

ONE AND THE SAME? HISPANIC STUDENT SUPPORT BY GENERATIONAL STATUS

by

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(Under the Direction of Linda Renzulli)

ABSTRACT

Education has become increasingly important for upward mobility in the United States. Hispanic students, who make up the largest proportion of immigrants face a significant lag in educational attainment. Ensuring that students stay in and succeed in school is a challenge for our currently stratified society but social support is a key factor in doing so. The current study examines the differences between first, second, and third-plus generation Hispanic students' reports of social support from their families as well as schools. Using negative binomial regression, I assess differences by generational status. Results are indicative of significant disparities among a sample of 1990 Hispanic high school students, evident among both family and institutional support.

INDEX WORDS: Education, Stratification, Hispanic, Support

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DEDICATION

To my loving family, Mami, Papi, Mana, the support you gave me over the process of my thesis has been beyond what words can express. Thank you for your love and for always having faith in me. To my entire entering cohort, thank you for being part of this experience with me and for always being a place to go when both accomplishments and challenges arose. I look forward to sharing in all of your future successes.

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CHAPTER 1

Introduction

Racial-ethnic inequality is among the most pressing issues in the U.S. education system. This phenomenon becomes increasingly complex when examining immigrants, who comprise nearly one fifth of the U.S. school-aged population (NCES 2016b, Noguera 2004). The U.S. Hispanic population increased between 1980 (6.5%) and 2014 (17.3%). Prior to 2000, immigration was the primary source of this growth, but since then, U.S. births are the main reason for their increase (Stepler and Brown 2016). This significant portion of United States residents faces serious lags in educational attainment despite accounting for 25% of public school enrollment in 2013 (NCES 2016b). While the Hispanic dropout rate decreased by 21.8% between 1990 and 2014, Hispanic youth still had a higher dropout rate than both Black (7.4%) and White (5.2%) youth in 2014 (NCES 2016a). Similarly, while college enrollment increased 13% between 1993 and 2014, four-year degree attainment remains at only 15% of Hispanics between 25 and 29, lower than Asian, White, and Blacks (Krogstad 2016).

Hispanics¹ may be studied as a group, in spite of variance by country of origin, but their individual generational status may be both cause and consequence of different lived experiences within that group while in the U.S. (Suárez-Orozco and Suárez-Orozco 1995, Suárez-Orozco and Suárez-Orozco 2001). First generation Hispanic immigrants are those who immigrated to the U.S. and second generation immigrants are those born in the U.S. with at least one foreign-born parent (Fry and Passel 2009, Ovink and Kalogrides 2015) . The third-plus generation includes

¹ Study participants all self-identified as “Hispanic,” meaning those of Caribbean Spanish or Latin American descent (Mexican, Puerto Rican, Dominican, Salvadoran, Cuban etc.) Previous research uses the term Hispanic interchangeably with Latino.

U.S. born children with U.S. born parents and foreign born grandparents (Ovink and Kalogrides 2015). For the present study, third-plus generation students includes all who did not fall under the first or second generations. First generation immigrants have stronger family ties and higher dropout rates (Portes and Rumbaut 2001) than second generation immigrants. In 2014, the U.S. born Hispanic youth dropout rate was 7.6% compared to 20.8% for their foreign-born counterparts (NCES 2016a, NCES 2016b). Education is imperative for obtaining a good job – full time, with benefits, over \$53,000 a year – and between 2010 and 2014, over 96% of these good jobs went to individuals with a bachelor’s degree or higher (Carnevale, Jayasundera and Gulish 2015). Consequently, low levels of educational attainment, evident among a significant portion of this population, reduce the opportunity for upward mobility in the work force.

The upward mobility immigrants come to achieve is influenced by many factors, one of which is social support, often framed as a form of social capital. In the academic context, students are most notably supported by the institutions (comprised of school staff) they attend, and their families. Academic support is enacted through encouragement to take rigorous coursework, assistance in college applications and career planning, showing love and concern, and numerous other ways. As immigrant students receive more or less support from these sources, it follows that they will have different experiences and outcomes in school.

Because educational attainment has long-term effects on socioeconomic status (SES) and upward mobility, it is increasingly important to understand factors influencing educational attainment (Blau and Duncan 1967, Haller and Portes 1973, Sewell, Haller and Ohlendorf 1970). Given the differences in attainment among U.S. immigrants, the particular disparity facing Hispanic immigrants (Krogstad 2016, NCES 2016a, Portes and Rumbaut 2001, Stepler and Brown 2016), and the relationship between social support and academic achievement (Borrero

2011, Demaray et al. 2005, Rueger, Malecki and Demaray 2010, Wentzel 1998), the relationship between immigrant status and academic support is one worth studying. Accordingly, the following study contributes to the literature by examining how family and institutional academic support varies by foreign-born status for Hispanic students of the first, second, and third-plus generations.

