relationship also depends on other correlates that have been shown to influence the educational experiences and outcomes of students. The review of the related educational literature presented earlier has shown that SES, gender, peers, teachers, and immigrant generational status emerged among the most salient predictors of school belongingness. The effects of these predictors in addition to the English-Language status measure are reviewed in this chapter to examine the conceptual and theoretical frames that can further illuminate the implications of the belongingness and achievement relationship.

Suárez-Orozco et al. (2008), for example, have argued that schools are gendered institutions that tend to favor girls over boys. Interestingly, many related studies have found that girls experience a greater sense of belongingness (Adelabu, 2007; Arastaman, 2006; Cheung, 2004; Cheung & Hui, 2003; Goodenow, 1992; Goodenow & Grady, 1993; Hagborg, 1994; Nichols, 2006; Sari, 2012). However, a longitudinal study by Gillen-O'Neel and Fuligni (2013) found that in ninth grade, girls' school belongingness tends to be higher than boys' but that by the end of high school, girls' school belongingness tends to decline. In contrast, boys' sense of school belongingness tends to remain stable across the high school years. As a result, although girls begin secondary school at similar levels of belongingness relative to

male students, both groups end with similar levels of school belongingness by the end of high school. In this study, however, because school sense of belongingness was only measured at a single time point when students were in ninth grade, it is not possible to assess changes to school sense of belongingness throughout the high school experience. However, consistent with other existing studies, it is hypothesized that girls will experience a greater sense of school belongingness at ninth grade.

Prior research has also highlighted cultural experiences that uniquely affect the lives of male and female immigrant students. For example, Espiritu and Wolf, (2001) have offered evidence to suggest that the effect of gender is complicated by cultural and racial dynamics. In their work, Espiritu and Wolf reported that Filipina students consistently suffer from lower self-esteem and higher depression than their male counterparts. They attribute this pattern to the conflicting cultural expectations placed upon the girls by their parents. Given such findings, it is hypothesized that Filipina immigrants within U.S. schools will experience a greater sense of school belongingness relative to their male counterparts. This hypothesis is also premised on the notion that within the high school context, Filipinas, relative to Mexicanas, will experience a greater sense of school belongingness and greater academic achievement outcomes, because U.S. schools, in addition to being gendered institutions, are primarily English dominant. This hypothesis is counter to the Filipino paradox (Espiritu & Wolf, 2001), which suggest that despite the tendency to acculturate and assimilate into mainstream middle-class America, Filipinos, at least within the home, experience socioemotional difficulties compared to other immigrant groups.

Students' peers have also been shown to play an integral part in the lives of students in school (Gibson, et al., 2004; Sancho & Cline, 2012). Thus, accounting for peer relations in secondary school studies related to belongingness may be critical because peers can potentially mitigate students' feelings of isolation. Several studies have shown that peers have a profound effect on the level of comfort that students experience with their educational context and their overall degree of belongingness in school (Gibson, et al., 2004; Sancho & Cline, 2012). Faircloth and Hamm (2005) posited that school sense of belonging may be derived via a network of positive friends through which students feel recognized. According to Suárez-Orozco (2001), immigrant students are more likely to have friends who think that academic achievement is important. The relationship between peer effects and belongingness with achievement may also be complicated by gender such that immigrant girls have been found to be more likely to have friends with higher school orientation (Suárez-Orozco, et al., 2008).

Consistent with these findings, it is also hypothesized that girls in this study will have access to peers who are more school oriented. Peers may eventually serve as conduits of information (Gibson, et al., 2004; Suárez-Orozco, et al., 2008). This suggests that the affinity to others is important for the solidification of relationships. Faircloth and Hamm (2005) used the number of friendships as an indicator of school-based social integration and hypothesized that students with more friends would report a greater sense of belonging. They also argued that across ethnic groups,

school-based friendships carry different levels of intimacy and support, and the contribution of friendships to school belonging may vary across groups as well.

The emphasis on peer relationships assumes that “if ethnic minority youth lack intimacy in school-based friendships, these relationships may not serve to psychologically bond teens to their schools” (Faircloth & Hamm, 2005, p. 305). Students’ ability to bond with peers can foster opportunities to gain access to resources and information that may contribute to an increased sense of belongingness and academic achievement. In situations where bonding with peers occurs, students themselves can provide a source of social capital for each other, which in turn may strengthen the language and belongingness relationship (Gibson et al., 2004). The simultaneous effect of peer social and linguistic social capital may bolster perceptions of belongingness for both Filipino and Mexican immigrant students. Peer social capital is defined “as adolescents’ connections to peers and peer networks that can provide the resources and other nontangible forms of support, including proacademic norms and identities that facilitate academic performance” (Gibson, et al., 2004, pp. 130-131). In addition, Nawyn et al. (2012) suggested that language expands access to networks and provides a link to necessary information and constitutes an act of social power. This suggests that linguistic capital, or the ability to produce language beneficial to the individual's social status, is a fundamental tool for understanding the interrelated effects of English-language and relationships with peers and teachers on school belongingness.

However, research has demonstrated that peer relationships may not always be positive, as students may be highly uncomfortable in school settings that bring them in contact with peers who they feel neither accept nor respect them (Gibson et al., 2004). In addition, different ethnic groups may experience peer relationships differently in schools (Way & Chen, 2000). It is likely that Mexican immigrant students will benefit most from peers who are also school oriented. Unfortunately, this study does not test for whether the students in this sample engaged with bilingual peers who are able to mediate relationships and expand social networks in schools. It is assumed, however, that because language status is itself a prerequisite for engagement, Mexican immigrant students with low degrees of English-language status would be less likely to establish relationships with English-speaking peers relative to their English monolingual counterparts.

Moreover, SES has consistently been reported to be a significant predictor of higher educational outcomes. Children who attend schools of middle and high SES have also been reported to have a higher sense of school membership (Sari, 2012). Lew (2007) corroborated such findings and argued that families' class position affects the quality of their children's education. Schools are primarily funded by revenues collected from property taxes, which often results in income and achievement disparities. Access to quality schools and educational preparation often depend on the economic vitality of a neighborhood and the local property values. As a result, schools serving children in the same grade, one attending a school in a poor neighborhood and another in a more affluent neighborhood, will receive a per student

expenditure that differs dramatically. This results in a tremendous amount of variation and inequality across schools. It is reasonable to assume that the educational and socioemotional experiences of students who attend better resourced schools will be strikingly different from those attending less resourced schools.

Relationships with teachers could help mitigate the variability in school resources resulting from these socioeconomic differences. However, better resourced schools are more able to hire better trained teachers. Furthermore, prior research has shown that teachers tend to be more supportive of students who they like (Suárez-Orozco, et al., 2008) as well as students who they perceive to be more competent (Rosenthal & Jacobsen, 1968). Teachers' ideologies and negative attitudes about the use of languages other than English may have an effect on how students feel about teachers and schools in general (Gibson, 1998). However, little is still understood about how teachers' commitment to the educational well-being of students affects the students' sense of school belongingness.

To account for variability in generational status among immigrants, this study uses first, second, or third generation to account for these important differences. The effect of generational status on students has been explained as *generational dissonance* and *generational consonance* (Portes & Rumbaut, 1996). Generational dissonance occurs when children do not correspond to parental acculturation. Generational consonance, on the other hand, is when parents and children remain unacculturated or both agree to selectively acculturate. The effects of generational status, at least in the quantitative sense, have been less attended to in research on

school sense of belongingness. Generational status has, however, emerged as a significant predictor of other educational outcomes. For example, Gibson (1998) stated that immigrant generation in the United States was an important factor in how students perceived and responded to assimilationist pressures and the actions and attitudes that they viewed as discriminatory. Third-generation students of Mexican descent, for instance, tend to academically underperform relative to their first- and second-generation counterparts (Gibson, 1998; Perlmann & Waldinger, 1997).

Interestingly, third-generation students tend to have parents who were born, raised, and also attended schools in the United States, which allowed them to improve their English-language competence. However, third-generation students were also more likely to live in poverty, which may have resulted in less optimistic outlooks about their future educational and employment opportunities (Gibson, 1998). First-generation students were found to be more likely to view their status in the United States as temporary (Zhou, 2001). The effects of generational status have also been noted among Filipino youth. For example, Wolf (1997) suggested that second-generation Filipino youth experience *emotional transnationalism*. This means that Filipinas tend to experience greater parental control than their male counterparts, leading many girls to experience suicidal predispositions. Taken together, generational status is included in this study to account for the effects of immigrant designation in Mexican and Filipino youth. This study hypothesizes that first-generation Mexican immigrants will experience a lower sense of school belongingness as opposed to first-generation Filipino immigrants, because first-

generation Mexican immigrants may not have acquired the language competency necessary to excel in school relative to English-speaking Filipinos.

Given the complex nature of the relationship between English-language status and school belongingness, the primary focus of this study is to test the effect for Filipino and Mexican immigrant students in secondary schools. However, solely focusing on first, second, or third generation conflates the level of English language status of students. For this reason, the language first spoken by students is taken into account. Suárez-Orozco, (2008) stated that

it is in school where, day in and day out, immigrant youth come to know teachers and peers from the majority culture as well as newcomers from other parts of the world. It is in schools that immigrant youth develop academic knowledge and, just as important, form perceptions of where they fit in the social reality and cultural imagination of their new nation (pp. 2-3)

However, the languages that immigrant and non-immigrant students speak to intergrate themselves into the context of the school, if different from the dominant language of the school, may exacerbate social divisions.

SES remains a critical factor in school success and is also related to English-language competency. The children of less skilled immigrant workers have academically struggled relative to other children (Kao & Tienda, 1995). Immigrant children often find themselves adjusting to a new school environment while simultaneously attempting to meet the academic expectations placed on them (Suárez-Orozco, et al., 2008). However, excelling academically may be difficult for immigrant students whose language is not consistent with the language of the school. In fact, higher English-language competence has been correlated with higher grades

and test outcomes (Suárez-Orozco, et al., 2008). Scaffolding immigrant students who also tend to be English-language learners to develop the English competency needed to excel academically is necessary. Equally important is the extent to which schools provide scaffolding opportunities to students in their home languages (Cartmell & Bond, 2015; Fine, Jaffe-Walter, Pedrazza, Futch, & Stoudt, 2007). However, English-dominant practices are often premised on ideologies about the languages that schools should use to teach their students, which perpetuate educational disparities.

The English-language skills of students have also been linked to their social adaptations (Orellana & Gutierrez, 2006; Suárez-Orozco, et al., 2008). As a result, the extent to which immigrant students experience school belonging in U.S. schools may depend on their command of the English language (Pease-Alvarez, Samway, & Cifka-Herrera, 2010). This is especially relevant given that the mastery of English and having lived in America for an extended period of time can foster people's membership in the American ingroup (Devos & Banaji, 2005; Espiritu & Wolf, 2001). On one hand, the mastery of English may help fortify group memberships among immigrant students and their English-speaking peers, and on the other hand, not mastering English may prevent group memberships among immigrant students and their English-speaking peers.

As early as the age of 5, children have shown a preference for other children who speak the same language that they do (Powlishta, Serbin, Doyle, & White, 1994). This favoritism toward linguistic in-group members may persist well into early adolescence and influence the school context. Other research has demonstrated that

the linguistic composition of the classroom matters. For example, Gibson et al. (2004) found that in Advanced Placement Spanish classes, Mexican students were generally comfortable using oral Spanish to communicate with other Spanish-speaking peers. Conversely, White students were more likely to be silent and reluctant to speak up and cautious about drawing attention to themselves in Spanish-dominant classrooms (Gibson, et al., 2004).

Gibson et al. (2004) also reported the discomfort of immigrant students in their pronunciation of English words in an English-dominant setting. For one student, the mispronunciation of an English word evoked uncertainty: “It’s scary.” Another, added, “They’ll probably laugh at you” (pp. 136 - 137). Others have also reported this sentiment, stating that in some cases, immigrant students remain silent because they fear being humiliated for their accents (Fine et al., 2007). However, in educational settings where other students may also speak a language other than English, immigrant students do not feel as threatened because they understand that the majority of their peers are also experiencing similar language difficulties (Fine et al., 2007). As Foner (2005) stated “shared language is a powerful unifier that makes communication and shared experiences possible” (p. 25). However, the power differentials evoked by language competency carry profound implications for these students’ well-being.

Spaces of acceptance, where power differentials are minimized, may buffer students against feelings of exclusion. For example, Gibson et al. (2004) stated that students who were members of a Migrant Student Association and Spanish speakers

felt the liberty to communicate in their native language. This finding is consistent with Chhuanon and Hudley (2010), who found that Cambodian students feel more comfortable speaking Khmer when there are other Khmer-speaking students at school. This finding magnifies the effects of language differences for students whose primary language is one other than the dominant language of schools. Gibson et al. (2004) stated that students are guarded in their speech because they fear they may be teased if their English is not up to par with that of native speakers. Students also worry that their use of Spanish may draw criticism from non-Spanish-speaking peers and teachers (Gibson et al., 2004).

This study focuses on the extent to which English-language status and immigrant status affect the sense of school belongingness among Filipino and Mexican immigrant students. The following research questions guided the investigation:

1. Is school sense of belongingness mediated by English-language status, academically inclined peers, and an ethos of teacher commitment among Mexican and Filipino immigrant and non-immigrant students?
2. Does school sense of belongingness differ as a function of English-language status and ethnicity for Mexican and Filipino immigrant and non-immigrant students?
3. Does school sense of belonging, academically inclined peers, and an ethos of teacher commitment predict ninth grade academic achievement for Mexican and Filipino immigrant and non-immigrant students?

4. Does ninth grade academic achievement differ as a function of generational status and ethnic background for Mexican and Filipino immigrant and non-immigrant students?

To examine the extent to which linguistic status and academic achievement mediate school belongingness for Filipino and Mexican immigrant students, research must account for the important control measures discussed earlier, such as SES, gender, peer effects, and teacher commitment. After accounting for such predictors, this study hypothesizes that perceptions of belongingness will be heightened for Filipino immigrant students much more so than for Mexican-origin students. Consequently, the relationship between linguistic status and school belongingness will be lower for Mexican immigrant students due to their limited exposure to the English language in U.S. schools. Filipino immigrant students may be more likely to validate their placement in schools as the context supports their language, which in turn serves as the relational link to teachers, students, and other educational agents in and out of the classroom. This relational experience may result in the acquisition of key information useful for reaping the benefits of education. This hypothesis is based on the assumption that Filipino immigrant students, unlike Mexican immigrant students, are able to weave themselves into the English-dominant schools due to language-based congruencies. The context, if conducive for the patterns of adaptation and incorporation for either immigrant group, can bolster or ameliorate the language and belongingness and achievement relationship. Importantly, research should

examine the effects of belonging outside of a laboratory environment (Good, et al., 2012).

Chapter 6: Data and Methods

This chapter provides a description of the data and methodology used in this study and discusses (a) the data set used for analyses; (b) the definition for each variable, including the coding scheme; (c) the subsample of students included in the analyses; and (d) the statistical models that were fit to address the guiding research questions. The theoretical premise of social reproduction theory undergirds the analyses and provides insight for the interpretation of the results. The analyses may yield findings useful for understanding the effect of language, belongingness, and academic achievement of immigrant students. A diagram showing the methodological steps taken to conduct this research is give in Figure A.1 of the appendix section.

Data Source

The data for this study were drawn from the restricted sample of the first wave of the High School Longitudinal Study of 2009 (HSL:09), a large nationally representative data set provided by the National Center for Education Statistics (NCES). The data set consists of a nationally representative sample of high school students who were in the ninth grade in 2009. The original data set includes information for 25,206 students who were sampled from 944 schools. The data set also includes information on teachers, counselors, parents, and administrators. This analysis investigates a subsample of 14,377 students and examines the four research questions of this dissertation. The public data are available from the NCES Website (<http://nces.ed.gov/EDAT>). The restricted data were available through a restricted-use

license and were housed in a secure location in the Department of Education at UC Santa Cruz.

The HSLS:09 is ideal for investigating the effect of student and school predictors on sense of school belongingness for several reasons. First, the data set provides a composite measure of school sense of belongingness. Second, the HSLS:09 sample design is based on a multistage process that uses stratified random sampling of schools and random sampling of students within each school. This sampling method is useful for investigating school sense of belonging, while accounting for school-level effects, a method that has been recently introduced to the belongingness literature (Gillen-O'Neel & Fuligni, 2013). Third, because of the complex survey design, NCES provides analytic weights that allow results to be generalizable to the population of U.S. high school students and schools in 2009.

Variables in the Study

Variables. Using the electronic software designed by the U.S. Department of Education (NCES 2014-359), the following variables were extracted from the restricted student data set: STU_ID, SCH_ID, X1SCHOOLBEL, X1SES, X1SEX, X1RACE, X1HISPTYPE, X1ASIANATYPE, X1DUALLANG, P1USBORN9, P1USBORN1, P1USBORN2, S1FRNDGRADES, S1FRNDCLASS, S1HRFRIENDS, M1TEACHING, M1TSCHDISC, M1TIMPROVE, M1TSETSTDS, M1TSELFDEV, M1TALLLEARN, X3TGPA9TH, W1STUDENT, and W1SCHOOL. For a list of the extracted variables and their descriptions see Table A.1 of the appendix.

Outcome Variables. The primary outcome variable for this study was sense of school belongingness (X1SCHOOLBEL). The variable X1SCHOOLBEL is a scale of the sample student's perception of school belonging where low values represent lower sense of school belonging and higher values represent a greater sense of school belonging. The variable was created by the NCES through principal components analysis weighted by W1STUDENT and standardized to a mean of 0 and a standard deviation of 1. The sense of belongingness scale comprised of the following items:

- S1SAFE: Do you feel safe at school?
- S1PROUD: Do you feel proud of being part of this school?
- S1TALKPROB: Are there always teachers or other adults in your school that you can talk to if you have a problem?
- S1SCHWASTE: Is school often a waste of time?
- S1GOODGRADES: Is getting good grades in school important for you? Only students who provided a full set of responses were assigned a scale value.

The inputs used to create the composite of school sense of belongingness were captured at baseline year when the students were in ninth grade. The coefficient of reliability (alpha) for the scale is .65. No subsequent measure of school sense of belonging was provided beyond the first baseline-year data collection. The scale for X1SCHOOLBEL was recoded to account for missing data and was relabeled SCHOOLBEL. Additional follow-up analyses used GPA at ninth grade (X3TGPA9TH) as an outcome variable and incorporated belongingness as a

predictor. The variable X3TGPA9TH is a composite measure capturing the sample participants' GPAs in ninth grade. The variable X3TGPA9TH was recoded to account for missing data and was relabeled GPA.

Question Predictors. The sample member's race/ethnicity was captured using X1RACE. The variable categorized students into one of the following racial/ethnic groups: (a) American Indian/Alaska Native, non-Hispanic; (b) Asian, non-Hispanic; (c) Black/African-American, non-Hispanic; (d) Hispanic, no race specified; (e) Hispanic, race specified; (f) more than one race, non-Hispanic; (g) Native Hawaiian/Pacific Islander, non-Hispanic; and (h) White, non-Hispanic. Table A.2 shows the frequencies for each of the eight categories and provides an illustration of the students' race/ethnicity in the full sample.

Two additional variables, X1HISPTYPE and X1ASIANATYPE, were used to identify the students' Hispanic and Asian subgroups. X1HISPTYPE indicates the sample member's Hispanic subgroup, and X1ASIANATYPE indicates the sample member's Asian subgroup. The information for these two variables was taken from the base-year student questionnaire. Table A.3 shows the frequencies for each of the Hispanic categories and Table A.4 shows the frequencies for each of the Asian categories in the extracted sample. Because this study focuses on Mexican and Filipino students, X1HISPTYPE and X1ASIANATYPE were used to identify both ethnic groups. Specifically, X1HISPTYPE was used to create a new variable indicating whether the student was MEXICAN and X1ASIANATYPE was used to create a new variable indicating whether the student was FILIPINO.

The variables P1USBORN9, which indicated whether the student was born in the United States; P1USBORN1, which indicated whether Parent 1 was born in the United States., and P1USBORN2, which indicated whether Parent 2 was born in the United States were used to determine a student's generational status. Table A.5 shows the frequencies for P1USBORN9, P1USBORN1, and P1USBORN2 disaggregated by those born in the United States, those born in Puerto Rico or in another U.S. territory, and those born in another country. Two new variables were created from P1USBORN1, and P1USBORN2: P1_FOREIGN, which indicated if Parent 1 was born outside of the United States and P2_FOREIGN, which indicated if Parent 2 was born outside of the United States. From P1_FOREIGN and P2_FOREIGN, a new variable was created called PARS_FOREIGN, capturing in a single variable if at least one parent was foreign born.

A new variable, STU_FOREIGN, was also created from P1USBORN9 to capture whether the student was foreign born. After PARS_FOREIGN and STU_FOREIGN were created, generational status was captured in a single variable indicating whether a student was foreign born and either parent was foreign born; if so, then that student would be considered first generation (GEN1). If either parent was foreign born and the student was U.S. born, then the student would be considered to be second generation (GEN2). If either parent was U.S. born and the student was U.S. born, then the student would be considered to be third generation (GEN3). For an illustration of the creation of these variables, see Figure A.2.

The variable X1DUALLANG indicated whether the language that the student first learned was English only, non-English only, or English and a non-English language equally. This variable was used to create three new binary variables: NONENG (non-English only), BILING (English and a non-English language equally), and ENGONLY (English only). In addition, three peer variables were used in this study (S1FRNDCLASS, S1FRNDGRADES, S1HRFRIENDS). The variable S1FRNDCLASS was captured during the baseline year and asked students whether they believed that their closest friends attended classes regularly. A dummy variable FRNDCLASS was created to capture if the student believed that his or her closest friend attended classes regularly. The variable S1FRNDGRADES was captured during the baseline year and asked the student whether he or she believed that his or her closest friend received good grades. A binary variable, FRNDGRADES, was created to capture if the student believed that his or her closest friend received good grades.

Because FRNDCLASS and FRNDGRADES were highly correlated with one another, a composite variable PEEREFF was created to represent the peer effects in the statistical models. This composite was computed due to a strong intercorrelation between FRNDCLASS and FRNDGRADES. The last peer variable included in this analysis was S1HRFRIENDS, which was also captured during the baseline year and asked students the number of hours they spent hanging out or socializing with their friends during a typical weekday. The options were less than 1 hour, 1-2 hours, 2-3 hours, 3-4 hours, 4-5 hours, or 5 or more hours. A new variable HRFRIENDS was

created to capture the number of hours each student spent hanging out or socializing with friends.

Teachers' commitment at school was captured using six variables from the math teacher instrument administered during the baseline year and included M1TEACHING, M1TSCHDISC, M1TIMPROVE, M1TSETSTDS, M1TSELFDEV, and M1TALLLEARN. The variable M1TEACHING assessed whether math teachers at the school set high standards for teaching, the variable M1TSCHDISC assessed whether teachers at the school help maintain discipline in the entire school, and M1TIMPROVE assessed whether teachers at the school take responsibility for improving the school; the variable M1TSETSTDS assessed whether teachers at the school set high standards for themselves, M1TSELFDEV assessed whether teachers at the school felt responsible for developing student self-control, and M1TALLLEARN assessed whether teachers at the school felt responsible that all students learn.

These items were measured on a 4-point scale ranging from 1 (*strongly agree*) to 4 (*strongly disagree*). For the purpose of interpretation in the output, the responses were reverse coded such that 1 = 4, 2 = 3, 3 = 2, and 4 = 1, and this resulted in six new reverse-coded variables RM1TEACHING, RM1TSCHDISC, RM1TIMPROVE, RM1TSETSTDS, RM1TSELFDEV, and RM1TALLLEARN. Higher scores on the reverse-coded scale represented higher agreement and lower scores represented lower agreement. Principal components analysis using STATA was used to compute eigenvalues and eigenvectors. Table A.6 shows the unrotated principal components

analysis generated in STATA, and Table A.7 shows the principal components eigenvectors generated in STATA. The eigenvectors were used to generate a composite variable. The composite was called TEACHERCOM and captured teachers' commitment.

Control Predictors. This study controls for SES and gender. Socioeconomic status (X1SES) is a composite continuous variable. The variable was calculated by using parent/guardian's education, occupation, and family income. The information used to create this composite is from the baseline year. The variable X1SES was recoded to account for all missing data and was relabeled as SES. The student's sex (X1SEX) was taken from the base-year student questionnaire. The parent questionnaire, and/or school-provided sampling roster was used to account for missing data. All remaining missing data were coded using the system missing (sysmis) option on SPSS. X1SEX was used to create a new variable labeled FEMALE, which is the binary indicator of all students who identified as female. Descriptive statistics for the variables in the study are shown in Table 1, and coding for the variables is outlined in Table 2.

Missing data. Only complete data were incorporated into the analyses. The numerical codes for indicating missing data were as follows: -9 = missing; -8 = unit non-response/component not applicable; -7 = item legitimate skip/NA; -6 = component not applicable; and -4 = item not administered: abbreviated interview.

Table 1
Descriptive Statistics for Variables in the Study

Variable	Description	<i>n</i>	Mean	<i>SD</i>	Min.	Max.
Control predictors						
SES	Composite variable used to measure a construct for socioeconomic status	21,992	0.041	0.78	-1.93	2.88
FEMALE	Whether students is female	25,206	0.487	0.49	0	1
Generational status						
GEN1	Student is first generation	25,206	0.043	0.20	0	1
GEN2	Student is second generation	25,206	0.110	0.31	0	1
GEN3	Student is third generation	25,206	0.480	0.49	0	1
Language competence						
NOENG	First language is a non-English language only	25,206	0.480	0.58	0	1

84

BILING	First language is English and non-English equally	25,206	0.480	0.59	0	1
ENG	First language is English only	25,206	0.480	0.49	0	1
Race/ethnicity						
MEXICAN	Student is Mexican	25,206	0.075	0.26	0	1
FILIPINO	Student is Filipino	25,206	0.015	0.12	0	1
WHITE	Student is White	25,206	0.486	0.49	0	1
Peer variables						
PEEREFF	Closest friends attends classes regularly	25,206	0.791	0.40	0	1
HRFRIENDS	Hours spent socializing with friends	20,640	3.16	1.73	1	6
Teacher commitment composite						
TEACHERCOM	Teacher commitment composite	15,859	7.702	1.12	2.43	9.7

Outcome variables						
SCHOOLBEL		21,240	0.076	0.04	-4.35	1.59
GPA	GPA at ninth grade	23,550	3.45	1.34	0	4

Table 2
Coding for Variables in the Extraction

Variable	Definition	Notes/coding
Control variables		
SES	Composite variable used to measure a construct for socioeconomic status	Ranges from -1.93 to 2.88
FEMALE	Students' gender	1 = female, 0 = male
Generational status		
GEN1	Student is first generation	1 = yes, 0 = no
GEN2	Student is second generation	1 = yes, 0 = no
GEN3	Student is third generation	1 = yes, 0 = no
Language competence		
NOENG	First language is a non-English language only	1 = yes, 0 = no
BILING	First language is English and non-English equally	1 = yes, 0 = no
ENG	First language is English only	1 = yes, 0 = no
Race/ethnicity		

MEXICAN	Indicates whether the students are Mexican	1 = yes, 0 = no
FILIPINO	Indicates whether the students are Filipino	1 = yes, 0 = no
WHITE	Indicates whether the students are White	1 = yes, 0 = no
Peer variables		
PEEREFF	Indicates the effect of peers	Ranges from 0 to 3
HRFRIENDS	Hours spent socializing with friends	Ranges from 1 to 6 1 = 1 hour 2 = 1 to 2 hours 3 = 2 to 3 hours 4 = 3 to 4 hours 5 = 4 to 5 hours 6 = 5 or more hours
Teacher commitment composite		
TEACHERCOM	Teacher commitment composite	Ranges from 1 to 4 4 = Strongly agree 3 = Agree 2 = Disagree 1 = Strongly disagree
Outcome variables		
SCHOOLBEL	Sense of school belonging	Ranges from -4.35 to 1.59
GPA	GPA at ninth grade	Ranges from 0.25 to 4.00

Analytical Sample

The full HSL:09 data set consisted of 25,206 students grouped in 944 schools. This study analyses a subsample of data on Filipino, Mexican, and White students. The binary codes created to identify students who were White, Filipino, or Mexican were useful in reducing the file to include only the analytical sample. Students who did not identify with one of the three racial/ethnic groups were removed from the analytic sample. Once the file was reduced, X1RACE was used to identify any of the remaining students in the file who were biracial. A total of 170 students were removed from the data set. In addition, 13 students were removed from the data set because they identified as both Filipino and Mexican but were not captured as biracial in the X1RACE biracial code. Ultimately, the file included mutually exclusive binary codes for White, Mexican, and Filipino students with all biracial students omitted. Descriptive statistics for the variables in the analytic sample are outlined in Table 3.

Table 3
Descriptive Statistics of the Variables in the Analytic Sample

Variable	Description	<i>n</i>	Mean	<i>SD</i>	Min.	Max
Control variables						
SES	Composite variable used to measure a construct for socioeconomic status	14,136	0.08	0.77	-1.93	2.88
FEMALE	Students who are female	14,377	0.48	0.49	0	1
Generational status						
GEN1	First generation	10,725	0.03	0.19	0	1
GEN2	Second generation	10,725	0.11	0.32	0	1
GEN3	Third generation	10,725	0.84	0.36	0	1
Language competence						
NOENG	First language is a non-English language only	10,725	0.11	0.20	0	1
BILING	First language is English and non-English equally	10,725	0.15	0.19	0	1
ENG	First language is English only	10,725	0.11	0.11	0	1
Race/ethnicity						
MEXICAN	Student is Mexican	14,224	0.13	0.34	0	1

FILIPINO	Student is Filipino	14,187	0.01	0.12	0	1
WHITE	Student is White	14,377	0.85	0.35	0	1
Language background						
ELLEVER	The ninth grader has ever been enrolled in a program for English-language learners	10,500	0.06	0.23	0	1
Peer variables						
PEEREFF	Closest friends gets good grades	13,643	0.87	0.33	0	1
HRFRIENDS	Hours spent socializing with friends	13,471	3.14	1.71	1	6
Teacher commitment composite						
TEACHERCOM	Teacher commitment composite	9,749	7.70	1.09	2.43	9.70
Measure of student achievement						
SCHOOLBEL		13,452	0.64	0.785	-4.35	1.59
GPA	GPA at ninth grade	14,377	2.72	0.92	0.25	4.00

Analytic Strategy

Research Question 1. Ordinary least squares (OLS) regression was used to address this question. The regression was used to investigate the predictive effect of English-language status and ethnic background controlling for SES, gender, the effect of peers, the hours spent socializing with peers, and teacher's commitment on school sense of belongingness. Multiple-level modeling is well suited for this analysis, as it accounts for the natural clustering within schools (Raudenbush & Bryk, 2002; Singer & Willett, 2003). The fitted multiple regression model is as follows:

$$\begin{aligned} \text{SCHOOLBEL} = & \beta_0 + \beta_1\text{SES} + \beta_2\text{FEMALE} + \beta_3\text{PEEREFF} + \\ & \beta_4\text{HRFRIENDS} + \beta_5\text{TEACHERCOM} + \beta_6\text{MEXICAN} + \beta_7\text{FILIPINO} + \\ & \beta_8\text{NONENG} + \beta_9\text{BILING} + e \end{aligned}$$

The parameters in these models are defined as follows:

β_1 = Slope parameters describing the impact of SES on school sense of belongingness

β_2 = Slope parameter describing the impact of being female on school sense of belongingness

β_3 = Slope parameter describing the impact of peer effects on school sense of belongingness

β_4 = Slope parameter describing the impact of hours spent socializing with friends on school sense of belongingness

β_5 = Slope parameter describing the impact of math teacher's commitment on school sense of belongingness

β_6 = Slope parameter describing the impact of being Mexican on school sense of belongingness

β_7 = Slope parameter describing the impact of being Filipino on school sense of belongingness

β_8 = Slope parameter describing the impact of non-English speakers on school sense of belongingness

β_9 = Slope parameter describing the impact of bilingual speakers on school sense of belongingness

e = error

Testing the main effect of control predictors ($\beta_1, \beta_2, \beta_3, \beta_4, \beta_5$) lends insight for better understanding the main effect of the question predictors ($\beta_6, \beta_7, \beta_8, \beta_9$). Control parameters β_1 and β_2 when added to the regression would result in a positive predictive effect for school sense of belongingness. This is to say that if β_1 is statistically significant and positive, school sense of belongingness (SCHOOLBEL) is higher when SES is also high. If β_2 is statistically significant and positive, school sense of belongingness (SCHOOLBEL) is higher for girls than it is for boys (the omitted category). After accounting for β_1 and β_2 , if β_3 is statistically significant and positive, school sense of belongingness (SCHOOLBEL) is higher when the effect of peers (PEEREFF), which captures students' beliefs that their closest friends are academically committed and successful, is also high. Controlling for β_1 and for β_2 , if β_4 is statistically significant and positive, school sense of belongingness (SCHOOLBEL) is higher when students spend more hours socializing with their

friends. Controlling for β_1 and for β_2 , if β_5 is statistically significant and positive, school sense of belongingness (SCHOOLBEL) is higher when math teachers show greater commitment.

After accounting for the control parameters ($\beta_1, \beta_2, \beta_3, \beta_4, \beta_5$), the effect of the question predictors ($\beta_6, \beta_7, \beta_8, \beta_9$) will be assessed. If parameter β_6 is statistically significant and negative, Mexican students would have a lower sense of school belongingness (SCHOOLBEL) than White students (the omitted category). If parameter β_7 is statistically significant and negative, Filipino students would have a lower sense of school belongingness (SCHOOLBEL) than White students (the omitted category). Relative to White students, Filipinos would still have a higher sense of belongingness, but not lower than Mexican students, when compared to Whites. If parameter β_8 is statistically significant and negative, non-English speakers would have a lower sense of school belongingness (SCHOOLBEL) than English speakers (the omitted category). If parameter β_9 is statistically significant and negative, bilingual speakers would have a lower sense of school belongingness (SCHOOLBEL) than English speakers (the omitted category).

Research Question 2. The fitted multiple regression model is as follows:

$$\begin{aligned} \text{SCHOOLBEL} = & \beta_0 + \beta_1\text{SES} + \beta_2\text{FEMALE} + \beta_3\text{PEEREFF} + \\ & \beta_4\text{HRFRIENDS} + \beta_5\text{TEACHERCOM} + \beta_6\text{MEXICAN} + \beta_7\text{FILIPINO} + \\ & \beta_8\text{NONENG} + \beta_9\text{BILING} + \beta_{10}(\text{MEXICAN} * \text{NONENG}) + \beta_{11}(\text{MEXICAN} \\ & * \text{BILING}) + \beta_{12}(\text{FILIPINO} * \text{NONENG1}) + \beta_{13}(\text{FILIPINO} * \text{BILING}) + e \end{aligned}$$

The cross-products of ethnicity and language were added to the statistical model. The cross-products are described as follows:

β_{10} = Slope parameter describing the impact of the cross-product of MEXICAN and NONENG on school sense of belongingness, that is, the impact of the two-way interaction of being Mexican and English not being the first language for the student

β_{11} = Slope parameter describing the impact of the cross-product of MEXICAN and BILING on school sense of belongingness, that is, the impact of the two-way interaction of being Mexican as well as having learned English and another language equally

β_{12} = Slope parameter describing the impact of FILIPINO and NONENG on school sense of belongingness, that is, the impact of the two-way interaction of being Filipino and English not being the first language for the student

β_{13} = Slope parameter describing the impact of FILIPINO and BILING on school sense of belongingness, that is, the impact of the two-way interaction of being Filipino as well as having learned English and another language equally

e = error

After accounting for the controls ($\beta_1, \beta_2, \beta_3, \beta_4, \beta_5$), the main effect of the question predictors ($\beta_6, \beta_7, \beta_8, \beta_9$) and the effect of the interactions ($\beta_{10}, \beta_{11}, \beta_{12}, \beta_{13}$) will be assessed. If parameter β_{10} is statistically significant and negative,

Mexican non-English-speaking students would have a lower sense of school belongingness (SCHOOLBEL) than White English-speaking students (the omitted category). If parameter β_{11} is statistically significant and negative, Mexican bilingual students would have a lower sense of school belongingness (SCHOOLBEL) than White English-speaking students (the omitted category). If, parameter β_{12} is statistically significant and negative, Filipino non-English-speaking students would have a lower sense of school belongingness (SCHOOLBEL) than White-English speaking students (the omitted category). If parameter β_{13} is statistically significant and negative, Filipino bilingual students would have a lower sense of school belongingness (SCHOOLBEL) than White English-speaking students (the omitted category).

Immigrant status was tested using generational status as a proxy. However, because of the multicollinearity between language and generational status, a separate analysis was conducted to address the immigrant and nonimmigrant components of Research Questions 1 and 2. First (GEN1), and second (GEN2) generation, were added to the multilevel model. The model now addresses the effects of race, ethnicity, and generational status as a proxy for immigrant/non-immigrant status, after controlling for SES, gender, the effect of peers, hours spent socializing with peers, teacher's commitment, and ethnicity:

$$\text{SCHOOLBEL} = \beta_0 + \beta_1\text{SES} + \beta_2\text{FEMALE} + \beta_3\text{PEEREFF} + \beta_4\text{HRFRIENDS} + \beta_5\text{TEACHERCOM} + \beta_6\text{MEXICAN} + \beta_7\text{FILIPINO} +$$

$$\beta_8\text{GEN1} + \beta_9\text{GEN2} + \beta_{10}(\text{MEXICAN} * \text{GEN1}) + \beta_{11}(\text{MEXICAN} * \text{GEN2}) + \beta_{12}(\text{FILIPINO} * \text{GEN1}) + \beta_{13}(\text{FILIPINO} * \text{GEN2}) + e$$

where

β_8 = Slope parameter describing the impact of being first generation on school sense of belonging

β_9 = Slope parameter describing the impact of being second generation on school sense of belonging

β_{10} = Slope parameter describing the impact of the cross-product of MEXICAN and GEN1 on school sense of belongingness, that is, the impact of the two-way interaction of being Mexican and first generation

β_{11} = Slope parameter describing the impact of the cross-product of MEXICAN and GEN2 on school sense of belongingness that is, the impact of the two-way interaction of being Mexican and second generation

β_{12} = Slope parameter describing the impact of FILIPINO and GEN1 on school sense of belongingness, that is, the impact of the two-way interaction of being Filipino and first generation

β_{13} = Slope parameter describing the impact of FILIPINO and GEN2 on school sense of belongingness, that is, the impact of the two-way interaction of being Filipino and second generation

e = error

To address the immigrant and nonimmigrant components of Research Questions 1 and 2, the test parameters β_8 , and β_9 and the cross-products testing for interactions of generational status and race (β_{10} , β_{11} , β_{12} , β_{13}) were estimated. If parameter β_8 is statistically significant and negative, first-generation students would have a lower sense of school belongingness (SCHOOLBEL) than third-generation students (the omitted category). If parameter β_9 is statistically significant and negative, second-generation students would have a lower sense of school belongingness (SCHOOLBEL) than third-generation students (the omitted category). If, parameter β_{10} is statistically significant and negative, first-generation Mexican students would have a lower sense of school belongingness (SCHOOLBEL) than third-generation White students (the omitted categories). If, parameter β_{11} is statistically significant and negative, second-generation Mexican students would have a lower sense of school belongingness (SCHOOLBEL) than third-generation White students (the omitted categories).

After conducting analyses that used sense of school belongingness as an outcome, two additional research questions assessed school belongingness as a predictor. Prior work has leveraged belongingness as a predictor (e.g., Hausmann, Schofield, & Woods, 2007). The purpose for including school sense of belongingness as a predictor is to assess its effect on academic achievement after controlling for the predictors included in Research Questions 1 and 2.

Research Question 3. To address the third research question, ninth grade GPA was added as the outcome variable. The effect of SES, gender, peers, hours

spent socializing with peers, teacher's commitment, and ethnicity were retained in the model. Generational status GEN1 and GEN2 were added as predictors as opposed to language status (NONENG, BILING, ENG) because of their intercoliniarity. This is to say that first-generation status was strongly correlated with non-English, second-generation status was strongly correlated with bilingualism, and third-generation status was strongly correlated with English only. Because of this intercoliniarity, generational status is used in the third and fourth research questions to indicate generational status as well as language status. Last, school sense of belongingness was added as the final question predictor:

$$\text{GPA}_{9\text{th}} = \beta_0 + \beta_1\text{SES} + \beta_2\text{FEMALE} + \beta_3\text{PEEREFF} + \beta_4\text{HRFRIENDS} + \beta_5\text{TEACHERCOM} + \beta_6\text{MEXICAN} + \beta_7\text{FILIPINO} + \beta_8\text{GEN1} + \beta_9\text{GEN2} + \beta_{10}\text{SCHOOLBEL} + e$$

where

β_1 = Slope parameters describing the impact of SES on ninth-grade GPA

β_2 = Slope parameter describing the impact of being female on ninth-grade GPA

β_3 = Slope parameter describing the impact of peer effects on ninth-grade GPA

β_4 = Slope parameter describing the impact of hours spent socializing with friends on ninth-grade GPA

β_5 = Slope parameter describing the impact of math teacher's commitment on ninth-grade GPA

β_6 = Slope parameter describing the impact of being Mexican on ninth-grade GPA

β_7 = Slope parameter describing the impact of being Filipino on ninth-grade GPA

β_8 = Slope parameter describing the impact of being first generation on ninth-grade GPA

β_9 = Slope parameter describing the impact of being second generation on ninth-grade GPA

β_{10} = Slope parameter of school sense of belonging on ninth-grade GPA

e = error

To address the third research question, control parameters ($\beta_1, \beta_2, \beta_3, \beta_4, \beta_5, \beta_6, \beta_7, \beta_8, \beta_9$) were accounted for to assess the effect of the question predictors (β_{10}). The predictive main effects of the control parameters with ninth-grade GPA as the outcome are as follows: Control parameters β_1 and β_2 when added to the regression would result in a positive predictive effect on ninth-grade GPA. In other words, if β_1 is statistically significant and positive, ninth-grade GPA (GPA9TH) is higher when SES is also high. If β_2 is statistically significant and positive, ninth-grade GPA (GPA9TH) is higher for girls than it is for boys (the omitted category). After accounting for β_1 and β_2 , if β_3 is statistically significant and positive, ninth-grade GPA (GPA9TH) is higher when the effect of peers (PEEREFF), which captures

students' beliefs that their closest friends are academically committed and successful, is also high.