After discussing the literature surrounding social support, Hispanic immigrants, and social capital theory, I assess the relationship between generational status and social support using longitudinal data from the High School Longitudinal Survey (HSLs), which consists of 24,000 high school students from 940 public and private high schools nationwide. The data provides the ability to use ethnic identifiers and information about student and parent birth place to better understand how these students experience support in school and in the home. Family and institutional support serve as mechanisms for the advancement of student education thus, I test for differences in immigrant support by generational status. The theorized differences may shed light on the variation in outcomes noted by other scholars (Bettie 2002, Doucet 2011, Luthra and Soehl 2015, Portes and Rumbaut 2001, Portes and Hao 2004, Portes and Salas 2015, Rosenbaum and Rochford 2008, Zarate and Pineda 2014) adding to the broader discussion surrounding systemic disadvantage and discrimination within an institutional context.

CHAPTER 2

Literature Review

Social Support

Social support is the behavior from those in one's network which improve functioning and security, or helps protect one from negative outcomes (Demaray, Malecki and Jenkins 2010, Malecki and Demaray 2003, Rueger, Malecki and Demaray 2010, Tardy 1985, Tennant et al. 2015). Social support consists of multiple networks, or sources, and types. It is both a resource, and a means to resources, given through relationships that are established by networks. These networks can include parents, peers, community members, and teachers. Support types include emotional, appraisal, instrumental, and informational (Demaray, Malecki and Jenkins 2010, Tardy 1985). Social support has positive effects on well-being (Hernández-Plaza, Alonso-Morillejo and Pozo-Muñoz 2006). It may, however, be enacted differently for people of distinctive backgrounds benefitting recipients unequally (Leidy, Guerra and Toro 2012, Malecki and Demaray 2006). Students with low socioeconomic status (Gillock and Reyes 1999), who have mothers with low educational attainment, or are high-risk benefit from social support more than those who do not face such challenges (Malecki and Demaray 2006, Sanders and Epstein 2005). Thus, social support may be crucial for closing the gap between privileged and disadvantaged students (Downey, von Hippel and Broh 2004).

Often, support is measured by network without drawing distinctions between support type. Support has been measured as whether or not one feels valued and esteemed (Dubow et al. 1991), feels appreciated, cared for, encouraged, and held to high expectations (Garcia-Reid,

Peterson and Reid 2015), or engaged in discussion regarding one's future and has received academic encouragement (Witkow and Fuligni 2011). Additionally, the Multidimensional Scale of Perceived Social Support is a self-report assessment where individuals rank questions regarding how strongly (or not) they feel supported (Perry, Pullen and Oser 2012, Qiaobing Wu 2014). These measures may only partially account for support by only examining components of some, but not each type of support. Finally, the revised Child and Adolescent Social Support Scale (Jimerson and Haddock 2015, Suldo et al. 2009) takes emotional, appraisal, instrumental and informational support constructs and measures them equally in a self-report assessment in order to offer a full picture of support.

Individuals may receive emotional, appraisal, instrumental, or informational support. Emotional support is the most commonly tested and includes feelings of warmth, trust, empathy, and being loved or cared for while appraisal support is feedback, either positive or constructive, towards the receiver. Instrumental support consists of helping behavior (i.e. providing resources like time or money.) Informational support, includes giving information, advice, or knowledge (Malecki and Demaray 2003, Tardy 1985). Emotional and instrumental support tend to have the most significant positive association with academic outcomes (Suldo et al. 2009, Tennant et al. 2015). Emotional support from parents is most important for younger children, but as they age into adolescence, emotional support decreases while instrumental support remains relatively constant throughout development (del Valle, Bravo and López 2010). In some cases, teacher informational support is the most important for teenagers, bearing significance in the later years when parent support decreases (Hombrados-Mendieta et al. 2012). Instrumental and emotional teacher support, however, have shown the strongest associations with positive student performance when compared to appraisal and informational support (Suldo et al. 2009, Tennant

et al. 2015). Emotional support, on the other hand, can be predictive of “students’ social skills and academic competence” (Malecki and Demaray 2003:249) while appraisal, informational, and instrumental are still significant in the relationship (Malecki and Demaray 2003).