Controlling for β_1 and for β_2 , if β_4 is statistically significant and positive, ninth-grade GPA (GPA9th) is higher when students spend more hours socializing with their friends. Controlling for β_1 and for β_2 , if β_5 is statistically significant and positive, ninth-grade GPA (GPA9th) is higher when math teachers show an ethos of greater commitment. If, parameter β_6 is statistically significant and negative, Mexican students would have lower ninth-grade GPAs (GPA9th) than White students (the omitted category). If parameter β_7 is statistically significant and negative, Filipino students would have lower ninth-grade GPAs (GPA9th) than White students (the omitted category). If parameter β_8 is statistically significant and negative, first-generation students would have lower ninth-grade GPAs (GPA9th) than third-generation students (the omitted category). If parameter β_9 is statistically significant and negative, second-generation students would have lower ninth-grade GPAs (GPA9th) than third-generation students (the omitted category). Last, if parameter β_{10} is statistically significant and positive, students with a higher sense of school belongingness would also have higher academic achievement as measured by ninth-grade GPA.

Research Question 4. The fitted multiple regression model is as follows:

$$\text{GPA9th} = \beta_0 + \beta_1\text{SES} + \beta_2\text{FEMALE} + \beta_3\text{PEEREFF} + \beta_4\text{HRFRIENDS} + \beta_5\text{TEACHERCOM} + \beta_6\text{MEXICAN} + \beta_7\text{FILIPINO} + \beta_8\text{GEN1} + \beta_9\text{GEN2} +$$

$$\beta_{10}\text{SCHOOLBEL} + \beta_{11}(\text{MEXICAN} * \text{GEN1}) + \beta_{12}(\text{MEXICAN} * \text{GEN2}) + \beta_{13}(\text{FILIPINO} * \text{GEN1}) + \beta_{14}(\text{FILIPINO} * \text{GEN2}) + e$$

where

β_{11} = Slope parameter describing the impact of the cross-product of MEXICAN and GEN1 on ninth-grade GPA, that is, the impact of the two-way interaction of being Mexican and first generation

β_{12} = Slope parameter describing the impact of the cross-product of MEXICAN and GEN2 on ninth-grade GPA, that is, the impact of the two-way interaction of being Mexican and second generation

β_{13} = Slope parameter describing the impact of the cross-product of FILIPINO and GEN1 on ninth-grade GPA, that is, the impact of the two-way interaction of being Filipino and first generation.

β_{14} = Slope parameter describing the impact of the cross-product of FILIPINO and GEN2 on ninth-grade GPA, that is, the impact of the two-way interaction of being Filipino and second generation.

e = error

To address the fourth research question, control parameters ($\beta_1, \beta_2, \beta_3, \beta_4, \beta_5, \beta_6, \beta_7, \beta_8, \beta_9$) as well as the question predictor (β_{10}) were accounted for to assess the effect of the interactions ($\beta_{11}, \beta_{12}, \beta_{13}, \beta_{14}$). The effect of the control parameters ($\beta_1, \beta_2, \beta_3, \beta_4, \beta_5, \beta_6, \beta_7, \beta_8, \beta_9$) and question predictor (β_{10}) remain the same as for the third research question. The effects of the interactions ($\beta_{11}, \beta_{12}, \beta_{13}, \beta_{14}$) are as follows. If the cross-product of being Mexican and first generation β_{11} is statistically significant and negative, this would result in lower ninth-grade GPA as

opposed to White third-generation students (the omitted category). If the cross-product of being Mexican and second generation β_{12} is statistically significant and negative, this would result in lower ninth-grade GPA as opposed to White third-generation students (the omitted category). If the cross-product of being Filipino and first generation β_{13} is statistically significant and negative, this would result in lower ninth-grade GPA as opposed to White third-generation students (the omitted category). If the cross-product of being Filipino and second generation β_{14} is statistically significant and negative, this would result in lower ninth-grade GPA as opposed to White third-generation students (the omitted category).

Chapter 7: Results

This chapter is organized into four sections, each of which provides the findings for each of the corresponding research questions. The first two sections present results that examine the effects of school sense of belongingness as an outcome and directly respond to Research Questions 1 and 2, for Filipino and Mexican immigrant students relative to their White ethnic peers. The last two sections present an analysis of school sense of belongingness as a predictor of academic achievement and directly respond to Research Questions 3 and 4, also for Filipino and Mexican immigrant students relative to their White ethnic peers.

The results presented below refer to the fitted multilevel regression models presented in Tables 4-6. The left side of each table lists the control variables, question predictors, and interaction effects. The variables are organized as follows: individual predictors (SES, FEMALE), peer effects and teacher commitment measures (PEEREFF, HRFRIENDS, TEACHERCOM), and the question predictors for ethnicity [MEXICAN, FILIPINO, WHITE (omitted category)], generational status [GEN1, GEN2, GEN3 (omitted category)], and also language status that includes non-native English speakers, bilingual, or English-only speakers [NONENG, BILING, ENG (omitted category)], and the cross-products for the appropriate interactions. See Table 3 for the sample description and coding of the variables in the models. Stata was used to account for the complex survey sampling methodology employed by NCES. The student weight (W1STUDENT) was used to generalize to

the overall sample of the U.S. population. School IDs were used to account for the clustering of students within schools.

Sense of belongingness as an Outcome Variable

Table 4 presents two fitted regression models that were used to test whether differences in the question and control predictors help explain the variance in sense of belongingness. The first model evaluates the difference in school sense of belongingness based on the control predictors, SES and gender (FEMALE). The second model evaluates the difference in school sense of belongingness based on the additional control predictors, including the effect of peers (PEEREFF), the number of hours spent with friends (HRFRIENDS), and the commitments of teachers (TEACHERCOM). As previously discussed, the outcome variable school sense of belongingness (SCHOOLBEL) is a scale that is made up of five items, where lower values represent a lower sense of school belonging and higher values represent a greater sense of school belonging.

Research Question 1. The changes in R^2 were examined to determine how much variation in sense of school belonging is accounted for by the predictors. For instance, with the addition of the peer and teacher predictors in Model 2, the R^2 increases from .04 to .08 from Model 1, which indicates that Model 2 explains 8% of the variation in school sense of belonging. The results for Model 1 indicate that both SES and gender were significant predictors of school sense of belongingness such that every unit positive difference in SES results in a .244 positive change in school

sense of belongingness, $p < .001$, and girls are associated with a .145 positive difference in school sense of belongingness, $p < .001$, relative to male students.

Table 4
School Sense of Belonging by Language Competence

	Coefficient (SE)			
	Model 1	Model 2	Model 3	Model 4
Fixed effects				
Intercept	-.013 (.016)	-1.021*** (.099)	-1.058*** (.101)	-1.060*** (.101)
Student controls				
SES	.244*** (.013)	.199*** (.014)	.212*** (.015)	.212*** (.015)
Female ^a	.145*** (.018)	.115*** (.021)	.114*** (.022)	.114*** (.022)
Peer and teacher variables				
Peer effectiveness		.420*** (.028)	.428*** (.028)	.428*** (.028)
Hours spent socializing with friends		-.034*** (.007)	-.032*** (.007)	-.031*** (.007)
Teacher commitment composite		.051*** (.011)	.051*** (.011)	.051*** (.011)
Race/ethnicity ^b				
Mexican			.076 (.044)	.063 (.051)
Filipino			.033 (.078)	.097 (.117)
Language competence ^c				
No English			.069 (.053)	.079 (.112)

Bilingual	.020 (.064)	.000 (.105)
Interaction effects		
Mexican × No English		.020 (.129)
Mexican × Bilingual		.029 (.134)
Filipino × No English		-.239 (.190)
Filipino × Bilingual		.109 (.300)

Note. Fitted models weighted by W1STUDENT clustered by school ID in which outcome SCHOOLBEL is predicted by race/ethnicity and language competence controlling for SES, gender, peer effect, hours spent socializing with friends, teachers' commitment. SES = socioeconomic status.

^aMale is omitted. ^bWhite is omitted. ^cEnglish-only is omitted.

* $p < .05$. ** $p < .01$. *** $p < .001$.

Model 2 accounted for the controls and added the main effect of peers, the number of hours spent socializing with friends, and teacher commitment. The control predictors tested in Model 1 remained statistically significant such that SES and gender were predictive of school sense of belongingness where every unit difference in SES resulted in a .199 increase in school sense of belongingness, $p < .001$, and girls (relative to boys) were associated with a .115 unit positive change in school sense of belongingness $p < .001$. The three additional control variables were also statistically significant such that the main effect of peers was associated with a .420 positive difference in school sense of belongingness, $p < .001$, and the number of hours spent socializing with friends had an inverse but statistically significant main

effect such that every additional hour spent socializing with friends was associated with a negative difference of .034 in school sense of belongingness $p < .001$. Last, teacher commitment had a positive statistically significant main effect on sense of belongingness such that every additional unit difference in teacher commitment was associated with a .051 positive difference in school sense of belongingness $p < .001$.

Model 3 addresses the first research question (see Table 4) and examines differences in sense of belongingness related to variations in the question predictors after accounting for the control predictors in Model 1 and in Model 2. Specifically, Model 3 tested the main effects of the question predictors, which included students' ethnicity and their English-language status. Table 4 shows the results of the third fitted regressions model with sense of school belongingness as the dependent variable.

The variables SES and gender, peer effects, hours spent socializing with peers, and teacher commitment all remained statistically significant control predictors of school sense of belongingness. The findings show that every unit difference in SES results in a .212 positive difference in school sense of belongingness, $p < .001$, and girls were associated with a .114 positive difference in school sense of belongingness, $p < .001$, relative to male students. The effect of peers was associated with a .428 positive difference in school sense of belongingness $p < .001$. In addition, the number of hours spent socializing with friends continued to have an inverse but statistically significant effect such that every additional hour spent socializing with friends resulted in a .032 negative difference in school sense of belongingness $p < .001$, and,

lastly, teacher commitment had a positive statistically significant effect on sense of belongingness such that every additional unit difference in teacher commitment was positively associated with a .051 increase in school sense of belongingness, $p < .001$. Students' language status and ethnicity were not statistically significant.

Research Question 2. Model 4 addresses the second research question and tests for the possibility of interaction effects with race/ethnicity and language status. The variables for SES and gender, peer effects, hours spent socializing with peers, and teacher commitment all continued to be statistically significant control predictors of school sense of belongingness. The results indicate that every additional unit difference in SES was associated with a .212 positive difference in school sense of belongingness, $p < .001$, and being female was still associated with a .114 positive difference in school sense of belongingness $p < .001$. The effect of peers remained associated by a .428 positive difference in school sense of belongingness $p < .001$, and the number of hours spent socializing with friends continued to have an inverse but statistically significant effect such that every additional hour spent socializing with friends resulted in a .031 negative difference in school sense of belongingness $p < .001$. In addition, teacher commitment had a positive statistically significant main effect on sense of belongingness such that every unit difference in teacher commitment was still positively associated with a .051 difference on school sense of belongingness $p < .001$. The interactions of language status and race/ethnicity were not statistically significant.

Immigration Status and its Effect on Sense of Belongingness

To examine the effects of immigrant and non-immigrant differences in response to Research Questions 1 and 2, the main effect of generational status was examined and English-language competency was removed from the analytic model because of its multicollinearity with language status. In this new set of fitted regression models in Table 5, the main effect of generational status as well as the cross-products testing for interactions between generational status and race/ethnicity were estimated. The fitted models (in Table 5) test whether variations in control predictors (Model 1), and peer and teacher effects (Model 2) were related to sense of belonging. Models 1 and 2 remained identical as in the first analysis. Model 3 introduced the main effect of race and generational status. Model 3 reveals that SES and gender, peer effects, hours spent socializing with peers, and teacher commitment all remain statistically significant predictors of school sense of belongingness.

More specifically, every additional unit difference in SES was associated with a .189 positive difference in school sense of belongingness $p < .001$, and being female was associated with a .107 positive difference in school sense of belongingness $p < .001$. Additionally, the effect of peers was positively associated by a .371 positive difference in school sense of belongingness, $p < .001$, and the number of hours spent socializing with friends continued to have an inverse but statistically significant effect such that every additional hour spent socializing with friends resulted in a .029 negative difference in school sense of belongingness, $p < .001$. Teacher commitment had an effect on sense of belongingness such that every additional unit difference in

teacher commitment was positively associated with a .055 difference in school sense of belongingness, $p < .001$. In addition, the generational status measures showed that being first generation was positively associated with a .162 positive difference in school sense of belongingness, $p < .05$, but the effect of second generational status was not statistically significant, in relation to third-generation students (the omitted category).

Table 5
School Sense of Belonging by Generational Status

	Coefficient (SE)			
	Model 1	Model 2	Model 3	Model 4
Fixed effects				
Intercept	-.013 (.016)	-1.021*** (.099)	-.956*** (.114)	-.954*** (.114)
Student controls				
SES	.244*** (.013)	.199*** (.014)	.189*** (.015)	.187*** (.016)
Female ^a	.145*** (.018)	.115*** (.021)	.107*** (.024)	.107*** (.024)
Peer and teacher variables				
Peer effectiveness		.420*** (.028)	.371*** (.033)	.371*** (.033)
Hours spent socializing with friends		-.034*** (.007)	-.029*** (.008)	-.029*** (.008)
Teacher commitment composite		.051*** (.011)	.055*** (.011)	.055*** (.011)
Race/ethnicity ^b				
Mexican			.053 (.049)	.091 (.066)

Filipino	-.012 (.098)	.014 (.320)
Generational status ^c		
First generation	.162* (.072)	.291* (.117)
Second generation	.036 (.043)	.052 (.052)
Interaction effects		
Mexican × First Generation		-.150 (.154)
Mexican × Second Generation		-.088 (.094)
Filipino × First Generation		-.395 (.363)
Filipino × Second Generation		.098 (.348)

Note. Fitted models weighted by W1STUDENT clustered by school ID in which outcome SCHOOLBEL is predicted by race/ethnicity and generational status controlling for SES, gender, peer effect, hours spent socializing with friends, teachers' commitment. SES = socioeconomic status.

^aMale is omitted. ^bWhite is omitted. ^cThird generation is omitted.

* $p < .05$. ** $p < .01$. *** $p < .001$.

Interactions between race/ethnicity and generational status were also examined to test whether the effect of race/ethnicity on sense of belongingness differed as a function of generational status. The interactions of generational status and ethnicity were tested in Model 4, however, the results were not statistically significant. Nevertheless, all of the main effects in Model 4 remained statistically significant at similar levels to what was described in Model 3, including the main

question predictor: generational status. In Model 4, being first generation was positively associated with a .291 difference in school sense of belongingness, $p < .05$.

The Effects of Sense of Belonging as a Predictor of Academic Achievement (Ninth-Grade GPA)

After conducting analyses that use sense of school belongingness as an outcome, two additional research questions were addressed in this study that conceptualize school belongingness as a predictor of students' academic achievement in ninth grade. The results of this analysis are presented below in Table 6 and include the same control predictors from the analysis described previously. The first model (in Table 6) evaluates the outcome, ninth-grade GPA, based on the control predictors, SES and gender (FEMALE); the second model evaluated the difference in ninth-grade GPA based on control predictors, including the effect of peers (PEEREFF), the number of hours spent with friends (HRFRIENDS), and the commitment of teachers (TEACHERCOM). As was discussed in the previous chapter, the outcome variable ninth-grade GPA is on a scale where low values of ninth grade represent a lower ninth-grade GPA and higher values represent a higher ninth-grade GPA.

Table 6
Ninth-Grade Grade Point Average and School Sense of Belongingness

	Coefficient (SE)				
	Model 1	Model 2	Model 3	Model 4	Model 5
Fixed effects					
Intercept	2.59*** (.014)	2.24*** (.092)	2.42*** (.097)	2.59*** (.096)	2.59*** (.096)
Student controls					
SES	.465*** (.011)	.405*** (.013)	.349*** (.013)	.323*** (.013)	.324*** (.013)
Female ^a	.318*** (.014)	.315*** (.017)	.304*** (.018)	.281*** (.018)	.282*** (.018)
Peer and teacher variables					
Peer effect		.301*** (.023)	.262*** (.027)	.201*** (.027)	.201*** (.027)
Hours spent socializing with friends		-.081*** (.006)	-.079*** (.006)	-.075*** (.006)	-.075*** (.006)
Teacher commitment composite		.009 (.010)	.008 (.010)	-.003 (.010)	-.003 (.010)
Race/ethnicity ^b					
Mexican			-.224*** (.039)	-.228*** (.039)	-.231*** (.052)
Filipino			.035 (.076)	.050 (.073)	-.476 (.067)
Generational status ^c					
First generation			.094 (.065)	.061 (.065)	.067 (.093)

Second generation	.018 (.037)	.012 (.037)	-.005 (.044)
School sense of belongingness		.158*** (.010)	.158*** (.010)
Interaction effects			
Mexican × First Generation			.031 (.138)
Mexican × Second Generation			.011 (.081)
Filipino × First Generation			.391 (.314)
Filipino × Second Generation			.669* (.279)

Note. Regression weighted by W1STUDENT clustered by school ID. Regression model fitting control predictor on outcome in relation to the research. SES = socioeconomic status.

^aMale is omitted. ^bWhite is omitted. ^cThird generation is omitted.

* $p < .05$. ** $p < .01$. *** $p < .001$.

Research Question 3. In response to the third research question, a fitted multiple linear regression was fit to predict ninth-grade GPA based on the predictor school belongingness and also controlling for the same variables included in prior models. Model 1 examines the effects of SES and gender, and both parameter estimates were significant predictors of ninth-grade GPA, such that every additional unit of SES was associated with a .465 positive difference in ninth grade-GPA, $p < .001$, and being female (relative to male) is associated with a .318 positive difference in ninth-grade GPA, $p < .001$. Model 2 accounted for the controls in Model 1 and added the main effect of peers, the number of hours spent socializing with friends,

and teacher commitment. All four predictors were statistically significant in the model. As in Model 1, SES and gender were significant predictors of school sense of belongingness such that every unit difference in SES resulted in a .405 positive difference in ninth-grade GPA, $p < .001$, and girls (relative to boys) are associated with a .315 positive difference in ninth-grade GPA, $p < .001$. Two of the three additional control predictors were also statistically significant such that the effect of peers was positively associated with a .301 positive difference in ninth-grade GPA, $p < .001$, the number of hours spent socializing with friends had an inverse but statistically significant effect such that every hour spent socializing with friends resulted in a .081 negative difference in ninth-grade GPA, $p < .001$, and last, teacher commitment was not a statistically significant predictor of ninth-grade GPA.

Model 3 includes all of the control predictors in this study. The results show that SES and gender, peer effects, hours spent socializing with peers, and race/ethnicity—identifying as Mexican—were statistically significant predictors of ninth-grade GPA. However, teacher commitment, generational status, and identifying as Filipino were not statistically significant predictors of ninth-grade GPA. Consistent with Model 1 and Model 2, the control predictors for SES and gender were significant predictors of ninth-grade GPA such that every additional unit difference in SES was associated with a .349 positive difference in ninth-grade GPA, $p < .001$, and girls (relative to boys) were associated with a .304 positive difference in ninth-grade GPA, $p < .001$. The effect of peers was positively associated with a .262 difference in ninth-grade GPA, $p < .001$, and the number of hours spent socializing with friends

continued to have an inverse but statistically significant effect such that every additional hour spent socializing with friends was associated with a .079 negative difference in ninth-grade GPA, $p < .001$. Last, identifying as Mexican had an inverse but statistically significant relationship with ninth grade GPA such that being Mexican was associated with a .224 negative difference in ninth-grade GPA.

Model 4 tested for the main effect of school sense of belonging on ninth-grade GPA after accounting for the aforementioned control variables from Models 1 and 2. The results of the regression were similar to those of Model 3 such that SES and gender peer effects, hours spent socializing with peers, and identifying as Mexican were statistically significant predictors of ninth-grade GPA. The main question predictor, school sense of belongingness, was also statistically significant. However, teacher commitment, generational status, and identifying as Filipino were not statistically significant predictors of ninth-grade GPA. The results showed that each additional unit difference in SES was associated with a .323 positive difference in ninth-grade GPA, $p < .001$, and girls (compared to boys) were associated with a .281 positive difference in ninth-grade GPA, $p < .001$. The effect of peers remained positively associated by a .201 positive difference in ninth-grade GPA, $p < .001$, and the number of hours spent socializing with friends continued to have an inverse but statistically significant effect such that every additional hour spent socializing with friends was correlated with a .075 negative difference in ninth-grade GPA, $p < .001$. Mexican students had a lower average GPA relative to White students. The results showed that Mexican students' GPAs were .228 points lower on ninth-grade GPA,

and average and relative to White students, $p < .001$. Last, the main question predictor, school sense of belongingness, was statistically significant, and the results showed that an additional unit difference in sense of belongingness was associated with a .158 positive difference in ninth-grade GPA, $p < .001$.

Research Question 4. The fifth model (see Table 6) tested the interaction effect of race/ethnicity and generational status on ninth-grade GPA. The results of the regression were consistent with the analysis presented in Model 4, such that SES and gender, peer effects, hours spent socializing with peers, identifying as Mexican, and sense of school belongingness were statistically significant predictors of ninth-grade GPA. One of the four interaction effects (Filipino x Second Generation) was statistically significant. However, teacher commitment, generational status, and identifying as Filipino were not statistically significant predictors of ninth-grade GPA. The statistically significant parameter estimates indicate that every additional unit difference in SES was associated with a .324 positive difference in ninth-grade GPA, $p < .001$. Also, being female, relative to male, was associated with a .282 positive difference in ninth-grade GPA, $p < .001$. The effect of peers also remained associated with a .201 positive difference in ninth-grade GPA, $p < .001$, and the number of hours spent socializing with friends continued to have an inverse but statistically significant effect such that every additional hour spent socializing with friends was correlated with a .075 negative difference in ninth-grade GPA, $p < .001$. Mexican students also had a lower effect on GPA. More specifically, Mexican students' GPAs were .231 units lower relative to White students' GPAs, $p < .001$. In

addition, an additional unit difference in school sense of belongingness was associated with a .158 positive difference in ninth-grade GPA, $p < .001$. The interaction terms were also significant and suggest that the effect of race/ethnicity and second-generation status cannot be interpreted alone. The statistically significant interaction term for being Filipino differed as a function of also being second generation and had a .669 positive difference on ninth-grade GPA.

Chapter 8: Discussion

This study leveraged theoretical and conceptual frameworks from psychological, sociological, sociocultural, and sociolinguistic perspectives to inform an investigation on the predictive effect of English-language status, academically inclined peers, and teachers ethos of commitment on the school sense of belongingness and achievement relationship for immigrant Filipino and Mexican high school students. Differences in the language of instruction received in their home country— the Philippines or Mexico—provided an opportunity to examine the social contexts that influence the adaptation and incorporation of Filipino and Mexican immigrant students in U.S. schools. The Mexican and Filipino immigrants provided ideal comparison groups because their experiences overlap in several ways in the United States currently as well as historically. This, in turn, provided an ideal situation to test the hypothesis that, in instances when the language status of immigrant students was consistent with the dominant language of U.S. schools, one would expect students to have a greater sense of school belongingness.

Many immigrant students often attend underresourced schools where they may not have received the educational or the linguistic scaffolding necessary to thrive in the U.S. public education system. For this reason, the effect of academically inclined peers, and teachers' ethos of commitment to students were investigated for understanding the belongingness and achievement relationship between Mexican and Filipino youth. A central feature of this work is the notion that the human experience is social in nature and that the absence of positive social experiences, dependent on

language status, can hold important and often negative implications for students' daily lives. In schools, however, the extent to which immigrant students feel accepted, respected, included, and supported by others may be informed by the language that students are able to communicate in.

OLS fitted regression models were implemented to address the research questions guiding this inquiry. This paper is organized into two interdependent studies. The first study examined the predictive effect of English-language status, academically inclined peers, and teachers' ethos of commitment to students on school sense of belongingness for immigrant Filipino and Mexican high school students. The second study examined the predictive effect of English-language status, academically inclined peers, teachers' ethos of commitment, and sense of belongingness on the academic achievement of Filipino and Mexican high school students as measured by ninth grade GPA. The regressions were also useful for disentangling the effects of other predictive variables that, according to the literature, are critical for unraveling the belongingness and achievement relationship.

This chapter discusses the findings from the analyses for both studies and presents the results in response to each corresponding research question. The results from the first study showed that when academically inclined peers, and teachers ethos of commitment to students, were used as predictors of school belongingness, the study yielded statistically significant evidence, as outlined on Model 3 in Table 4. However, English-language status did not hold a predictive effect on sense of school belonging for the students in the sample. Model 4, also in Table 4, tested for the

interactions of language status and race/ethnicity, on school sense of belongingness which were also not statistically significant. In the second study, when sense of belongingness was used as a predictor of academic achievement, the results showed that school sense of belonging was predictive of ninth grade GPA. In Model 4, in Table 6, the findings revealed that school sense of belonging is a statistically significant predictor of ninth-grade GPA. Overall, the results discussed herein offer a unique perspective in support of the effect of academically inclined peers and teachers who share an ethos of commitment for students on the belonging-achievement relationship as it relates to Filipino and Mexican high school students.

Summary of Findings

Important predictors of sense of school belongingness. The study first addressed the difference in school sense of belongingness based on the control predictors of SES and gender. Consistent with prior research (Sari, 2012), this study found that higher SES is positively associated with higher sense of school belonging. Researchers have also suggested that schools are gendered institutions that favor the behavioral repertoire of girls over boys (Suárez-Orozco, et al., 2008). Female students in the analysis experienced a greater sense of school belonging than did male students (Adelabu, 2007; Arastaman, 2006; Cheung, 2004; Cheung & Hui, 2003; Gillen-O'Neel & Fuligni, 2013; Goodenow, 1992; Goodenow & Grady, 1993; Hagborg, 1994; Nichols, 2006; Sari, 2012). This finding may be best understood when referring to studies which suggest that teachers hold behavioral expectations that socialize girls

distinctly from boys such as passive participation and obedience at an early age (Banse, Gawronski, Rebetez, Gutt, & Morton, 2010).

However, a longitudinal analysis of high school students reported that female students tend to have a greater sense of school belonging at the beginning of high school but that female and male students have similar levels of school belonging by the end of high school (Gillen-O'Neel & Fuligni, 2013). Gillen-O'Neel and Fuligni have suggested that access to extracurricular activities, the importance of student-teacher relationships, gender disparities in extracurricular options and girls' possible sensitivity to the quality of student-teacher relationships, may help explain the disparities and challenges related to gender. In other words, the gender differences detected in this study may be explained, in part, by long-held ideals embedded within gendered norms that define what it means to be a "good student" by Western standards. This finding is consistent with concerns regarding disparities in achievement between boys and girls. Tailoring the schooling system to the developmental needs of the students, adjusting pedagogical practices, providing diverse opportunities for engagement, and challenging gender norms may help ameliorate gender disparities related to school belongingness. Dweck and Bush (1976) have suggested, however, that girls are more responsive to teacher evaluations, whereas boys tend to be more responsive to peer evaluations. For this reason, the first research question addresses the effect of peer and teacher predictors.

Research Question 1. The positive effect of peer relationships, and teachers' commitment to students on school belongingness has been consistently documented

(Anderman, 2003; Berndt, 1989; Berndt & Perry, 1990; Blyth, Hill, & Thiel, 1982; Cauce, 1986; Bowen, Richman, Brewster, & Bowen, 1998; Brewster & Bowen, 2004; Garcia-Reid, 2007; Garcia-Reid et al., 2005; Hallinan, 2008; Larson & Richards, 1991; Schochet et al., 2007). Consistent with the aforementioned studies, the results from the first analysis show that after controlling for SES and gender, a statistically significant and positive predictive main effect of academically inclined peers and an ethos of teacher commitment were observed. Such findings suggest that sense of school belonging is higher when students believed that their peers are more academically inclined and when teachers convey a commitment to students.

This finding is consistent with prior research suggesting that peers play a critical role in students' comfort within their educational context (Gibson, Bejénez, Hidalgo, Rolón, 2004). Suárez-Orozco (2001) also states that immigrant students are more likely to have friends who think that academic achievement is important as well as more general findings that indicate that peer acceptance, and positive peer relationships are a significant factor for a higher sense of belongingness (Cartmell & Bond, 2015; Faircloth & Hamm, 2005; Sancho & Cline, 2012). These findings also corroborate the value of having access to a network of positive friends through which students feel recognized (Faircloth & Hamm, 2005). However, as suggested by Suárez-Orozco, et al., (2008) immigrant girls are more likely than boys to have friends who are more invested in their schoolwork (Suárez-Orozco, et al., 2008).

The effect of peers, however, may be best understood as a measure of the time (in hours) that students spent with peers. After controlling for SES and gender, the

analysis yielded a significant yet negative predictive effect of hours spent with peers. This result suggests that the more hours students spent with friends, the lower their sense of school belonging. This finding may be attributed to the possibility that the time spent socializing with friends may have occurred outside of the school context engaging in nonacademic activities or with less academically inclined peers. Goodenow, (1993a) suggested that peer relations in the classroom as opposed to outside of the classroom, may have different effects on students.

Faircloth and Hamm (2005) have suggested that participation in extracurricular, cultural or sports activities are important for sense of belongingness. However, this finding suggests that the type of engagement with peers is fundamental for investigating school sense of belongingness. As a result, there were two notable limitations with the measure. First, the measure did not distinguish between the number of hours spent with friends in or out of schools. Second, the nature of the socialization activity was also not assessed. This finding is consistent with Larson and Asmussen, (1991) who stated that friends can also be the source of negative emotions which, in turn, may lead to a decrease in school sense of belonging. Engaging with less academically inclined peers outside of the school context may have also resulted in the observed results.

The results also showed that after controlling for SES and gender, a statistically significant and positive teacher commitment effect was found. The teacher commitment predictor was a composite based on math teachers' perception that teachers at the school set high standards for teaching, that they maintain

discipline within the entire school, that teachers at the school take responsibility for improving the school, whether teachers at the school set high standards for themselves, whether teachers at the school felt responsible for developing student self-control, and whether teachers at the school felt responsible that all students learn. The results yielded a statistically significant and positive relationship between the measure of teachers' commitment and school sense of belonging. This result indicates that in schools where math teachers perceive a greater commitment of other teachers, students also experienced a greater sense of school belonging.

This finding is consistent with other research findings that have demonstrated the important role that teacher support has on school sense of belonging (Anderman, 2003; Bowen, Richman, Brewster, & Bowen, 1998; Brewster & Bowen, 2004; Faircloth and Hamm, 2005; Garcia-Reid, 2007; Garcia-Reid et al., 2005; Hallinan, 2008; Schochet et al., 2007). However, there were some notable limitations with this measure. First and foremost, the composite measure assessed math teacher's perceptions of other teachers' ethos of commitment at the school, and therefore does not capture individual teachers' assessment of their own commitment to students. Nevertheless, the measure does lend some insight into the general commitment of teachers at the school. The second limitation is that this measure cannot assess other teachers' commitment in different content areas. This may be problematic because perceptions of commitment may be driven by math teachers in the study.

Nevertheless, this result was consistent with other findings indicating that school sense of belonging for students involves perceptions of teacher commitment

and support (Booker, 2006; Hallinan, 2008; Libbey, 2004). Suárez-Orozco, Suárez-Orozco & Todorova, (2008) state that teachers tend to be more supportive towards students who they like. Hence, future inquiry may benefit from investigating teacher biases, a phenomenon often referred to as the Pygmalion Effect (Rosenthal & Jacobsen, 1968), as it relates to students perceived level of belonging. This suggests, that as a result of students' perceptions of low support from teachers, students would experience a lower sense of belonging.

The results from this study also show that the ethnicity of students is not a significant predictor of school sense of belonging. This result is contrary to prior research, which has found that students from different ethnic groups experience relationships and belongingness differently in school (Davidson, 1996; Johnson, Crosnoe, & Elder, 2001; Phelan, Davidson, & Yu, 1998; Valenzuela, 1999; Way & Chen, 2000). It was assumed that Filipino immigrants, having been immersed in an English-based educational system in their home country, would have an advantage over Mexican immigrant students, whose country of origin has not historically adopted English as the primary language of instruction in schools. In contrast, students arriving from countries such as Mexico may not have the English language mastery necessary to transition into English-dominant U.S. schools.

The first study attempted to provide a different perspective and lend insight to better understand how the immigrant experience differs for Mexican and Filipino immigrant and non-immigrant high school students. In addition, this investigation sought to contribute to a deeper understanding of the Filipino paradox (Espiritu &

Wolf, 2001), which suggest that despite the tendency to acculturate and assimilate well into mainstream middle-class America, Filipinos still experience disproportionate socioemotional difficulties compared to other immigrant groups. Unfortunately, because there were no statistically main effects of ethnicity on sense of school belongingness this work is unable to shed light on the Filipino paradox. The consequential effects of sense of belongingness in schools have been documented in prior literature. However, immigrant students are unique from other student groups because they are consistently problematized through language, and their lower degrees of English-language competence are often viewed through a deficit lens (Gándara & Orfield, 2010).

Furthermore, the results from this analysis do not support the relationship between language status and school sense of belonging between Mexican and Filipino youth. This result is not consistent with other studies indicating that language holds profound implications for the experiences of students in schools (Cartmell & Bond, 2015; Fine et al., 2007; Gibson et al., 2004). The inability to detect a statistically significant relationship between language status and belongingness may be attributed to the fact that the language that students first learned may not have been the language that they had mastered by the time they entered high school. This study does not determine if students in the sample had matriculated in a U.S. school prior to high school. Because acquiring English competency can take nonnative English speakers 5-7 years (Hakuta, et al., 2000), the possibility exists that for those students in the sample who had matriculated in elementary or early middle school may have been

able to develop the English-status necessary to build and sustain English based relationships with teachers and peers. In fact, an investigation using the Children of Immigrants Longitudinal Study reported that there is a rapid shift in English preferences among most immigrant students (Rumbaut, 2005).

Research Question 2. Because race/ethnicity alone yielded inconsistent findings, the study tested for the interaction of language status and race/ethnicity. However, there was no evidence to support the hypothesized outcome that English-speaking Mexican immigrant students would experience a lower sense of school belonging relative to English speaking Filipino immigrant students. The analysis addressed the effect of language and race on student's sense of school belonging.

Furthermore, in a separate analysis, generational status was used as a proxy for immigration status. Testing for the effect of generational status both as a main effect and as a cross product with race/ethnicity presented some advantages and disadvantages. The advantage of using generational status as a predictor of school sense of belonging was that it served as a proxy for immigration status. The disadvantage of using generational status as a predictor was that language status was conflated within the generational designation. For this reason, multicollinearity among language and generational status was an issue that resulted in the separation of language status and generational status in the models. First- and second-generation youth who can speak their home language do tend to view their ethnic backgrounds more positively and have higher self-esteem (Lee & Suárez 2008; Phinney et al. 2001).

The results showed that after controlling for SES, gender, peer effects, number of hours spent socializing with peers and the effect of teacher's commitment, first generation, emerged as statistically significant and positive predictors of school sense of belonging. These results challenge the assimilationist perspective which assumed that,

distinctive ethnic traits such as native languages, ethnic identity, ethnic institutions, and ethnic social relations may be sources of disadvantages. These disadvantages negatively affect acculturation, but the effects are greatly reduced in each of the successive generations, since native-born generations adopt English as the primary means of communication and become more and more similar to the earlier American population in language use, outlook, and behavior.” (Zhou, 2001, p.199).

Prior research by Gibson (1998) complicates the linearity of the assimilationist standpoint by stating that generational status emerged as a notable factor in how students perceived and responded to assimilation pressures that were imposed on them by teachers and classmates. Gibson also stated that for third generation students, despite having parents who themselves were born and raised in the U.S. and “who by and large, in spite of their U.S. schooling and their fluency in English, were living on the edge of poverty” (Gibson, 1998 p. 626). This finding points to the profound effect that socioeconomic status may have over generational and language status. This finding has also been supported by others who state that students, who are third generation and Mexican, academically underperform relative to their first- and second-generation counter parts (Perlmann & Waldinger, 1997).

Furthermore, Zhou (2001) has posited that first generation students, amidst efforts to rebuilt their lives in the U.S., tend to hold optimistic views and see their

own initial disadvantages as temporary, and that they are eager to embrace American ideals which include freedom and equal opportunity. If in fact immigrant optimism is a prominent feature of the first-generation immigrant experience, then the positive emotionality tied to immigrant optimism may help explain the greater sense of belongingness within schools. In other words, the optimism that first-generation immigrants experience as they move to the U.S., where they aspire to achieve what they have difficulties achieving in their homeland (Portes & Rumbaut, 1996), may be related to their perceptions of belongingness in schools. An emotional shift may be occurring when immigrant expectations do not match their aspirations (Lopez & Stanton-Salazar, 2001), leading to a decline in optimism with second- and third-generation students. Such emotional experiences may ultimately have a dual relationship with school sense of belonging, and contribute to their academic achievement.

Sense of School Belongingness its Conceptualization, Operationalization, and Implications

The results of the first study that addressed research questions 1 and 2, merit a closer discussion on the conceptualization, operationalization, and implications of school sense of belonging as an outcome variable. The first study examined sense of belonging as an outcome to unravel its effects in the broader school-level context, and a discussion regarding the measure of sense of school belongingness merits closer attention. School sense of belongingness in this study was created using five survey items that assessed the extent to which students felt (a) safe at school, (b) proud of

being part of the school, (c) having teachers or other adults in the school who they could talk to if they had a problem, (d) whether they believed that school was a waste of time, and (e) whether getting good grades in school was important for the student. It is worth noting that this measure attempted to capture a general assessment of the students experience in school as opposed to a more specific context, such as the classroom. The rationale for including a general measure of school sense of belongingness suggested an attempt to maximize student experiences so that students would be better able to gain a holistic educational experience in school that would, in turn, promote overall academic achievement. Revisiting the school sense of belonging construct may help assess the validity of the measure and highlight potential recommendations for subsequent studies.

A review of the literature supports the notion that students who believe that their teachers promote mutual respect among classmates also report stronger academic self-efficacy and self-regulation (Ryan & Patrick, 2001). Anderman (2003) suggested that these perceptions may also contribute to students' feelings of psychological safety and comfort, which can enhance their perceptions of school belonging. This is supported by Gibson et al. (2004), whose work demonstrated the importance of safety as a feature that promotes belonging. Anderman (2003) added that experiencing a respectful and psychologically safe instructional environment may be an important protective factor against declines in school belonging. In addition, Maslow (1943) theorized that the need for belongingness would emerge only after the physiological and safety needs of individuals were met In fact, studies that investigate

students' sense of belonging have accounted for student safety (Cunningham, 2007; Garcia-Reid, et al., 2005; Hallinan, 2008; Holt & Espelage, 2003; Schochet et al., 2007; Whitlock, 2006). Specifically, such studies have shown that when feelings of safety are at risk, sense of school belonging diminishes (Holt & Espelage, 2003). Libbey (2004) has argued that in addition to safety, teacher supportiveness and caring, and peer relationships are important contributors to a sense of school belonging.

Through an exploratory principal components analysis of the social-relational context measures, Anderman (2003) demonstrated that the item "I am proud of belonging to this school" was a statistically significant factor loaded item that was included in an overall measure of school belongingness. Pride in the school also related to whether students believed that school was a waste of time. Other research has shown that adolescents in a large, nationally representative sample were more likely to report a lack of "connectedness" to school if they perceived their classes as poorly managed and characterized by conflictual relationships with teachers and peers (Blum, McNeely, & Rinehart, 2002). In a related study, Booker (2006) stated,

a student first has to associate schooling and education with some higher level of importance and value, otherwise, he or she will not have the impetus to connect to or relate to others in that environment. If students do not initially identify with the inherent significance or worth of school, then they are less likely to express the desire to become a part of the school community. (p. 5)

Similarly, greater class participation has been associated with greater connection with school (Voelkl, 1997). This research exemplified the significance of including dimensions in a belongingness scale that can capture whether students believe that school is a waste of time and whether they feel a sense of pride in their school.

Anderman (2003) has also found that students who perceive their classes as task goal oriented reported higher levels of belonging. Students reported a greater sense of school belonging when they perceived their academic tasks as interesting, important, and useful. Eccles et al. (1993) used a model of task values that offered a framework for understanding the significance of school-related assignments and activities on students' perceptions of school belongingness. Eccles et al.'s model also suggested that students who perceive academic tasks as irrelevant are likely to experience a lower sense of belonging in schools. Eventually, this perception may promote adversity toward schooling when compared to other students who perceive schoolwork to hold intrinsic or utilitarian value. Similarly, students who perceive that doing well at various school tasks is personally important to them promote favorable perceptions toward schooling and enhances perceptions of school belongingness.