In spite of this evidence for differences by support type, support networks may be most influential for student outcomes. Institutional and family support networks are important and effective resources aiding in academic success, as measured by test scores (Tennant et al. 2015) and GPA (Dubow et al. 1991, Malecki and Demaray 2006), among other outcomes such as college enrollment (Borrero 2011), mental health (Zimmerman et al. 2000), competency and behavioral adjustment (Dubow et al. 1991). Until age 15, parents are a stronger source of network support compared to teachers (Hombrados-Mendieta et al. 2012). Around age 15 the salience of parental support tends to decrease, simultaneously making institutional support more influential to the student (del Valle, Bravo and López 2010, Hombrados-Mendieta et al. 2012). Despite variation in results, one thing is clear: family and institutional support have a positive impact on student lives.

Family Support

Family support, conceptualized as positive, helping, or encouraging behavior received from parents, step-parents, siblings, and extended family (Gillock and Reyes 1999) is important for students’ academic success. There exists a strong relationship between family support and children’s positive psychosocial development and well-being (Dubow et al. 1991, Kashani and Canfield 1995, Leidy, Guerra and Toro 2012, Malecki and Demaray 2003, Rueger, Malecki and Demaray 2010, Zimmerman et al. 2000), academic effort (Qiaobing Wu 2014) adjustment in school, and academic self-concept (Dunn et al. 1987, Qiaobing Wu 2014, Wenz-Gross and Siperstein 1997). Strong family ties increase student success (Lauglo 2000), especially when

parents have high educational attainment (Valenzuela and Dornbusch 1994). For example, Lareau and Horvat (1999) document how a father with high educational attainment used his knowledge to help his daughter move into an exclusive accelerated program. Because this father knew he could ask, and recognized his daughter's ability, she was tested for the program which she otherwise would not have been. She was a strong student who received support and had positive interactions with teachers in spite of the prevalent racial discrimination within the school. Family social capital, (affluence and parental educational attainment) has a strong positive influence on student achievement (Israel, Beaulieu and Hartless 2001). Family support is critical for students of low socioeconomic status as it may decrease some of the negative outcomes that low SES is associated with (Leidy, Guerra and Toro 2010, Masten et al. 1988)

Institutional Support

There is a positive relationship between teacher support and student outcomes (Demaray, Malecki and Jenkins 2010, Tennant et al. 2015). Teacher-student relationships have shown to be the most important factor for student success (Jimerson and Haddock 2015, Reddy, Fabiano and Jimerson 2013) when using GPA as a measure for academic outcomes (Gillock and Reyes 1999, Malecki and Elliott 1999, Rosenfeld, Richman and Bowen 2000). Student effort increases when the student has strong school-based relationships (Suarez-Orozco, Pimetel and Martin 2009).

While schools can reduce the inequality by race, class, and gender that would exist without their presence, inequality still exists and is perpetuated through school systems (Downey, von Hippel and Broh 2004). Because institutional support is integral to student welfare, student success may then be in jeopardy when parents have poor relationships with their children's schools. Negative relationships tend to exist between schools and immigrant parents, as there is thought to be intentional exclusion of immigrant parents by the school (Olivos and

Mendoza 2010). Given this tension, students of immigrant parents may then have weaker relationships with schools as a result.

Hispanics and Immigrants

Inequality has been documented as occurring among Hispanics as a group, U.S. immigrants, and Hispanic Immigrants, specifically. When compared to whites, Hispanics have significantly lower achievement (Krogstad 2016, Rosenbaum and Rochford 2008) with grades and standardized test scores significantly below those of non-Hispanics between the 1980s and 2003 (Kao and Thompson 2003b). Immigrants from different countries do not always experience stratification and disparities equally, notably so for Hispanic immigrants both in the larger social context and in education. Non-White immigrants in the U.S. are a particularly disadvantaged group facing challenges such as low income, residential segregation, and limited resources, carrying on in many of their schools (Orfield, Lee and Harvard Civil Rights Project 2006). Limited resources increase child risk factors and Hispanic immigrants are at the highest levels of likelihood for negative outcomes (Driscoll, Russell and Crockett 2008), adversely affecting educational attainment. Previously, Hispanic immigrants had consistently higher dropout rates relative to non-Hispanic Whites and non-Hispanic immigrants overall (Kao and Thompson 2003b, Rumbaut 2005). The pattern has continued as, more recently, almost twenty-five percent of second generation Central American and Mexican students drop out of high school and only about an eighth complete a 4-year college degree. This is double the rate of drop-out and roughly a third the rate of college completion compared to native born, White students (Holdaway and Alba 2010, Krogstad 2016). It is important to note that there variation may occur by country of origin, but the literature largely studies Hispanics as an ethnic group at large.