Whether students feel that getting good grades is important to them is also relevant to the measure of belongingness. Research by Taylor (1999) has found that school belonging significantly predicts students' GPA's. However, Anderman (2003) has argued that the bidirectional relationship between GPA and school sense of belonging should also be attended to. Anderman found that prior school achievement as measured by GPA and academic motivational variables was positively associated with students' level of school belonging. In addition, course taking patterns to analyze institutional values of access and achievement were also available. Newmann, Wehlage, and Lamborn (1992) stated that

for many students, schooling signifies institutional hypocrisy and aimlessness, rather than consistency and clarity of purpose; arbitrariness and inequity, rather than fairness; ridicule and humiliation, rather than personal support and respect; and worst of all, failure, rather than success. For others, the disaffection can seem less personally damaging—schooling is seen as a theater of meaningless ritual, unrelated to students’ serious concerns. (p.19)

Moreover, Arhar, and Kromrey (1993) have added that “if students are to psychologically invest themselves in the hard work of learning and mastery, that is, if they are to become academically engaged, they must perceive the school to be a worthwhile investment of their time and energy” (p. 3), thereby resulting in higher achievement.

The quality of social relationships for students in schools is argued to be an important predictor of academic achievement (Anderman, 2003; Goodenow & Grady, 1993; Kuperminc, Darnell, & Alvarez-Jimenez, 2008; Roeser & Eccles, 1998). Others have stipulated that racial/ethnic and gender minorities may experience a lower sense of school belonging based on the negative stereotypes that they face in and out of school (Garcia-Reid, 2007; Good et al., 2012; Goodenow & Grady, 1993). However, these experiences may depend on the racial, linguistic, and gender composition of the student body. If the racial, linguistic, and gender representation of students is not present at the school, then racial, linguistic, and gender minorities within such contexts would be least likely to develop a positive sense of belongingness. Prior research has also observed school characteristics such as grade configuration, teaming practices, the percentage of students involved in extracurricular activities, disciplinary policies, and the degree of racial integration in both the student body and faculty of the school (Anderman & Freeman, 2004). This

suggests that future research should account for the student body compositions of schools themselves. Students who experience negative interactions with members of a racial, linguistic, or gender majority group may “prevent feelings of true connection or belonging to the school” (p. 3). This phenomenon has been referred to as the *identification-connection divide* (Booker, 2006).

Positive teacher-student relationships are also critical to positive school sense of belonging. Teacher-student relationships that are characterized by fairness and respect are thought to be central for understanding students’ belonging or alienation from school (Murdock, Anderman, & Hodge, 2000). The need to be a part of a circle of friends also comes to the forefront as a crucial component of sense of school belonging (Faircloth & Hamm, 2005). According to Drolet et al. (2013), their research findings underline the complementary importance attributed to having positive relationships with supportive adults. Adolescents experiencing personal problems will affiliate with others in similar situations (Catalano et al., 2004).

Minority students who experience disrespect from others on the basis of ethnic differences may benefit most from developing healthy relationships and speaking to others (Way et al., 2001). In addition, a cultural emphasis on familial or neighborhood-based relationships may lead members of minority communities to look to adult relationships in these contexts, rather than to the school, as a source of support (Triandis, 1990). Faircloth and Hamm (2005) stated that bonding with teachers reflected students’ perceptions that teachers cared for and supported them. Curtin, Stewart, and Ostrove (2012) added that advisor support is likely to play a key

role in the experiences of students as they navigate their way through school, develop a sense of belonging, and view themselves as competent and productive members of the academy. For Faircloth and Hamm (2005), one of the four domains of sense of belonging that young people have in terms of their school were positive ties with teachers or other adults, through which the adolescent feels appreciated, supported, and assured of help in difficult times.

This review of the literature validates the need for a general measure of school sense of belongingness as opposed to subject matter-specific sense of belongingness experienced at the classroom level or that is limited to participation in student organizations. This is not to say, however, that sense of belongingness experienced in classrooms or in student organizations is not relevant. These variants of sense of belongingness will depend on their own set of context-specific measures. Gibson (1998) has stated that teachers held negative attitudes about the use of Spanish at schools, often insisting on English-only classrooms for Mexican students. This experience may result in classroom-specific adversity that may be detected through an assessment of classroom sense of belongingness but lost in the broader assessment of school sense of belongingness. In her study, Gibson et al. (2004) also demonstrated that members of a Migrant Student Association experienced a greater sense of acceptance within a student-led organization where they felt validated and respected. Involvement in school-based extracurricular activities, as captured by membership in student associations, was not accounted for in this study. Arguably, it is the general

schooling experience that collectively promotes educational equity and results in students' opportunity to reap the benefits of schooling.

The extent to which students experience an overall sense of school belonging may carry greater implications for their access to social capital in the school, which may promote greater educational outcomes. The broader outcome variable of school belongingness and the distal nature of the language status as the predictor may be a reason for the inability to detect an effect of language on school sense of belongingness in high school. Analyzing the experiences of immigrant students and their relationship to specific sites in the school may offer greater insight for understanding the variations of school belongingness within a single school. Importantly, sense of school belongingness was not normally distributed and may have resulted in methodological issues, as a normally distributed outcome is necessary to draw meaningful conclusions from the results.

The Relationship Between Control Predictors and ninth grade GPA

Studies have consistently reported that school sense of belonging has a positive effect on students' academic achievement (Goodenow & Grady, 1993). However, the results are often contingent on the educational context, the students, the scaffolds that students receive, and how achievement is assessed. In this respect, the social interactions that students develop in schools are dependent on a number of factors. For example, Booker (2006) suggested that "affirmative interactions with teachers and other students are critical" (p. 3) for the success of students. The gender of the students has also been demonstrated to have an effect on motivation and

achievement. Goodenow (1993a) suggested that teachers may be more attuned to the motivation and engagement of females than males. Furthermore, teachers' encouragement and support tend to have a positive relationship to academic achievement (Booker, 2006). However, it is worth noting that students may be able to differentiate the intent of teachers as they superficially or authentically care about them (Noddings, 1992; Valenzuela, 1999).

As a result, this study tested for the effect SES and gender, as control predictors, on academic achievement as measured by ninth-grade GPA. Researchers have employed a variety of achievement measures, such as standardized test scores (Adams & Singh, 1998), GPA (E. M. Anderman, 2002; Taylor, 1999), self-reported grades (K. V. Finn & Frone, 2004), grades from school records (Kuperminc, et al., 2008), and end-of-year grades (Buote, 2001). Ninth-grade GPA, as opposed to GPA in math, science, or other content areas, was used as the outcome variable because the sense of school belongingness measure captures sense of school belonging as opposed to classroom sense of school belongingness.

Moreover, social connections with others have been suggested to be a major factor in promoting academic achievement for students. As stated, it was important to discern the positive as opposed to negative effects of peers in this analysis (Phelan, Davidson, & Cao, 1991). Consequently, the peer effects composite measure was created so that higher ratings represented higher peer academic inclinations. The result of this analysis indicates that peers held a critical role in the academic achievement of the students in the sample. This result suggests that students who

engage with peers who are more academically inclined are positively related to ninth-grade GPA. This finding corroborates with prior studies suggesting that peers act as conduits of information leading to higher academic achievement (Gibson, et al., 2004; Ladd, 1990; Oseguera et al., 2010; Suárez-Orozco, et al., 2008).

Less understood was whether the amount of time that students spend socializing with friends is predictive of achievement, as measured by ninth-grade GPA. After controlling for SES and gender, the analysis yielded a significant and negative predictive effect for the number of hours spent with friends. This result suggests that the more time students spend with friends, the lower their academic achievement. It is unknown whether socialization of students in this study involved supervised academic activities outside of the school. As was stated earlier, this measure had two notable limitations. First, the measure did not distinguish whether the number of hours spent with friends occurred in or out of schools, and second, the nature of the socialization was not captured as the predictive variable. Future studies may need to differentiate between the types of interactions in which students engage in and out of schools.

Teacher commitment did not emerge as a statistically significant predictor of academic achievement. This result was not consistent with prior research demonstrating that teachers have a profound effect on students' academic achievement. However, as stated earlier, this measure had some notable limitations. First and foremost, the composite measure assessed math teachers' perceptions of

other teachers' commitment at the school and did not capture every teacher's own assessment of his or her individual commitment to students.

School sense of belonging was statistically significant and predictive of ninth-grade GPA. This finding is consistent with prior research stating that a sense of school belongingness is predictive of achievement at various grade levels and among diverse students (Anderman, 2002; Buote 2001; Sari, 2012; Taylor, 1999; Walton & Cohen, 2011). Students who identified as Mexican statistically underperformed relative to White students in the analytic sample. This finding is consistent with prior research showing that Mexican students persistently underperform in school. Generational status did not have a predictive effect on academic achievement. However, as Gibson (1998) stated “we cannot assume a linear relation between generation in the United States, years of school attendance, and economic and social mobility—with second-generation immigrants doing better than the first and the third surpassing the second” (p. 627). This finding is consistent with the notion that generational status alone cannot be seen as the sole predictor of academic achievement and should be understood in relation to other facets of the student experience.

Research Question 4. The fourth research question addressed statistical interactions between race and generational status. The results show that Filipino second-generation students statistically performed better than third-generation and first-generation students. This finding is consistent with long-standing work that has illuminated the second-generation advantage over foreign-born and U.S.-born peers

(Kao & Tienda, 1995). This finding makes sense, given that students who were U.S. born were more likely to start school in the United States allowing them to have full exposure to English instruction from the start of their academic trajectory.

Implications for Policy and Practice

English dominant schools, belongingness and access. This dissertation argued that the English-language status of students may be an important predictor for understanding the extent to which immigrant students experience belongingness. For example, prior research has shown that English proficiency is an important predictor of other psychological experiences, such as self-esteem, for immigrant students (Espiritu & Wolf, 2001). Therefore disregarding or imposing the nondominant language on immigrant students, as well as offering limited opportunities to form meaningful relationships with peers and adults, may be compromised when students do not share the language of their peers and teachers. This type of language-based exclusion may have adverse effects on immigrant students' sense of school belongingness and the access to educational resources needed to academically thrive.

Specifically, this study hypothesized that the experiences would differ for immigrant students depending on their premigration characteristics such as English-language status, and that the language of instruction would have a profound effect on the educational experiences of immigrant Filipino and Mexican students. Research has shown that schools play a key role in ensuring that students, regardless of background, receive the quality of education that they need to thrive in today's global era (Ladson-Billings, 2006; Suárez-Orozco, 2001). Guided by social reproduction

theory and literature in psychology, sociology, and sociolinguistics, this study examined an immigrant model for Filipino and Mexican students and tested the overarching relationship with school sense of belongingness. However, this analysis was not able to provide evidence for this phenomenon when belongingness was used as an outcome measure. It was only when belongingness was used as a predictor of achievement that sense of belongingness was indeed statistically significant, but this relationship was not dependent on language status.

Turning to prior literature does, however suggest, that language matters for the adaptation and incorporation of immigrant youth. Qualitative research findings show that the dominant language of schools is far from neutral. Instead, the language of schools carries profound socioemotional consequences and excludes students from educational access. In addition, because immigrant parents tend to be unfamiliar with the U.S. educational system (Valenzuela, 1999), students often rely on teachers and peers for support. However, peer and teacher relationships vary (Oseguera et al., 2010). For this reason, culturally and linguistically responsive teaching practices in schools are critical for the emotional and academic engagement of students in schools (Gay, 2000). Villegas and Lucas (2002) stated that culturally responsive schooling helps students to “interrogate the curriculum critically by having them address inaccuracies, omissions and distortions in the text, and by broadening it to include multiple perspectives” (p. 29). This study contributes to the school belonging literature by accentuating the challenges of immigrant students in U.S. schools, by quantitatively testing for the effect of language on immigrant students’ sense of

school belongingness and by challenging English-only ideologies that perpetuate meritocratic falsehoods.

Experiences of immigrant students in U.S. schools are relevant to the extent that immigrant students experience belongingness because it showcases a potential conflict between the students and the school's linguistic policies and practices. However, such linguistic conflicts may be more relevant for some immigrant groups than for others. This dissertation argued that Mexican immigrant students, who are less likely to be familiar with English, may be at a disadvantage relative to Filipino immigrant students in U.S. schools. Therefore the absence of belongingness for immigrant students could be understood as a disconnect between the everyday language of the students and the dominant language within schools. Belonging for immigrant students is most likely to occur in schools that accept, respect, promote, and value linguistic diversity. However, students in high schools are often expected to conform to “categories of normalcy” (Ngo, 2009, p. 210; also Davidson, 1996). Students in schools that do not accept, respect, promote, and value the languages of students are often asked to conform to the dominant language of the school. Not conforming may preclude the development of social relationships with peers and teachers who hold the institutional knowledge needed for academic success. Consequently, immigrant students who are not proficient in the dominant language, namely English, prior to their arrival in the United States may find that establishing these relationships is challenging because such relationships are dependent on the mastery of the dominant language.

The language of students then acts as a communicative tool and as a tool of exclusion and inclusion to the resources associated with content knowledge acquisition. The relations associated with language demarcate and marginalize non-English-speaking immigrant students and may result in unequal access to educational opportunities. In fact, in their review of the literature, Slaten et al. (2016) found that it is not only the social support that teachers give students that is associated with a greater sense of belongingness but also the academic support that teachers offer. Students whose language differ from teachers or academically inclined peers who could scaffold learning may be least likely to benefit from schooling.

Students who are unfamiliar with the language of schools, such as immigrant students, are less likely to academically excel. The English-language status of students may facilitate or impede membership with teachers and peers and facilitate access to resources in schools. In schools where language functions as a prerequisite for access, immigrant students are disproportionately disadvantaged, because it can also take nonnative English speakers between 5 and 7 years to develop the language necessary to excel in school (Hakuta, Butler, & Witt, 2000). For this reason, Filipino immigrant students who arrive to the U.S. with some English competency may be better positioned to form relationships for developing a sense of school belongingness and for accessing educational materials that promote academic achievement.

A popular response to students learning English are English immersion programs as solutions to address the underachievement of non-English-speaking immigrant students (Gibson, 1998). However, this acculturative approach embraces a

deficit model that fails to capitalize on immigrant students' funds of knowledge and instead reproduces patterns of inequality and exonerates schools from the responsibility to teach English-language learners (González, Moll & Amanti, 2005). All too often, immigrant students learn from peers and teachers that detaching themselves from their foreign ways will gain them acceptance (Gibson, 1998). In this respect, the dominant language of U.S. schools becomes a tool of exclusion that reproduces the status quo.

Purcell-Gates (2002) has suggested that with such sociopolitically driven attitudes toward the languages in which students speak, think, and learn, it is no surprise that there are clear class distinctions in learning and achievement. The long-term implications of these affective experiences can be profound. Student academic disengagement and future professional prospects may be limited for those whose language is not accepted in schools (Good et al., 2012). The desire to belong may be accompanied by tension and anxiety and by the pressure to conform to dominant norms. This may suppress the academic will of many immigrant students, leading to a disillusioned view about schooling in the United States. Minority students in educational environments that are insensitive to immigrant students' home languages may be most negatively affected (Booker, 2006). Similarly, Gibson (1998) added that

students most at risk are those from poor and minority backgrounds who view schooling as an alienating force providing unequal opportunities, who feel their identities and languages are undermined or deprecated at school, and who feel stuck in remedial tracks that offer them little meaningful education. (pp. 629-630)

Ultimately, English-language status may play a significant role in the opportunity for immigrant students to reap the benefits of the social and educational experiences of schools. This is especially likely in schools where teachers have not received the training needed to scaffold the learning of their non-English-speaking students in their home languages. The pressure to acculturate may be most damaging for students who do not have supportive teachers or peers. Consequently, the relationships students develop with teachers and peers may provide insight into understanding perceptions of belongingness among diverse students (Faircloth & Hamm, 2005). In sum, not speaking the dominant language of schools plays a central role in the class-related denial of educational opportunity (Purcell-Gates, 2002). Purcell-Gates added that language is an important indicator of people's perceived worth within a context. With language being the clearest and most stable marker of class membership (Purcell-Gates, 2002), the structural inequities associated with access to a quality education will continue to exclude non-English-proficient immigrant students.

The meritocratic ideals that undergird the U.S. public school system may perpetuate patterns of exclusion and inequity for immigrant students. Meritocracy assumes that to academically achieve, immigrant students who acculturate to the dominant practices of schools fare better than those who do not. This ideology has permeated the educational system and has led immigrant students to believe that their foreign ways do not have a place in U.S. schools. Surrendering to this ideology is deemed as an opportunity to become a member of an educational system that values

hard work. However, little to no consideration is given to the structural inequities on which the educational system stands (Lew, 2007). Furthermore, this false meritocratic ideology absolves schools from any attempts to adjust and adapt the educational infrastructure to accommodate the needs of their immigrant students. Achieving academically has by default meant acculturating to the dominant practices of schools. All too often, immigrant students learn from peers and teachers that detaching themselves from their foreign ways will gain them acceptance to the mainstream culture (Gibson, 1998). In this respect, the dominant language of U.S. schools has become a tool of exclusion that reproduces the status quo.

The values and beliefs of the English-dominant culture are imposed on immigrant students through the daily policies and practices of schools. This business-as-usual approach is consistently reinforced through the practices of schools, such as the curriculum, pedagogy, assessments, classroom organization, and teaching ideologies. We have known for a long time that schools socialize students by imposing values, dispositions, and social behaviors that are consistently rewarded (Jackson, 1968). Furthermore, the hidden curriculum that includes the nonacademic factors that have an influence on academic outcomes (Sari & Doganay, 2009) continues to reinforce the dominant values of Western culture.

For this reason, immigrant student success in U.S. schools depends on a culturally and linguistically competent teacher workforce. Mastering English is perhaps the most pressing assimilative demand that immigrant students continue to face. Students are arguably better equipped for the academic expectations placed on

them when their language status is consistent with that of the mainstream educational culture. Hence developing a culturally and linguistically responsive pedagogical approach that capitalizes on the students' home languages, while allowing students to acquire the cultural norms of the school, may help immigrant students to achieve socioemotional stability and succeed academically in U.S. schools. However, segregation by language is still alive and well (Gándara & Orfield, 2010). Immigrant students, especially of Mexican origin, are consistently segregated across districts and within schools (Gándara & Orfield, 2010).

In this global era, it is of outmost importance that immigrant students be able to retain their home languages and also learn English—the language of commerce. Furthermore, exposure to and interaction with other students who hold high aspirations may allow immigrants to retain a positive educational identity. The stigmatization associated with language segregation may damage their socioemotional standing in schools and have a negative effect on their academic outlook. Most immigrant students attend schools that do not value their home languages and come from families that are poor, and they often attend underresourced schools where parents are unable to join parent-teacher associations that prescribe some degree of administrative authority.

Furthermore, peer and adult social capital, as reported by Gibson et al. (2004), may ameliorate isolated cases of student success, but such isolated instances do little to systematically change the structural features that promote systemic educational equity (Stanton-Salazar, 2001). Consequently, English-language status has become

necessary for immigrant students to reap the benefits of the social and educational experience in schools. For students who do not have supportive teachers or peers, the pressure they face to acculturate may be most damaging to their achievement in schools. Therefore, teachers and school administrators should purposefully promote a school culture conducive to the acceptance of their students. A school culture that integrates immigrant students, like one that offers social-psychological interventions, should pay close attention to the nature of the educational environment (Yeager & Walton, 2011).

Creating a positive educational culture where students feel that others are invested in their well-being, may promote an educational experience that capitalizes on its context. After all, teaching and learning are socially and culturally interdependent (Vygotsky, 1962, 1978). Such an environment must provide language scaffolds within the classroom and encourage students of various language skills and levels of status to participate with one another thereby reaffirming their belongingness in schools. However, schools that continue to fail to accommodate the linguistic needs of their immigrant students will continue to exacerbate the disparities that all too often result in school failure. Gibson, et al. (2004) stated that affluent households generally acquire social capital directly from their families, whereas working-class youth from marginalized communities may be more dependent on connections in school. However, such connections may continue to be precluded by language differences and the discomfort associated with being a linguistic outsider in an English-dominant educational setting.

For this reason, having an administrative team that is cognizant and proactive about meeting the needs of immigrant students as well as having adequately trained teachers to provide culturally and linguistically relevant instruction within an educational environment that capitalizes on the variability among its students are crucial steps toward incorporating immigrant students equitably in schools. Most important, there is no magic formula, secret potion, or silver bullet that will resolve the educational or psychological challenges that immigrant students face. Schools hold a duty to provide optimal educational experiences for all students, but until deficit-oriented ideologies, assumptions, and beliefs that reproduce educational inequities are disrupted, immigrant students and their families will continue to suffer the consequences of an educational system that is not prepared to “pay” its educational debt to marginalized students (Ladson-Billings, 2006).

Limitations & Future Research

There are several limitations to consider in this research. First, this study was limited to a cross-sectional sample collected during a single time point to gauge students’ school sense of belongingness when students were in ninth grade. As demonstrated by Gillen-O’Neel and Fuligni, (2013), belongingness, when assessed over time, appears to fluctuate. Unfortunately, data to account for such fluctuations in belongingness were not available to incorporate into this study. Future research should investigate the effect of school sense of belongingness for students when they first matriculate in U.S. schools and track how their sense of belongingness fluctuates over the course of their educational experience. Second, school sense of

belongingness was assessed through a broader construct that was not contextualized to a specific activity or organization that traditionally contributes to a positive sense of belonging. In this regard, future research may also learn from prior literature focusing on classroom-specific sense of belonging (Goodenow, 1993a). Future research may choose to assess the features of the micro environments that sustain a sense of belongingness within school and examine the ways in which they can potentially be scaled out to the larger schooling context. Along these lines, it is worth investigating the composition of schools and classrooms that may optimize or preclude a positive sense of belongingness for immigrant students.

Third, the measure of language status in this study captured the language first learned by students, as opposed to their level of English-language proficiency in ninth grade. The measure does not account for language learned later in life, nor does the study control for the point in time when students matriculated in a U.S. school. The language predictor is also categorical. If the predictor had captured variability in English-language status through a continuous measure, this study could have detected changes in sense of school belongingness across different levels of English-language status. Furthermore, it is important to mention that the everyday language of students may differ from the language needed to excel academically.

Academic language refers to the oral, written, auditory, and visual language proficiency required to learn effectively in schools and academic programs (Kayalar & Ari, 2016). This language is specific to classroom lessons, books, tests, and assignments, and ultimately, it is the language in which students are expected to learn

and achieve fluency to succeed in school (Gottlieb & Ernst-Slavit, 2014). Academic language stands in contrast to the everyday language, social language, and conversational language of students. It may be possible to gain the academic language necessary to excel in school but not necessarily acquire the language to promote social relationships among peers and teachers. Future research should tease apart the effect of academic language and everyday language on facilitating the development of sense of school belongingness and their relation to academic achievement.

Fourth, the nonexperimental research design of this study presents an important limitation. All of the results presented are correlational and not causal. Future research may benefit from structural equation modeling to investigate the relationship of the variables in this study in its collective sense as opposed to parceling out effects with Ordinary Least Squares regressions. In addition, quasi-experimental designs and mixed methodologies that integrate the effect of language differences among students may be suitable for detecting effects. Future research may also consider investigating the effect of immigrant students' participation in student-led organizations. More specifically, student-led organizations, though not directly a unit of analysis in this study, may fortify relationships that are premised on shared interest, shared goals, and shared languages. Unlike in the classroom context, students have the liberty to join organizations that offer an environment conducive to forming social relationships. As demonstrated by Gibson et al. (2004), student-led organizations may provide an environment suitable for developing a sense of belongingness among migrant students. How student-led organizations, specifically

as they relate to language, affect students' access to and participation in the dominant mainstream English culture of school remains a promising area for future research.

Furthermore, the linguistic representation of students may be unevenly distributed throughout schools. For example, Gibson, et al. (2004), reported that the gathering spaces of White and Mexican students were physically separate in schools. Between classes and during lunchtime, ethnicity-based clusters were typical and contingent on patterns of privilege. Such research findings suggest that Mexican Spanish-speaking students generally gather in peripheral spaces where they have little opportunity to interact with students from the broader mainstream community. As a result, Mexican students report feelings of shame, inferiority, nervousness, and alienation associated with their physical exclusion. The emotions prompted from the appropriation of spaces and the activities dominated by their more privileged White, English-speaking peers were thought to prevent the active participation of Mexican students in schooling.

Fifth, future research should investigate whether the effect of having a friend who was a native speaker of English moderates the sense of school belongingness of immigrant students (Suárez-Orozco, et al., 2008) and whether sense of school belongingness mediates their academic achievement. Future research may also benefit from developmental studies that capture school sense of belongingness at different phases of development. Revisiting the theoretical conversations about sense of school belongingness may also yield a comprehensive approach useful for informing and triangulating findings among researchers in the field.

A number of theoretical accounts have already been instrumental for explaining the achievement-belonging relationship. For example, Slaten and colleagues (2016) state that the early work of Maslow, (1943) on the social hierarchy of needs leading to self-actualization, Dewey's (1938) work on supportive school environments, Vygotsky's (1962) work on social environments, and Erikson's (1968) work on social identification in schools, together offer a framework for investigating the importance of belongingness in educational systems. Other studies have leveraged from other theoretical accounts such as Bronfenbrenner's (1979) *ecological model*, which has placed an emphasis on the context for understanding belongingness.

Baumeister & Leary's (1995) *belongingness hypothesis* suggests that the need to form social relationships is inherently human. Investigating achievement without acknowledging the innate drive to form relationships would fail to consider the sociocultural nature of learning that Vygotsky (1978) emphasized. Furthermore, Vygotsky's focus on people's development, learning, and their cultural practices, and also accounting for a person's location and position within structures of power that socially reproduce social hierarchies, must be considered and challenged. This study finds that the language differentials that inform the achievement-belonging relationship resulting in educational inequities are useful for theorizing about school sense of belongingness among immigrant students.

Booker's (2006) *identification-connection divide* suggest that regardless of whether or not the students are aware of the importance of schools, the educational milieu may or may not be conducive for establishing a sense of belongingness.

Moreover, Finn (1989) has described the *participation-identification model*, which suggests that school withdrawal among at-risk students occurs when the school fails to demonstrate that students are welcomed, respected, and valued. *Stage-environment fit theory* (Eccles et al., 1983; Eccles & Roeser, 2009) argues that the mismatch between adolescent students' developmental needs and the environment may lead to higher school dropout rates among early adolescents. These theoretical perspectives exemplify the notion that the socioemotional well-being of students, especially for those from marginalized communities, are necessary for optimizing learning and academic engagement. Through the application of social reproduction theory and its tenets (i.e., social capital, linguistic capital), this study attempted to explain language-based differentials within schools, informed patterns of exclusion that often exist within the structures of power that marginalize immigrant students based on language, and create barriers toward school success.

Last, the experiences of students in high school and how they affect their college-going aspirations should also be a future area of research. As the need to understand the experiences of linguistically and culturally diverse students continues to be an issue in the context of P-12 and in higher education, the importance for understanding pathways prior to their college matriculation is more pressing than ever before. As the demographics of the United States and in higher education continues to shift toward diverse student bodies, administrators at every educational level must continue to grapple with implementing the best practices for serving their students now and in the future.

Conclusion

The core argument of this dissertation was centered on the assumption that immigrant high school Filipino and Mexican students' sense of school belongingness is shaped by their ethnicity and language status, academically inclined peers and an ethos of teacher commitment. The results showed that in the first study when academically inclined peers, and teachers ethos of commitment to students, were used as predictors of school belongingness, the study yielded statistically significant evidence to support the relationship. English-language status did not hold a predictive effect on sense of school belonging for the students in the sample. The interactions of language status and race/ethnicity on school sense of belongingness was also not statistically significant. When sense of belongingness was used as a predictor of academic achievement in the second study, the results showed that school sense of belonging was predictive of ninth grade GPA. Lastly, the results revealed that school sense of belonging was a statistically significant predictor of ninth grade GPA. This finding offers yet another piece of supporting evidence for the achievement-belonging relationship.

While *Plyler v. Doe* created a buffer for immigrant students to pursue a K-12 education it did not guarantee equitable access to the resources that these students would need to thrive in U.S. schools. Unfortunately, the literature has not established how language affects school belongingness and the consequences it has for the education of immigrant students. This study explicitly investigated these challenges and further complicated the notion of straight-line assimilation for recent immigrants.

Espiritu and Wolf, (2001) have stated that “rather than navigating a path toward a sense of ease and belonging, that process of assimilation is a complex one, ripe with contradictions and disrapture” (p. 183). Hence, immigrant students and the challenges they face in U.S. schools must be prioritized by researchers looking to inform the practices most suitable for promoting educational equity within the context of U.S. schools.

Appendix: Additional Resources

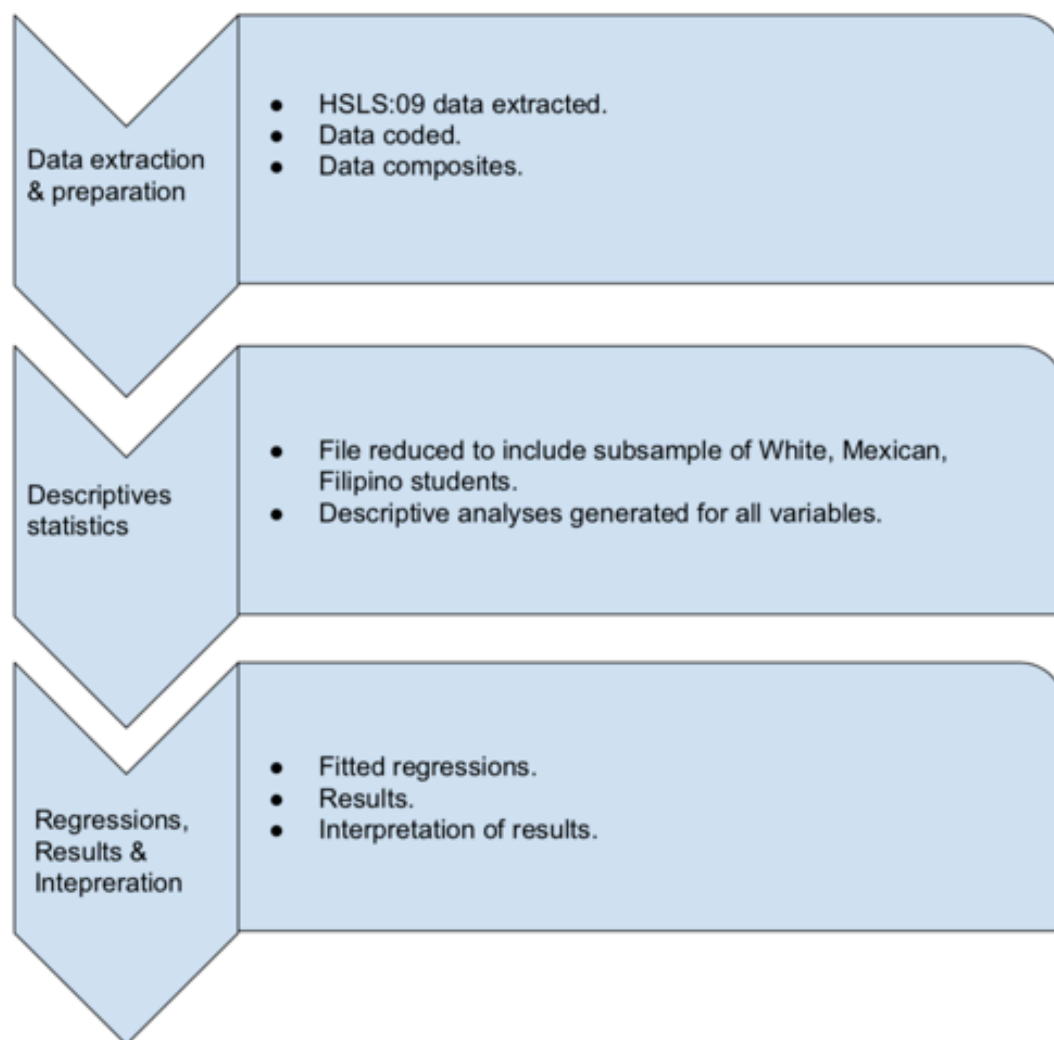


Figure A.1. Data Channels, Preparation, and Analysis

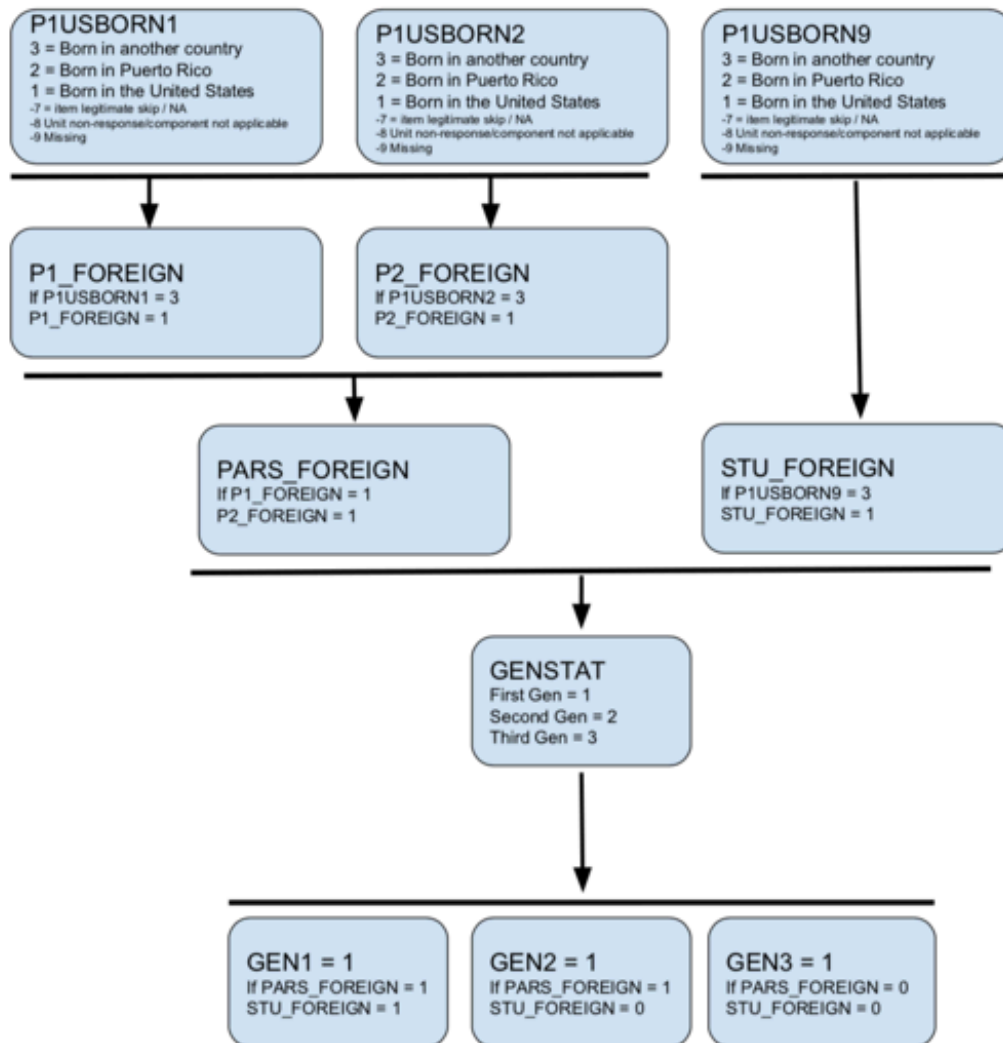


Figure A.2. Quantifying Generational Status

Table A.1
Extracted Variables and Descriptions

Variable	Description
STU_ID	Student ID
SCH_ID	School ID
X1SCHOOLBEL	X1 Scale of student's sense of school belonging
X1SES	X1 Socioeconomic status composite
X1SEX	X1 Student's sex
X1RACE	X1 Student's race/ethnicity composite
X1HISPTYPE	X1 Student's Hispanic/Latino/Latina subgroup composite
X1ASIANATYPE	X1 Student's Asian subgroup composite
X1DUALLANG	X1 Student dual-first language indicator
P1USBORN9	P1 B17 Student was born in the United States
P1USBORN1	P1 B06 Parent 1 was born in the United States
P1USBORN2	P1 B14 Parent 2 was born in the United States
S1FRNDGRADES	S1 E12A Ninth grader's closest friend gets good grades
S1FRNDCLASS	S1 E12C Ninth grader's closest friend attends classes regularly
S1HRFRIENDS	S1 E15G Hours spent hanging out with friends on typical schoolday
M1TEACHING	M1 B01A Math teachers in this school set high standards for teaching
M1TSCHDISC	M1 D06A Teachers at this school help maintain discipline in the entire school
M1TIMPROVE	M1 D06B Teachers at this school take responsibility for improving the school
M1TSETSTDS	M1 D06C Teachers at this school set high standards for themselves

Table A.1. (continued)

Variable	Description
M1TSELFDEV	M1 D06D Teachers at this school feel responsible for developing student self-control
M1TALLLEARN	M1 D06F Teachers at this school feel responsible that all students learn
X3TGPA9TH	X3 GPA at ninth grade
W1STUDENT	W1 Base-year student analytic weight
W1SCHOOL	W1 Base-year school analytic weight

Table A.2

Student's Race/Ethnicity Composite for Extracted Data Set

Race/ethnicity composite category	Frequency	Percentage
American Indian/Alaska Native, non-Hispanic	168	0.7
Asian, non-Hispanic	2,096	8.3
Black/African American, non-Hispanic	2,648	10.5
Hispanic, no race specified	590	2.3
Hispanic, race specified	3,410	13.5
More than one race, non-Hispanic	1,952	7.7
Native Hawaiian/Pacific Islander, non-Hispanic	110	0.4
White, non-Hispanic	12,259	48.6
Missing	1,973	7.8
<i>Total</i>	<i>23,233</i>	<i>100.0</i>

Table A.3

Student's Hispanic/Latino/Latina Subgroup Composite Frequencies Extracted From Data Set

Hispanic/Latino/Latina composite category	Frequency	Percentage
Student is not Hispanic	19,062	75.6
Mexican, Mexican American, Chicano	1,913	7.6
Cuban	157	0.6
Dominican	117	0.5
Puerto Rican	454	1.8
Central American	255	1.0
South American	212	0.8
Other Hispanic or Latino or Latina	473	1.9
Missing	2,563	10.2
<i>Total</i>	<i>22,643</i>	<i>100.0</i>

Table A.4

Student's Asian Subgroup Composite Frequencies Extracted From Data Set

Asian composite category	Frequency	Percentage
Student is not Asian	21,488	85.2
Chinese	457	1.8
Filipino	388	1.5
Southeast Asian, such as Vietnamese/Thai	517	2.1
South Asian, such as Indian or Sri Lankan	501	2.0
Other Asian, such as Korean or Japanese	476	1.9
Missing	13,79	5.5
<i>Total</i>	<i>23,827</i>	<i>100.0</i>

Table A.5

Student, Parent 1, and Parent 2 Places of Birth

	Frequency	Percentage
P1USBORN9 (Student)		
Born in the United States	14,841	58.9
Born in Puerto Rico or another U.S. territory	65	0.3
Born in another country	1,270	5.0
Missing	819	3.2
Unit nonresponse/component not applicable	8,211	32.6
<i>Total</i>	<i>25,206</i>	<i>100.0</i>
P1USBORN1 (Parent1)		
Born in the United States	12,762	50.6

Born in Puerto Rico or another U.S. territory	131	0.5
Born in another country	3,287	13.0
Missing	815	3.2
Unit nonresponse/component not applicable	8,211	32.6
<i>Total</i>	<i>25,206</i>	<i>100.0</i>
P1USBORN2 (Parent2)		
Born in the United States	9,737	38.6
Born in Puerto Rico or another U.S. territory	97	0.4
Born in another country	2,905	11.5
Missing	584	2.3
Unit nonresponse/component not applicable	8,211	32.6
Item legitimate skip/NA	3,672	14.6
<i>Total</i>		<i>100.0</i>

Table A.6
Unrotated Principal Components Analysis Generated in STATA

	Eigenvalue	Difference	Proportion	Cumulative
Comp1	3.59221	2.79352	0.5987	0.5987
Comp2	0.798685	0.275153	0.1331	0.7318
Comp3	0.523532	0.119998	0.0873	0.8191
Comp4	0.403534	0.0496138	0.0673	0.8863
Comp5	0.35392	0.0257999	0.0590	0.9453
Comp6	0.32812	–	0.0547	1.00

Note. Number of obs. = 15,859; number of comp. = 6; trace = 6; $\rho = 1.00$.