Hispanic immigrant students state that teachers often have low expectations of them, report negative encounters with teachers due to stereotyping, feeling invisible (Brown and Chu 2012) and being discriminated against in school (Silver 2015). In some cases, experiences of discrimination are overt. Students in new immigrant destinations in the South, face particularly high levels of discrimination as teachers and peers are unfamiliar with Hispanic youth who lack a historical presence in these regions (Perreira, Fuligni and Potochnick 2010, Silver 2015). This perceived discrimination can be particularly detrimental to student outcomes (Brown and Chu 2012, Portes 1999). Cases of Hispanic students in higher education, on the other hand, indicate an intentional straying from the use of the term discrimination, but a recurring description of "pre- and post-secondary educational institutions as 'white' or as a 'white space'" (Barajas and Ronnkvist 2007). Although averting use of the word discrimination and focusing on whiteness, students still expressed racial categories as a cause of differential treatment in education. This recognition involves an important component of the Hispanic student experience where identity is a constant point of negotiation (Barajas and Ronnkvist 2007). Hispanic students have also made note of experiences where teachers, aware of their students ethnicity, were surprised when they participated in positive school behaviors and performance (Barajas and Ronnkvist 2007, Valdés 2001). Much of U.S. education is taught from a white perspective, overlooking students of color (Barajas and Ronnkvist 2007, Portes and Salas 2015). These practices rooted in whiteness have also been referred to as "nativist", in which the U.S. education system overlooks other cultural identities and language differences, leaving immigrant students at a loss (Portes and Salas 2015). Some suggest an increased focus on multicultural education as factor that may help close the achievement gap (Watkins and Melde 2010). Schools that have implemented policies intended to help immigrant students through this multicultural education and ESL

programs, however, still partake in policies that while not outwardly discriminatory, still serve as markers of color (Barajas and Ronnkvist 2007). In fact, teachers who are proponents of multi-cultural education have expressed inadequate training as well as reported cultural distance between schools and English language learning families in spite of efforts to mediate these issues (Good, Masewicz and Vogel 2010). While teachers complimenting Hispanic students in surprise and ESL program instructors may not be partaking in outright or individually motivated racial discrimination, these factors contribute to and are products of a larger systemic discrimination. The macro-level issues trickle down to very real effects for parents and children as they face challenges in education, which ultimately serve as barriers for upward mobility. Hispanic immigrant students, as part of this system, end up subject to lower expectations, inaccessible pedagogies, and differential treatment in the school context (Barajas and Ronnkvist 2007, Good, Masewicz and Vogel 2010, Portes and Salas 2015, Valdés 2001)

While critical disparities exist between immigrant and non-immigrants in education attainment, there are also incongruences among immigrants depending on generation status (Portes and Rumbaut 2001, Rumbaut 2005, Wilbur and Roscigno 2016). In 2005, 31.4% of foreign-born immigrants received less than a high school diploma compared to only 11.6% of U.S. born individuals (Rumbaut 2005). By a significant margin, Hispanic first generation immigrants, specifically Mexican, Salvadoran, and Guatemalan are the lowest attaining immigrant group in the United states with the highest high school dropout rates (Rumbaut 2005). In fact, the majority of this low attaining group did not complete high school and “only 1 in 20 had completed a college degree” (Rumbaut 2005:1050). More recently, U.S. born immigrants display considerably higher rates of educational attainment than do foreign-born immigrants, where first-generation students are almost 70 percent less likely than students in the second

generation and beyond to enroll in a four year college or university (Hernandez, Denton and Macartney 2009, Wilbur and Roscigno 2016).

The literature is not entirely consistent in delineating the factors that attribute to these disparities: contrasting evidence shows that second generation immigrants tend to have lower success rates in school than first generation immigrants (Greenman 2013). English learning over time, and adjusting to cultural norms can increase academic outcomes and upward mobility for second generation immigrants as these individuals are raised with more exposure to cultural norms and expectations (Glazer and Moynihan 1963, Gordon 1964). Subsequently, immigrant educational attainment increases amid time spent in the U.S., with second generation students graduating at almost the same rate of third-plus generation students (Treveylyan et al. 2016). However, the Hispanic drop out remains higher than that of Blacks, Whites, and Asians (Krogstad 2016) indicative of progress within the group, but a clearly existing gap in achievement beyond the group.