Table A.7

Principal Components Eigenvectors Generated in STATA

	Comp1	Comp2	Comp3	Comp4	Comp5	Comp6
R1TEAC HING	0.2799	0.9366	0.0764	0.1750	0.0213	0.0873
RM1TSC HDISC	0.4047	-0.1520	0.7867	-0.1473	0.3859	-0.1537
RM1TIM PROVE	0.4448	-0.0983	0.0493	-0.4220	-0.5421	0.5640
RM1TSE TSTD,	0.4378	0.0462	-0.4001	-0.4272	-0.0586	-0.6783
RM1TSE LFDEV	0.4278	-0.2433	0.0274	0.7517	-0.3917	-0.1963
RM1TAL LLEARN	0.4305	-0.1696	-0.4605	0.1483	0.6324	0.3899

References

- Adams, C. R., & Singh, K. (1998). Direct and indirect effects of school learning variables on the academic achievement of African American 10th graders. *Journal of Negro Education, 67*, 48–66. doi:10.2307/2668240
- Adelabu, D. D. (2007). Time perspective and school membership as correlates to academic achievement among African American adolescents. *Adolescence, 42*, 525–538.
- Aerts, S., Van Houtte, M., Dewaele, A., Cox, N., & Vincke, J. (2012). Sense of belonging in secondary schools: A survey of LGB and heterosexual students in Flanders. *Journal of Homosexuality, 59*(1), 90–113. doi:10.1080/00918369.2012.638548
- Ainsworth, M. D. (1989). Attachment beyond infancy. *American Psychologist, 44*, 709–716.
- Anant, S. S. (1966). The need to belong. *Cunoda's Mental Health, 14*, 21–27.
- Anderman, E. M. (2002). School effects on psychological outcomes during adolescence. *Journal of Educational Psychology, 94*, 795–809. doi:10.1037/0022-0663.94.4.795
- Anderman, L. H. (1999). Classroom goal orientation, school belonging and social goals as predictors of students' positive and negative affect following the transition to middle school. *Journal of Research and Development in Education, 32*, 89–103.
- Anderman, L. (2003). Academic and social perceptions as predictors of change in middle school students' sense of school belonging. *Journal of Experimental Education, 72*, 5–22.
- Anderman, L. H., & Anderman, E. M. (1999). Social predictors of changes in students' achievement goal orientations. *Contemporary Educational Psychology, 24*, 21–37. doi:10.1006/ceps.1998.0978
- Arastaman, G. (2006). *The opinions of students, teachers and administrators in Ankara province in relation to freshman high school students' school engagement* (Unpublished master's thesis). Ankara University, Ankara, Turkey.
- Arhar, J. M., & Kromrey, J. D. (1993). *Interdisciplinary teaming in the middle level school: Creating a sense of belonging for at-risk middle level students*. Paper

presented at the meeting of the American Educational Research Association, Atlanta, GA.

- Audy, J. R. (1980). Man the lonely animal: Biological roots of loneliness. In J. Hartog, J. R. Audy, & Y. A. Cohen (Eds.), *The anatomy of loneliness* (pp. 111–128). New York, NY: International Universities Press.
- Averill, J. R. (1980). A constructivist view of emotion. In R. Plutchik & H. Kellerman (Eds.), *Emotion: Theory, research, and experience* (pp. 305–339). Orlando, FL: Academic Press.
- Banse, R., Gawronski, B., Rebetez, C., Gutt, H., & Morton, J. B. (2010). The development of spontaneous gender stereotyping in childhood: Relations to stereotype knowledge and stereotype flexibility. *Developmental Science, 13*, 298–306. doi:10.1111/j.1467-7687.2009.00880.x
- Barrett, K. C., & Campos, J. J. (1987). Perspectives on emotional development: A functionalist approach to emotions. In J. D. Osofsky (Ed.), *Handbook of infant development* (2nd ed., pp. 555–578). New York, NY: John Wiley.
- Battistich, V., Solomon, D., Kim, D., Watson, M., & Schaps, E. (1995). Schools as communities, poverty levels of student populations, and students' attitudes, motives and performance: A multilevel analysis. *American Educational Research Journal, 32*, 627–658.
- Baumeister, R. F., & Leary, M. R. (1995). The need to belong: Desire for interpersonal attachments as a fundamental human motivation. *Psychological Bulletin, 117*, 497–529. doi:10.1037/0033-2909.117.3.497
- Becker, B. E., & Luthar, S. S. (2002). Social-emotional factors affecting achievement outcomes among disadvantaged students: Closing the achievement gap. *Educational Psychologist, 37*, 197–214.
- Begen, F. M., & Turner-Cobb, J. M. (2015). Benefits of belonging: Experimental manipulation of social inclusion to enhance psychological and physiological health parameters. *Psychology & Health, 30*, 568–582. doi:10.1080/08870446.2014.991734
- Berndt, T. (1989). Obtaining support from friends in childhood and adolescence. In D. Belle (Ed.), *Children's social networks and social supports* (pp. 308–331). New York, NY: John Wiley.
- Berndt, T., & Perry, B. (1990). Distinctive features and effects of early adolescent friendships. In R. Montemayor, G. Adams, & T. Gullotta (Eds.), *From childhood to adolescence* (pp. 269–287). Newbury Park, CA: Sage.

- Blum, R. W., McNeely, C. A., & Rinehart, P. M. (2002). *Improving the odds: The untapped power of schools to improve the health of teens*. Minneapolis: University of Minnesota, Center for Adolescent Health and Development.
- Blyth, D., Hill, J., & Thiel, K. (1982). Early adolescents' significant others: Grade and gender differences in perceived relationships with familial and non-familial adults and young people. *Journal of Youth and Adolescence, 11*, 425–450.
- Bollen, K. A., & Hoyle, R. H. (1990). Perceived cohesion: A conceptual and empirical examination. *Social Forces, 69*, 479–504.
- Booker, K. (2006). School belonging and the African American adolescent: What do we know and where should we go? *High School Journal, 89*(4), 1–7.
- Bourdieu, P., & Thompson, J. B. (1991). *Language and symbolic power*. Cambridge, MA: Harvard University Press.
- Bowen, G., Richman, J. M., Brewster, A., & Bowen, N. K. (1998). Sense of school coherence, perceptions of danger at school, and teacher support among youth at risk of school failure. *Child & Adolescent Social Work Journal, 15*, 273–286. doi:10.1023/A:1007535930286
- Brewster, A. B., & Bowen, G. L. (2004). Teacher support and the school engagement of Latino middle and high school students at risk of school failure. *Child and Adolescent Social Work Journal, 21*, 47–67. doi:10.1023/B:CASW.0000012348.83939.6b
- Bronfenbrenner, U. (1979). *The ecology of human development: Experiments by nature and design*. Cambridge, MA: Harvard University Press.
- Buck, R. (1985). *Prime theory: An integrated view of motivation and emotion*. New York, NY: Psychology Press.
- Buote, C. A. (2001). Relations of autonomy and relatedness to school functioning and psychological adjustment during adolescence. *Dissertation Abstracts International, 61*(A), 4724–4845.
- Cartmell, H., & Bond, C. (2015). What does belonging mean for young people who are international new arrivals? *Educational & Child Psychology, 32*(2), 89–101.
- Castro-Salazar, R., & Bagley, C. (2010). “Ni de aqui in from there”: Navigating between contexts: Counter narratives of undocumented Mexican students in the United States. *Race, Ethnicity, and Education, 13*(1), 23–40.

- Catalano, R. F., Berglund, M. L., Ryan, J. A. M., Lonczak, H. S., & Hawkins, J. D. (2004). Positive youth development in the United States: Research findings on evaluations of positive youth development programs. *The Annals of the American Academy of Political & Social Science*, 591, 98–124.
- Cauce, A. (1986). Social networks and social competence: Exploring the effects of early adolescent friendships. *American Journal of Community Psychology*, 14, 607–629.
- Cheung, H. Y. (2004). Comparing Shanghai and Hong Kong students' psychological sense of school membership. *Asia Pacific Education Review*, 5(1), 34–38.
- Cheung, H. Y., & Hui, K. F. S. (2003). Mainland immigrant and Hong Kong local students' psychological sense of school membership. *Asia Pacific Education Review*, 4(1), 67–74.
- Chhuan, V., & Hudley, C. (2010). Asian American ethnic options: How Cambodian students negotiate ethnic identities in a U.S. urban school. *Anthropology & Education Quarterly*, 41, 341–359.
- Cohen, G. L., Garcia, J., Purdie-Vaughns, V., Apfel, N., & Brzustoski, P. (2009). Recursive processes in self-affirmation: Intervening to close the minority achievement gap. *Science*, 324, 400–403.
- Coleman, J. S. (1988). Social capital in the creation of human capital. *American Journal of Sociology*. Suppl., 95–120.
- Coleman, J. S., & Hoffer, T. (1987). *Public and private high schools*. New York, NY: Basic Books.
- Conchas, G. Q. (2001). Structuring failure and success: Understanding the variability in Latino school engagement. *Harvard Educational Review*, 70, 475–504.
- Connell, J., & Wellborn, J. (1991). Competence, autonomy and relatedness: A motivational analysis of self-system processes. In M. R. Gunnar & L. A. Sroufe (Eds.), *Self-processes and development* (pp. XX–XX). Hillsdale, NJ: Lawrence Erlbaum.
- Coon, C. S. (1946). The universality of natural groupings in human societies. *Journal of Educational Sociology*, 20, 163–168.
- Crouch, R., Keys, C. B., & McMahon, S. D. (2014). Student–teacher relationships matter for school inclusion: School belonging, disability, and school transitions. *Journal of Prevention & Intervention in the Community*, 42, 20–30. doi:10.1080/10852352.2014.855054

- Cunningham, N. J. (2007). Level of bonding to school and perception of the school environment by bullies, victims, and bully victims. *Journal of Early Adolescence*, 27, 457–458. doi:10.1177/0272431607302940
- Curtin N., Stewart A. J., Ostrove J. M., (2013) Fostering academic self-concept advisor support and sense of belonging among international and domestic graduate students. *Am Educ Res J* 2013, 50 (1):108–137.
- Darwin, C. (1859). *On the origin of species by means of natural selection, or, the preservation of favoured races in the struggle for life*. London, England: J. Murray.
- Davidson, A. L. (1996). *Making and molding identity in schools: Student narratives on race, gender and academic engagement*. New York, NY: SUNY Press.
- Deci, E., Vallerand, R., Pelletier, L., & Ryan, R. (1991). Motivation and education: The self-determination perspective. *Educational Psychologist*, 26, 325–346.
- Delpit, L. (1995). *Other people's children: Cultural conflict in the classroom*. New York, NY: New Press.
- Devos, T., & Banaji, M. (2005). American = White? *Journal of Personality and Social Psychology*, 88, 447–466.
- DeWall, C., Deckman, T., Pond, R. S., & Bonser, I. (2011). Belongingness as a core personality trait: How social exclusion influences social functioning and personality expression. *Journal of Personality*, 79, 979–1012. doi:10.1111/j.1467-6494.2010.00695.x
- Dewey, J. (1895). The theory of emotions: II. The significance of emotions. *Psychological Review*, 2, 13–32.
- Dewey, J. (1938). *Experience and education*. New York, NY: Kappa Delta Pi.
- Drolet, M., Arcand, I., Ducharme, D., & Leblanc, R. (2013). The sense of school belonging and implementation of a prevention program: Toward healthier interpersonal relationships among early adolescents. *Child & Adolescent Social Work Journal*, 30, 535–551. doi:10.1007/s10560-013-0305-5
- Durkheim, E. (1963). *Suicide*. New York, NY: Free Press. (Original work published 1897)
- Dweck, C., & Bush, E. (1976). Sex differences in learned helplessness: I. Differential debilitation with peer and adult evaluators. *Developmental Psychology*, 12, 147–156.

- Eccles, J. S. (1983). Expectancies, values, and academic behaviors. In J. T. Spence (Ed.), *Achievement and achievement motivation* (pp. 75–146). San Francisco, CA: Freeman.
- Eccles, J. S., Early, D., Fraser, K., Belansky, E., & McCarthy, K. (1997). The relation of connection, regulation, and support for autonomy to adolescents' functioning. *Journal of Adolescent Research, 12*, 263–286.
- Eccles, J. S., Midgley, C., Wigfield, A., Buchanan, C. M., Reuman, D., Flanagan, C., & Mac Iver, D. (1993). Development during adolescence: The impact of stage–environment fit on young adolescents' experiences in schools and in families. *American Psychologist, 48*, 90–101.
- Eccles, J. S., & Roeser, R. W. (2009). Schools, academic motivation, and stage–environment fit. In R. M. Lerner & L. Steinberg (Eds.), *Handbook of adolescent psychology: Vol. 1. Individual bases of adolescent development* (3rd ed., pp. 404–434). Hoboken, NJ: John Wiley.
- Ekman, P. (1992). Facial expressions of emotion: New findings, new questions. *Psychological Science, 3*, 34–38.
- Erikson, E. H. (1968). *Identity: Youth and crisis*. New York, NY: W. W. Norton
- Espiritu, Y. L., & Wolf, D. L. (2001). The Paradox of assimilation: Children of Filipino immigrants in San Diego. In R. G. Rumbaut & A. Portes (Eds.), *Ethnicities: Children of immigrants in America* (pp. 157–186). University of California Press.
- Faircloth, B., & Hamm, J. (2005). Sense of belonging among high school students representing four ethnic groups. *Journal of Youth and Adolescence, 34*, 293–309.
- Fairclough, N. (1989). *Language and power*. New York, NY: Longman.
- Fine, M., Jaffe-Walter, R., Pedraza, P., Futch, V., & Stoudt, B. (2007). Swimming: On oxygen, resistance, and possibility for immigrant youth under siege. *Anthropology and Education Quarterly, 38*(1), 76–96.
- Finn, J. (1989). Withdrawing from school. *Review of Educational Research, 59*, 117–142. doi:10.2307/1170412
- Finn, K. V., & Frone, M. R. (2004). Academic performance and cheating: Moderating role of school identification and self-efficacy. *Journal of Educational Research, 97*, 115–122.

- Fiske, S. T. (2004). *Social beings: A core motives approach to social psychology*. Hoboken, NJ: John Wiley.
- Foner, N. (2005). The social construction of race in two immigrant eras. In *A new land* (pp. 11–42). New York, NY: New York University Press.
- Ford, J. A. (2009). Nonmedical prescription drug use among adolescents, the influence of bonds to family and school. *Youth & Society, 40*, 336–352.
- Fredricks, J. A., Blumenfeld, P., Friedel, J., & Paris, A. (2005). School engagement. In K. A. Moore & L. H. Lippman (Eds.), *What do children need to flourish: Conceptualizing and measuring indicators of positive development* (pp. 305–321). New York, NY: Springer Science + Business Media.
- Furrer, C., & Skinner, E. (2003). Sense of relatedness as a factor in children's academic engagement and performance. *Journal of Educational Psychology, 95*(1), 148–162.
- Gaertner, S., & Dovidio, J. (2000). *Reducing intergroup bias: The common ingroup identity model*. New York, NY: Psychology Press.
- Gándara, P., & Orfield, G. (2010). *A return to the "Mexican Room": The segregation of Arizona's English learners*. Los Angeles, CA: Civil Rights Project/Proyecto Derechos Civiles, UCLA.
- Garcia-Reid, P. (2007). Examining social capital as a mechanism for improving school engagement among low income Hispanic girls. *Youth & Society, 39*, 164–181. doi:10.1177/0044118X07303263
- Garcia-Reid, P. G., Reid, R. J., & Peterson, N. A. (2005). School engagement among Latino youth in an urban middle school context: Valuing the role of social support. *Education and Urban Society, 37*, 257–275. doi:10.1177/0013124505275534
- Gay, G. (2000). *Culturally responsive teaching: Theory, research, and practice*. New York, NY: Teachers College Press.
- Gibson, M. (1998). Promoting academic success among immigrant youth: Is acculturation the issue? *Educational Policy, 12*, 615–633.
- Gibson, M. A., Bejinez, L. F., Hidalgo, N., & Rolón, C. (2004). Belonging and school participation: Lessons from a migrant student club. In M. Gibson, P. Gándara, & J. P. Koyama (Eds.), *School connections: U.S. Mexican youth, peers, and school achievement* (pp. 129–149). New York, NY: Teachers College Press.

- Gillen-O'Neel, C., & Fuligni, A. (2013). A longitudinal study of school belonging and academic motivation across high school. *Child Development, 84*, 678–692.
- Glasser, W. (1986). *Control theory in the classroom*. New York, NY: Perennial Library/Harper & Row.
- González, N., Moll, L., & Amanti, C. (2005). *Funds of knowledge: Theorizing practices in households, communities, and classrooms*. Mahwah, NJ: Lawrence Erlbaum.
- Gonzales, R. G. (2011). Learning to be illegal: Undocumented youth and shifting legal contexts in the transition to adulthood. *American Sociological Review, 76*, 602–619.
- Good, C., Rattan, A., & Dweck, C. S. (2012). Why do women opt out? Sense of belonging and women's representation in mathematics. *Journal of Personality and Social Psychology*. Advance online publication. doi:10.1037/a0026659
- Goodenow, C. (1992). Strengthening the links between educational psychology and the study of social contexts. *Educational Psychologist, 27*, 177–196. doi:10.1207/s15326985ep2702_4
- Goodenow, C. (1993a). Classroom belonging among early adolescent students: Relationships to motivation and achievement. *Journal of Early Adolescence, 13*(1), 21–43.
- Goodenow, C. (1993b). The psychological sense of school membership among adolescents: Scale development and educational correlates. *Psychology in the Schools, 30*, 79–90.
- Goodenow, C., & Grady, K. E. (1993). The relationship of school belonging and friends' values to academic motivation among urban adolescent students. *Journal of Experimental Education, 62*, 60–71. doi:10.1080/00220973.1993.9943831
- Gordon, S. L. (1989). The socialization of children's emotions: Emotional culture, competence, and exposure. In C. Saarni & P. Harris (Eds.), *Children's understanding of emotion* (pp. 319–349). Cambridge, England: Cambridge University Press.
- Gottlieb, M., & Ernst-Slavit, G. (2014). What is academic language? In *Academic language in diverse classrooms: Definitions and contexts* (pp. 1–26). Thousand Oaks CA: Corwin.

- Gutman, L. M., & Midgley, C. (2000). The role of protective factors in supporting the academic achievement of poor African-American students during middle school transition. *Journal of Youth and Adolescence*, *29*, 223–248.
- Hagborg, W. J. (1994). An exploration of school membership among middle and high school students. *Journal of Psychoeducational Assessment*, *12*, 312–323.
- Hagerty, B. M. K., Lynch-Sauer, J., Patusky, K. L., Bouwsema, M., & Collier, P. (1992). Sense of belonging: A vital mental health concept. *Archives of Psychiatric Nursing*, *6*, 172–177.
- Hagerty, B. M., & Patusky, K. L. (1995). Developing a measure of sense of belonging. *Nursing Research*, *44*(1), 9–13. doi:10.1097/00006199-199501000-00003
- Hakuta, K., Butler, Y., & Witt, D. (2000). *How long does it take for English learners to attain proficiency?* Santa Barbara, CA: Linguistic Minority Research Institute.
- Hallinan, M. T. (2008). Teacher influences on students' attachment to school. *Sociology of Education*, *81*, 271–283. doi:10.1177/003804070808100303
- Hatcher, S., & Stubbersfield, O. (2013). Sense of belonging and suicide: A systematic review. *Canadian Journal of Psychiatry*, *58*, 432–436.
- Hausmann, L., Schofield, J., & Woods, R. L. (2007). Sense of belonging as a predictor of intentions to persist among African American and White first-year college students. *Research in Higher Education*, *48*, 803–839. doi:10.1007/s11162-007-9052-9
- Hebb, D. O. (1949). *The organization of behavior: A neuropsychological theory*. New York, NY: John Wiley.
- Holt, M. K., & Espelage, D. L. (2003). A cluster analytic investigation of victimization among high school students: Are profiles differentially associated with psychological symptoms and school belonging? *Journal of Applied School Psychology*, *19*, 81–98. doi:10.1300/J008v19n02_06
- Jackson, P. (1968). *Life in classrooms*. New York, NY: Holt, Rinehart & Winston.
- Johnson, M. K., Crosnoe, R., & Elder, G. H. (2001). Students' attachment and academic engagement: Role of race and ethnicity. *Sociology Education*, *74*, 318–340.

- Johnson-Laird & Oatley (2008) Basic emotions, rationality, and folk theory, *Cognition and Emotion*, 6:3-4, 201-223, DOI: 10.1080/02699939208411069
- Jose, P. E., Ryan, N., & Pryor, J. (2012). Does social connectedness promote a greater sense of well-being in adolescence over time? *Journal of Research on Adolescence*, 22, 235–251. doi:10.1111/j.1532-7795.2012.00783.x
- Kao, G., & Tienda, M. (1995). Optimism and achievement: The educational performance of immigrant youth. *Social Science Quarterly*, 76, 1–19.
- Kia-Keating, M., & Ellis, B. H. (2007). Belonging and connection to school in resettlement: Young refugees, school belonging and psychosocial adjustment. *Clinical Child Psychology and Psychiatry*, 12, 29–43.
- Knifsend, C., & Graham, S. (2012). Too much of a good thing? How breadth of extracurricular participation relates to school-related affect and academic outcomes during adolescence. *Journal of Youth and Adolescence*, 41, 379–389. doi:10.1007/s10964-011-9737-4
- Kohut, H. (1984). *How does analysis cure?* New York, NY: International Universities Press.
- Kuperminc, G. P., Darnell, A. J., & Alvarez-Jimenez, A. (2008). Parent involvement in the academic adjustment of Latino middle and high school youth: Teacher expectations and school belonging as mediators. *Journal of Adolescence*, 31, 469–483.
- Ladd, G. W. (1990). Having friends, keeping friends, making friends, and being liked by peers in the classroom: Predictors of children's early school adjustment? *Child Development*, 61, 1081–1100.
- Ladson-Billings, G. (2006). From the achievement gap to the education debt: Understanding achievement in U.S. schools. *Educational Researcher*, 35(7), 3–12.
- Lakoff, F., & Ferguson, S. (2006). *The framing of immigration*. Retrieved from <http://www.rockridgeinstitute.org/research/rockridge/immigration.html>
- Larson, R., & Asmussen, L. (1991). Anger, worry, and hurt in early adolescence: The enlarging world of negative emotions. In M. Colten & S. Gore (Eds.), *Adolescent stress: Causes and consequences* (pp. 21–41). New York, NY: Aldine.