Conversely, recent immigrants may fare better than second or third generation immigrations. For example, more recent immigrant groups may have greater academic success because of high respect for authority (Suárez-Orozco and Suárez-Orozco 1995) and the perception of United States education as an opportunity for upward mobility serving as motivation to succeed (Zhou 1997). Hispanic immigrant students have, in fact, been found to place more value and be more motivated in school when compared to their native-born counterparts (Rosenbaum and Rochford 2008). First generation success may also result from stereotype threat, the idea that stereotypes may weigh heavily in minority test performance (Steele 1997), indicating that the first generation immigrants have not yet been socialized to

negative stereotypes about themselves while second generation immigrants are both aware of and affected by these stereotypes (Deux et al. 2007).

Native-born and immigrant Hispanics vary in their experiences in the U.S. In addition to the noted challenges, first and second generation students must work through the cultural differences and social distance between home and school that is not present among Hispanic students with native-born parents (Deschenes, Cuban and Tyack 2001, Wells 2010). When students or their parents come to the U.S. from another country, they must work to navigate the norms and expectations that they or their parents have not been previously exposed to, which can be an additional challenge to their success (Cabrera and Padilla 2004, Portes and Rumbaut 2001). Recent immigrant parents have been cited as lamenting their inability to offer their children emotional support as they adjust to a new setting (Good, Masewicz and Vogel 2010). The success of immigrant students is considered noteworthy and students self-describe as having “beaten the odds” (Borrero 2011:14), reflective of the particular challenges Hispanic immigrant students face. In line with the differences between home and school environments, children of immigrants face tension with their parents due to differences in acculturation, in some cases this is associated with family stress and unproductive parenting or changes in parenting style (Degarmo and Martinez 2006, Driscoll, Russell and Crockett 2008).

Even when acculturation occurs, upward mobility is still limited due to these circumstances (Wilbur and Roscigno 2016), thus, co-ethnic associations are strong as immigrants use one another for resources and support (Portes and Zhou 1993). Often, immigrant children face insensitivity and discrimination in schools. Hispanics have been documented as expressing a sense of disconnect with their schools (Borrero 2011). Instances in which students have non-parental adults invested in their education demonstrate benefits (Holdaway and Alba 2010,

Suarez-Orozco, Pimetel and Martin 2009). Strong and positive teacher relationships and support help buffer the home-school distance (Borrero 2011, Suarez-Orozco, Pimetel and Martin 2009). For the most part, however, immigrant students describe family support as a source of their academic success (Borrero 2011) and informal social networks, among which family is included, is the primary source of support for immigrants (Hernández-Plaza, Alonso-Morillejo and Pozo-Muñoz 2006).

CHAPTER 3

Theory

Social Capital

Social capital theory states that the value or strength of a social network lies in the quality of its resources (Bourdieu 1992). Early conceptualizations describe social capital as “the sum of resources ... that accrue to an individual or a group by virtue of possessing a durable network of more or less institutionalized relationships of mutual acquaintance and recognition” (Bourdieu 1986:248) . Essentially, social capital is a means to the resources of a group and one may either have "actual" or "potential" access to these resources, contingent upon ones relationships within the group (Bourdieu 1986). An important component of this idea is that social capital affects an individual's social location and is fundamentally class-based. It can both persist and be reproduced over time (Bourdieu 1986). Social capital maintains the power and privilege of the elite, thus, class can be passed down as children are primary recipients of parents' social capital. Social groups, valued by how much social capital they possess, must maintain exclusivity in order to continue existing. Individual group members work as actors who are then obligated to ensure this exclusivity "by expelling or excommunicating the embarrassing individuals” (Bourdieu 1986:24). An emphasis on actors and social structure (Coleman 1990) informs the understanding of social capital within the study of education and social support, where social capital is the link between one’s relationships and access to resources. Its strength is measured through the quality of the resources themselves (Coleman 1988, Rethon, Goodwin and Stansfeld 2012).

Two forms of social capital include norms and obligations, and expectations (Coleman 1988, Kao 2004). Schools use social norms to guide student behavior and establish student expectations (Kao 2004). The relationship between social capital and upward mobility emphasizes the benefits of knowing and abiding by these norms (Gamoran et al. 2011). When parents pass their understanding of expectations to students, they walk into the classroom environment with an advantage over students whose parents lack this knowledge. Knowledge regarding courses, expectations, and college applications are all further examples of types of information that, when missing, can hinder student success. The disparity in access to resources occurs through variation in the amount and strength of social capital parents have to transmit to their children (Lin 2000). Thus, social capital is a “taken for granted” method of passing on advantage to children (Valenzuela and Dornbusch 1994). Hence, when immigrant parents come to the U.S. lacking the knowledge of how to move forward in its education system, students come in at a disadvantage compared to children of native parents. Obligations and expectations are based on the premise of exchange, which is the idea that if one person does something for the other at a given time, there is now an obligation on the receiver and an expectation of the giver that it will be reciprocated at a later time. This alienates minority groups from dominant groups as this exchange is less likely to occur between minority and dominant groups. It is, however, particularly strong within each group.

Overall, social capital theory is useful for understanding immigration and social support, demonstrating a central role as immigrants adapt to new environments and social contexts (Hernández-Plaza, Alonso-Morillejo and Pozo-Muñoz 2006, Shen and Takeuchi 2001). Information obtained through increased social capital between actors can help people move forward within social systems. For recent immigrants, who have little social capital, this raises a

question of how and if it can be obtained. Resources are not evenly distributed across networks, limiting people's opportunities for success. The exchange of social capital both within and between groups is better understood through the concepts of bonding and bridging.

Bonding and Bridging

Bonding and bridging differentiate the benefits of homogenous and heterogeneous groups. Bonding describes relationships among homogenous groups while bridging describes relationships among heterogeneous groups. Both can help marginalized groups of people move forward in society. Bonding does so through collective identity and support whilst bridging does so by offering access to new and varying resources and information (Putnam 1993, Putnam 2000). As Portes and Sensenbrenner (1993) explain, minority social capital, rooted in trust and solidarity, increases access to resources otherwise unavailable to them. Strong bonding may mean a lot of specific resources that ones' ethnic group can offer while strong bridging may mean individuals can benefit from resources less available to their particular community.

Bridging can affect individuals and groups, while bonding can have negative external outcomes involving "in-group preference, discrimination and prejudice, increase[d] stereotypes about out-group members, and ... conflict with other groups" (Hernández-Plaza, Alonso-Morillejo and Pozo-Muñoz 2006:1157). It is clear how both homogenous and heterogeneous networks of support affect students. Within school contexts, being white may serve as a resource (Lareau and Horvat 1999) . If whiteness can be argued to exist as a form of capital, then non-White Hispanic students walk into many social scenarios at an immediate disadvantage. Following this idea, some work demonstrates intentional exclusion of Hispanic parents in parent-teacher relationships, which, hinders student support and their own engagement within the school environment (Stanton-Salazar, Chávez and Tai 2001). This may serve as an example of how

bonding amongst whites may deter bridging between whites and other groups, working as a mechanism for inequality.

Social Support as a Form of Social Capital

Positive relationships can strengthen and increase social capital which benefits recipients by transmitting resources such as skills or knowledge (Coleman 1988). Through understanding social capital as relationship from which one can benefit, social support can serve as a form of social capital. For example, parents and teachers can give students access to books and technology, offer information on pathways to higher education, transmit their own expertise on a variety of subjects, or help with homework. Additionally, offering students encouragement, care, advice, or positive feedback can bolster their confidence and well-being (Rosenbaum and Rochford 2008). These intangible components of relationships serve a function in helping students learn, grow, and stay motivated in school. In this way, social support works as a mechanism that offers access to resources, functioning as a form of social capital for students. Children of immigrant parents face an additional barrier once exclusionary bonding has occurred through their potential in-school support networks. If bridging occurs, specifically between students and native teachers, they may then have more support, thus, resources, increasing their chances at school success. Because social support helps students have better academic outcomes (Dunn et al. 1987, Hombrados-Mendieta et al. 2012, Rueger, Malecki and Demaray 2010), it is important to study what factors, such as generational status, may increase or decrease likelihood of receiving it.