- Larson, R., & Richards, M. (1991). Daily companionship in late childhood and early adolescence. *Child Development*, *62*, 284–300.
- Lazarus, R.S. (1991). *Emotion and adaptation*. Oxford, UK: Oxford University Press.
- Lee, J. S., & Suárez, D. (2008). A synthesis of the roles of heritage languages in the lives of immigrant children. In T. Wiley, J. S. Lee, & R. Rumberger (Eds.), *The education of language minority students in the United States* (pp. 136–170). Bristol, England: Multilingual Matters.
- Lee, R. M., & Robbins, S. B. (1995). Measuring belongingness: The social connectedness and the social assurance scales. *Journal of Counseling Psychology*, *42*, 232–241.
- Lee, T., & Fiske, S. (2006). Not an outgroup, not yet an ingroup: Immigrants in the stereotype content model. *International Journal of Intercultural Relations*, *30*, 751–768.
- Levenson, R.W. (1994). Human emotions: A functional view. In P. Ekman & R.J. Davidson (Eds.), *The nature of emotion: Fundamental questions* (pp. 123–126). New York: Oxford University Press.
- Lew, J. (2007). A structural analysis of success and failure of Asian Americans: A case of Korean Americans in urban schools. *Teachers College Record*, *109*, 369–390.
- Libbey, H. P. (2004). Measuring student relationships to school: Attachment, bonding, connectedness, and engagement. *Journal of School Health*, *74*, 275–283. doi:10.1111/j.1746-1561.2004.tb08284.x
- Lopez, D. E., & Stanton-Salazar, R. D. (2001). Mexican Americans: A second generation at risk. In R. Rumbaut & A. Portes (Eds.), *Ethnicities* (pp. 57–88). Berkeley, CA: University of California Press.
- Loukas, A., Roalson, L. A., & Herrera, D. E. (2010). School connectedness buffers the effects of negative family relations and poor effortful control on early adolescent conduct problems. *Journal of Research on Adolescence*, *20*, 13–22. doi:10.1111/j.1532-7795.2009.00632.x
- Lovitts, B. E. (2001). *Leaving the ivory tower: The causes and consequences of departure from doctoral study*. Lanham, MD: Rowman & Littlefield.
- Lutz, C., & White, G. M. (1986). The anthropology of emotions. *Annual Review of Anthropology*, *15*, 405–436.

- Ma, X. (2003). Sense of belonging to school: Can schools make a difference? *Journal of Educational Research*, *96*, 340–349. doi:10.1080/00220670309596617
- Mandler, G. (1984). *Mind and body: Psychology of emotion and stress*. New York, NY: W. W. Norton.
- Maslow, A. H. (1943). A theory of human motivation. *Psychological Review*, *50*, 370–396.
- Maslow, A. H. (1954). *Motivation and personality*. New York, NY: Harper.
- Maslow, A. H. (1968). *Toward a psychology of being*. New York, NY: Van Nostrand.
- McAuley, E., Blissmer, B., Marquez, D. X., Jerome, G. J., Kramer, A. F., & Katula, J. (2000). Social relations, physical activity, and well-being in older adults. *Preventive Medicine*, *31*, 608–617.
- McNamara, K., & Batalova, J. (2015). *Filipino immigrants in the United States*. Retrieved from <http://www.migrationpolicy.org/article/filipino-immigrants-united-states>
- McNeely, C., & Falci, C. (2004). School connectedness and the transition into and out of health–risk behavior among adolescents: A comparison of social belonging and teacher support. *Journal of School Health*, *74*, 284–292.
- McNeely, C. A., Nonnemaker, J. M., & Blum, R. W. (2002). Promoting school connectedness: Evidence from the national longitudinal study of adolescent health. *Journal of School Health*, *72*, 138–146.
- Morales, A., Herrera, S., & Murry, K. (2009). Navigating the waves of social and political capriciousness. *Journal of Hispanic Higher Education*, *10*, 266–283. doi:10.1177/1538192708330232
- Moreland, R. L. (1987). The formation of small groups. In C. Hendrick (Ed.), *Group processes: Review of personality and social psychology* (Vol. 8, pp. 80–110). Newbury Park, CA: Sage.
- Murdock, T. B., Anderman, L. H., & Hodge, S. A. (2000). Middle-grade predictors of students' motivation and behavior in high school. *Journal of Adolescent Research*, *15*(3), 327–351. <http://dx.doi.org/10.1177/0743558400153002>
- Nawyn, S. J., Gjokaj, L., Agbényiga, D. L., & Grace, B. (2012). Linguistic isolation, social capital, and immigrant belonging. *Journal of Contemporary Ethnography*, *41*, 255–282. doi:10.1177/0891241611433623

- Nepi, L. D., Facondini, R., Nucci, F., & Peru, A. (2013). Evidence from full-inclusion model: The social position and sense of belonging of students with special educational needs and their peers in Italian primary school. *European Journal of Special Needs Education, 28*, 319–332.
- Newman, B. M., Lohman, B. J., & Newman, P. R. (2007). Peer group membership and a sense of belonging: Their relationship to adolescent behavior problems. *Adolescence, 42*(166), 241–263.
- Newman, B. M., Lohman, B. J., Newman, P. R., Myers, M. C., & Smith, V. L. (2000). Experiences of urban youth navigating the transition to ninth grade. *Youth & Society, 31*, 387–416.
- Newmann, F. M., Wehlage, G. G., & Lamborn, S. D. (1992). The significance and sources of student engagement. In F. M. Newmann (Ed.), *Student engagement and achievement in American secondary schools* (pp. 11–39). New York: Teachers College Press.
- Ngo, B. (2009). Ambivalent urban, immigrant identities: The incompleteness of Lao American student identities. *Qualitative Studies in Education, 22*(2), 201–220.
- Nicholls, J. (1990). What is ability and why are we mindful of it? A developmental perspective. In R. Sternberg & J. Kolligian (Eds.), *Competence considered* (pp. 11–40). New Haven, CT: Yale University Press.
- Nichols, S. L. (2006). Teachers' and students' beliefs about student belonging in one middle school. *Elementary School Journal, 106*, 255–271.
- Noddings, N. (1992). *The challenge to care in school*. New York, NY: Teachers College Press.
- Ocampo, A. C. (in press). *The Latinos of Asia: How Filipinos break the rules of race*. Stanford, CA: Stanford University Press.
- Orellana, M. F., & Gutiérrez, K. D. (2006). What's the problem? Constructing different genres for the study of English learners. *Research in the Teaching of English, 41*, 118–123.
- Oseguera, L., Conchas, G., & Mosqueda, E. (2010). Beyond family and ethnic culture: Understanding the preconditions for the potential realization of social capital. *Youth & Society, 4*, 1136–1166.
- Osterman, K. F. (2000). Students' need for belonging in the school community. *Review of Educational Research, 70*, 323–367.
doi:10.3102/00346543070003323

- Ozer, J., Price Wolf, J., & Kong, C. (2008). Sources of perceived school connection among ethnically diverse urban adolescents. *Journal of Adolescent Research, 23*, 438–470.
- Pease-Alvarez, L., Samway, K. D., & Cifka-Herrera, C. (2010). Working within the system: Teacher of English learners negotiating a literacy instruction mandate. *Language Policy, 9*, 313–334.
- Pedraza, S. (2006). Assimilation or transnationalism? Conceptual models of the immigrant experience. In R. Mahalingam (Ed.), *Cultural psychology of immigrants* (pp. 33–54). Mahwah, NJ: Lawrence Erlbaum.
- Perlmann, J., & Waldinger, R. (1997). Second generation decline? Immigrant children past and present—a reconsideration. *International Migration Review, 31*, 893–922.
- Phelan, P., Davidson, A. L., & Yu, H. C. (1998). *Adolescents' worlds: Negotiating family, peers, and school*. New York: Teachers College Press.
- Phelan, P., Davidson, L. A., & Cao, T. H. (1991). Students' multiple worlds: Negotiating the boundaries of family, peer, and school cultures. *Anthropology & Education Quarterly, 22*, 224–250.
- Phinney, J., Romero, I., Nava, M., & Huang, D. (2001). The role of language, parents, and peers in ethnic identity among adolescents in immigrant families. *Journal of Youth and Adolescence, 30*, 135–153.
- Pianta, R. (1999). *Enhancing relationships between children and teachers* (1st ed.). Washington, DC: American Psychological Association.
- Plyler v. Doe, 457 U.S. 202 (1982).
- Portes, A., & Rumbaut, R. (1996). Who they are and why they come. In *Immigrant America* (2nd ed., pp. 1–27). Berkeley, CA: University of California Press.
- Powlishta, K., Serbin, L., Doyle, A., & White, D. (1994). Gender, ethnic, and body type biases: The generality of prejudice in childhood. *Developmental Psychology, 30*, 526–536.
- Purcell-Gates, V. (2002). "...As soon as she opened her mouth!" issues of language, literacy, and power. In L. Delpit & J. K. Dowdy (Eds.), *The skin that we speak: Thoughts on language and culture in the classroom* (pp. 107–120). New York, NY: The New Press.
- Raudenbush, S. W., & Bryk, A. S. (2002). *Hierarchical linear models: Applications and data analysis methods* (2nd ed.). Thousand Oaks, CA: Sage.

- Resnick, M., Bearman, P. S., Blum, R. W., Bauman, K. E., Harris, K. M., Jones, J., Tabor, J., Beuhring, T., Sieving, R. E., Shew, M., Ireland, M., Bearinger, L. H., Udry, J. R. (1997). Protecting adolescents from harm. *Journal of the American Medical Association*, 278, 823–832.
- Roeser, R. W., & Eccles, J. S. (1998). Adolescents perceptions of middle school: Relation to longitudinal changes in academic and psychological adjustment. *Journal of Research on Adolescence*, 8, 123–158.
- Roeser, R. W., Midgley, C., & Urdan, T. C. (1996). Perceptions of the school psychological environment and early adolescents' psychological and behavioral functioning in school: The mediating role of goals and belonging. *Journal of Educational Psychology*, 88, 408–422.
- Rosenthal, R., & Jacobsen, L. (1968). *Pygmalion in the classroom: Teacher expectation and pupils' intellectual development*. New York, NY: Holt, Rinehart, and Winston.
- Rumbaut, R. G. (1994). The crucible within: Ethnic identity, self-esteem, and segmented assimilation among children of immigrants. *International Migration Review*, 28, 748–794.
- Rumbaut, R. G. (1999). Passages to adulthood: The adaptation of children of immigrants in Southern California. In D. J. Hernández (Ed.), *Children of immigrants: Health, adjustment, and public assistance* (pp. 478–535). Washington, DC: National Academy Press.
- Rumbaut, R. G. (2005). Sites of belonging: Acculturation, discrimination, and ethnic identity among children of immigrants. In *Discovering successful pathways in children's development: Mixed methods in the study of childhood and family life* (pp. 111–164). Chicago, IL: University of Chicago Press.
- Rumberger, R. W. (1995). Dropping out of middle school: A multilevel analysis of students and schools. *American Educational Research Journal*, 32, 583–625.
- Ryan, R. M., & Deci, E. L. (2000). Self-determination theory and the facilitation of intrinsic motivation, social development, and well-being. *American Psychologist*, 55, 68–78. doi:10.1037/0003-066X.55.1.68
- Ryan, A., & Patrick, H. (2001). The classroom social environment and changes in adolescent motivation and engagement during middle school. *American Educational Research Journal*, 38, 437–460.

- Sánchez, B., Colón, Y., & Esparza, P. (2005). The role of sense of school belonging and gender in the academic adjustment of Latino adolescents. *Journal of Youth and Adolescence, 34*, 619–628. doi:10.1007/s10964-005-8950-4
- Sancho, M., & Cline, T. (2012). Fostering a sense of belonging and community as children start a new school. *Educational and Child Psychology, 29*, 64–73.
- Sari, M. (2012). Sense of school belongingness among elementary school students. *Cukurova University Faculty of Education Journal, 41*(1), 1–11.
- Sari, M., & Doganay, A. (2009). Hidden curriculum on gaining the value of respect for human dignity: A qualitative study in two elementary schools in Adana. *Educational Sciences: Theory & Practice, 9*, 925–940.
- Shaver, P., Hazan, C., & Bradshaw, D. (1988). Love as attachment: The integration of three behavioral systems. In R. J. Sternberg & M. L. Barnes (Eds.), *The psychology of love* (pp. 68–99). New Haven, CT: Yale University Press.
- Shochet, I. M., Smyth, T. L., & Homel, R. (2007). The impact of parental attachment on adolescent perception of the school environment and school connectedness. *Australian and New Zealand Journal of Family Therapy, 28*, 109–118. doi:10.1375/anft.28.2.109
- Short, R. (2004). Justice, politics, and prejudice regarding immigration attitudes. *Current Research in Social Psychology, 9*(14), 193–208.
- Singer, J., & Willett, J. B. (2003). *Applied longitudinal data analysis*. Oxford, England: Oxford University Press.
- Slaten, C. D., Elison, Z. M., Lee, J. Y., Yough, M., & Scalise, D. (2016). Belonging on campus: A qualitative inquiry of Asian international students. *Counseling Psychologist, 44*, 383–410.
- Slaten, C. D., Ferguson, J. K., Allen, K., Brodrick, D., & Waters, L. (2016). School belonging: A review of the history, current trends, and future directions. *Educational and Developmental Psychologist, 33*, 1–15.
- Smith, A. L. (2003). Peer relationships in physical activity contexts: A road less traveled in youth sport and exercise psychology research. *Psychology of Sport and Exercise, 4*(1), 25–39.
- Smoll, F. L., Smith, R. E., Barnett, N. P., & Everett, J. J. (1993). Enhancement of children's self-esteem through social support training for youth sport coaches. *Journal of Applied Psychology, 78*, 602–610.

- Spears Brown, C. (2011). American elementary school children's attitudes about immigrants, immigration, and being an American. *Journal of Applied Developmental Psychology, 32*, 109–117.
- Stanković-Dordević, M. (2013). Anxiety of teachers and mothers as an indicator of the sense of school belonging in children with developmental disabilities. *TEME: Casopis Za Društvene Nauke, 37*, 785–801.
- Stanton-Salazar, R. D. (2001). *Manufacturing hope and despair: The school and kin support networks of U.S.–Mexican youth*. New York, NY: Teachers College Press.
- Steele, C. M. (1997). A threat in the air: How stereotypes shape intellectual identity and performance. *American Psychologist, 52*, 613–629.
- Stenseng, F., Forest, J., & Curran, T. (2015). Positive emotions in recreational sport activities: The role of passion and belongingness. *Journal of Happiness Studies, 16*, 1117–1129.
- Stillman & Baumeister (2009) Uncertainty, Belongingness, and Four Needs for Meaning, *Psychological Inquiry, 20:4*, 249-251, DOI: 10.1080/10478400903333544
- Suárez-Orozco, M. (2001). Globalization, immigration, and education: The research agenda. *Harvard Educational Review, 71*, 345–365.
- Suárez-Orozco, M. M., & Sattin, C. (2007). Introduction: Learning in the global era. In M. M. Suárez-Orozco (Ed.), *Learning in the global era: International perspectives on globalization and education* (pp. 1–43). Berkeley, CA: University of California Press.
- Suárez-Orozco, C., & Suárez-Orozco, M. (2001). *Children of immigration*. Cambridge, MA: Harvard University Press.
- Suárez-Orozco, C., Suárez-Orozco, M. M., & Todorova, I. (2008). *Learning a new land: Immigrant students in American society*. Cambridge, MA: Belknap Press of Harvard University Press.
- Tajfel, H., Flament, C., Billig, M. G., & Bundy, R. F. (1971). Social categorization and intergroup behaviour. *European Journal of Social Psychology, 1*, 149–177.
- Taylor, E. (1999). Do African American adolescents discourage academic excellence? An investigation of the relation between peer support and academic achievement. *Dissertation Abstracts International, 60A*, 1453–1550.

- Tomasello, M., Carpenter, M., Call, J., Behne, T., & Moll, H. (2005). Understanding and sharing intentions: The origins of cultural cognition. *Behavioral and Brain Sciences*, *28*, 675–691. doi:10.1017/S0140525X05000129
- Tomkins, S. S. (1984). Affect theory. In K. R. Scherer & P. E. Ekman (Eds.), *Approaches to emotion* (pp. 163–195). Hillsdale, NJ: Lawrence Erlbaum.
- Tooby, J., & Cosmides, L. (1990). The past explains the present: Emotional adaptations and the structure of ancestral environments. *Ethology and Sociobiology*, *11*, 375–424.
- Triandis, H. C. (1990). Cross-cultural studies of individualism and collectivism. In Berman, J. J. (ed.), *Nebraska Symposium on Motivation 1989: Cross-Cultural Perspectives*. University of Nebraska Press, Lincoln, pp. 41–133.
- Trout, D. L. (1980). The role of social isolation in suicide. *Suicide and Life-Threatening Behavior*, *10*, 10–23.
- Tyler, T. R., & Degoey, P. (1995). Collective restraint in social dilemmas: Procedural justice and social identification effects on support for authorities. *Journal of Personality and Social Psychology*, *69*, 482–497. doi:10.1037/0022-3514.69.3.482
- Valenzuela, A. (1999). *Subtractive schooling: U.S.–Mexican youth and the politics of caring*. New York, NY: SUNY Press.
- Villegas, A. M., & Lucas, T. (2002). Preparing culturally responsive teachers: Rethinking the curriculum. *Journal of Teacher Education*, *30*(1), 20–32.
- Voelkl, K. E. (1997). Identification with school. *American Journal of Education*, *105*, 294–318.
- Vygotsky, L. S. (1962). *Thought and language*. Cambridge, MA: MIT Press.
- Vygotsky, L. (1978). Interaction between learning and development. In M. Gauvain & M. Cole (Eds.), *Readings on the development of children* (pp. 24–40). New York, NY: Scientific American Books.
- Walton, G. M., & Cohen, G. L. (2007). A question of belonging: Race, social fit, and achievement. *Journal of Personality and Social Psychology*, *92*(1), 82–96. doi:10.1037/0022-3514.92.1.82
- Walton, G. M., & Cohen, G. L. (2011). A brief social-belonging intervention improves academic and health outcomes of minority students. *Science Journal*, *331*, 1447–1451. doi:10.1126/science.1198364

- Walton, G. M., Cohen, G. L., Cwir, D., & Spencer, S. J. (2012). Mere belonging: The power of social connections. *Journal of Personality & Social Psychology*, *102*, 513–532. doi:10.1037/a0025731
- Way, N., Cowal, K., Gingold, R., Pahl, K., and Bissessar, N. (2001). Friendship patterns among African American, Asian American, and Latino adolescents from low-income families. *J. Soc. Pers. Relation.* *18*(1): 29–53.
- Way, N., & Chen, L. (2000). Close and general friendships among African American, Latino, and Asian-descent American adolescents from low-income families. *Journal of Adolescent Research*, *15*, 274–302.
- Wentzel, K. (1993). Does being good make the grade? Social behavior and academic competence in middle school. *Journal of Educational Psychology*, *85*, 357–365.
- Wentzel, K. R. (1997). Student motivation in middle school: The role of perceived pedagogical caring. *Journal of Educational Psychology*, *89*, 411–419.
- Whitlock, J. (2006). The role of adults, public space, and power in adolescent community connectedness. *Journal of Community Psychology*, *35*, 499–518. doi:10.1002/jcop.20161
- Wolf, D. L. (1997). Family secrets: Transnational struggles among children of Filipino immigrants. *Sociological Perspectives*, *40*, 457–482.
- Yeager, D. S., & Walton, G. M. (2011). Social–psychological interventions in education: They’re not magic. *Review of Educational Research*, *81*, 267–301.
- Zhou, M. (2001). Straddling different worlds: The acculturation of Vietnamese refugee children. In R. Rumbaut & A. Portes (Eds.), *Ethnicities* (pp. 187–227). Berkeley, CA: University of California Press.