Stress-Buffering Hypothesis

Hispanic immigrant students often face a multitude of barriers to education, risk factors, and stressors (Bettie 2003, Borrero 2011, Dillon, La Rosa and Ibañez 2013, Driscoll, Russell and

Crockett 2008, Jain et al. 2015, Kao and Thompson 2003a). The stress-buffering hypothesis suggests that social support is particularly important in cases of high risk or stress, as it is a buffer to negative outcomes (Cohen and Wills 1985, Cohen, Brittney and Gottlieb 2000, Demaray, Malecki and Jenkins 2010). Support networks serve as social resources, assisting individuals in coping with stress and potentially reducing negative effects. There is support for the stress-buffering hypothesis (Degarmo and Martinez 2006, Leidy, Guerra and Toro 2012, Qiaobing Wu 2014, Tennant et al. 2015), indicating that social support can ameliorate harsh circumstances and prevent negative outcomes for students. The large number of low-attaining Hispanic students and the differences in their attainment by generational status calls attention to the study of factors that may be affecting Hispanic immigrant students, thus, the current study merges Hispanic generational status with an assessment of the academic support these students receive.

CHAPTER 4

Hypotheses

The current study unpacks the influence of foreign-born status on academic support as a way of better understanding the mechanisms that can influence disparities among these students. I look at first generation, second generation, and third-plus generation Hispanic students' perceptions of their family and institutional support relationships. This analysis offers insight into the varied experiences among Hispanic students by examining the complexities and significance of support relationships as a form of social capital.

Immigrants and their children tend to report high levels of family support and closeness – a factor that can strengthen academic outcomes as it improves overall wellbeing and reduces the likelihood of behavioral issues (Borrero 2011, Leidy, Guerra and Toro 2012). Family support serves as a form of bonding social capital where strong ties mean greater access to resources within the support network. Among Hispanics, the first generation tends to have especially strong family relationships, but higher dropout rates than second generation students (Rumbaut 2005). Close family ties may be the initial indicator of support, however as acculturation occurs over time this may weaken family support in later generations making third-plus generation students likely to have the lowest levels of it. Third generation students, on the other hand, are expected to have the highest levels of institutional support which may buffer the weaker family support. Theoretically, it is likely that in spite of the social capital bonding available to earlier generation students through their family support, weak institutional support negatively affects their academic experiences. There is little bridging occurring in school which most strongly

affects those at the greatest cultural distance from the dominant group. Thus, I expect that both first and second generation immigrants will have stronger family support than third-plus generation students.

The second generation often faces a unique experience by being more tied to and assimilated to U.S. culture than the first generation, creating potential conflict and stress between children and their immigrant parents (Dillon, La Rosa and Ibañez 2013). Students of the second generation may be most likely to experience tension in parent relationships as third-plus generation parents are more assimilated, thus similar, to their children than immigrant parents with U.S. born children while those in the first generation are more culturally similar to their parents. This tension for the second generation can stifle their family support, reducing their access to resources. Therefore, I expect to find:

H1: First generation immigrants will have more family support than second and third-plus generation students.

H2: Second generation students will have less family support than first generation immigrants and third generation immigrants.

The stress-buffering hypothesis suggests that social support reduces the likelihood that students face negative outcomes due to negative factors, which Hispanic and immigrant students are exposed to. Immigrant parents and their children show weak ties with school administrators (Baum and Flores 2011, Gillock and Reyes 1999, Marsiglia et al. 20011, Olivos and Mendoza 2010, Sohn and Wang 2006), thus, these students face lower levels of institutional support reducing the chances it will be a protective factor for these vulnerable students. First generation students may be the most likely to be exposed to risk factors but the least likely to receive institutional support due to their recency, English learning, and low levels of acculturation,

compared to second and third-plus generation students. Students of the first and second generation may experience less bridging social capital because of weak institutional ties, reducing their access to knowledge and resources. Therefore, I expect to find:

H3: First generation students will have significantly less institutional support than second and third-plus generation students.

H4: Second generation students will have more institutional support than first generation students, but less institutional support than third-plus generation students.

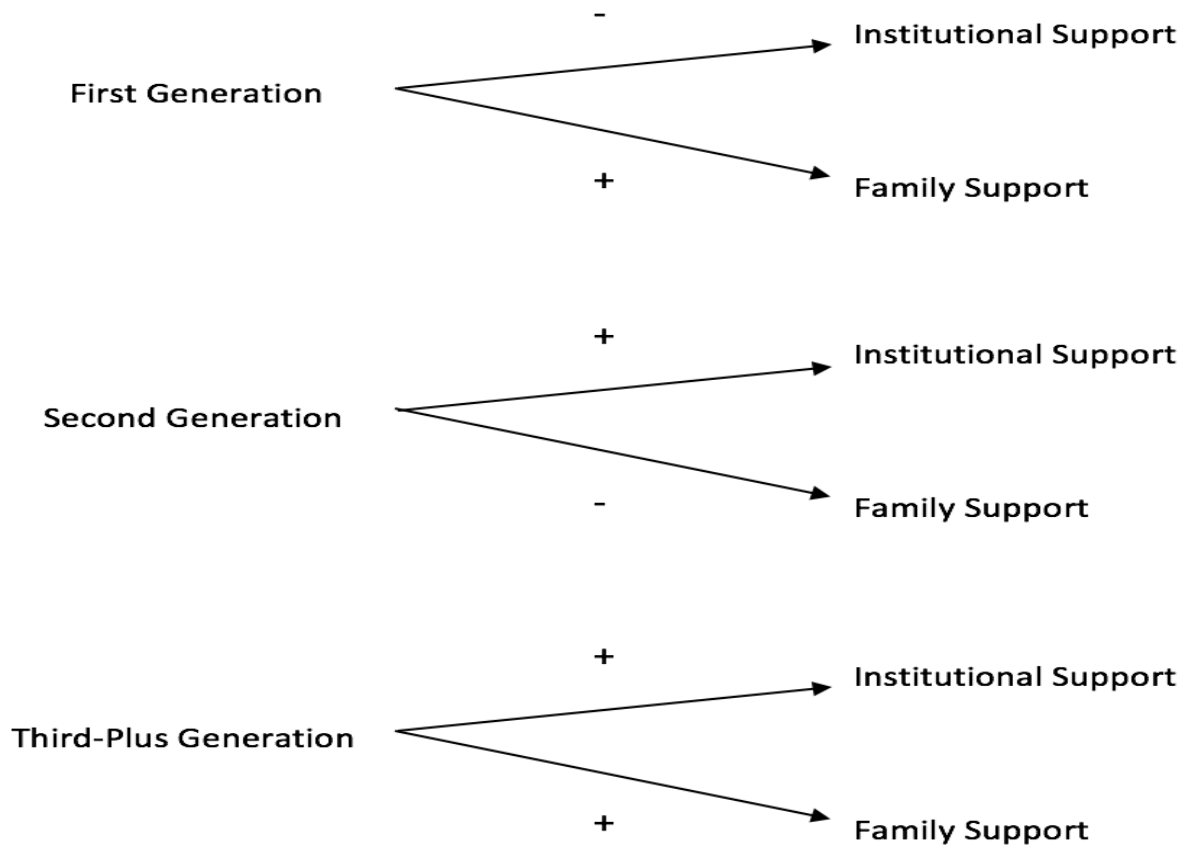


Figure 1. Support by Generational Status

CHAPTER 5

Data

The data for this project is from the first and second waves of the High School Longitudinal Study from the National Center for Education Statistics (NCES). This is a nationally representative, longitudinal study of over 24,000 ninth graders from 940 public and private high schools in 2009 with a follow up in 2012 when the students were eleventh graders. Students who dropped out or retained were included in the follow up. The population includes all 9th grade students across the U.S. From each randomly sampled high school, an average of 25 freshmen were randomly selected allowing for generalizability of this dataset (NCES 2013). Students, their parents, math and science teachers, school administrators, and counselors were surveyed. The questionnaire examined familial, school, and friend relationships of the students and contained questions regarding coursework and classes. Student questions, in particular, focused on their academic interests, goals, behaviors, and attitudes as well as their social and cultural experiences. The survey was targeted at understanding STEM and post-secondary outcomes for students. The NCES website states that the HSLs data can be used to examine the challenges faced by students of various cultural backgrounds (NCES 2013) making it ideal for the current study.

The dataset is useful and appropriate as it allows for assessment of the relationship between social support and generational status of Hispanic students utilizing survey questions regarding parent and student foreign-born status, ethnicity, and student relationships with school faculty and family. Criteria for inclusion for this study included Hispanic students whose

answers indicated generational status, ethnicity, and support relationships. Participants were limited by this ethnic identifier, but *not* by race. For theoretical and empirical reasons, I excluded those whose responses were missing. This may create bias as students with weak or negative relationships may not have answered support question. Undocumented students or parents may have chosen not to partake, minimizing the effects on some first generation students or the parents of second generation students. The final sample included 390 first generation students, 880 second generation students, and 720 third-plus generation students, all of whom were of Hispanic origin, totaling a final sample of 1990 students.

CHAPTER 6

Measures

Dependent Variables

Family and institutional support are the two networks of academic support – the primary outcome variable for this study. Each is measured using composite scales. Institutional support is comprised of sixteen questions regarding student relationships with school principals, teachers, and counselors. Family support is made up of seventeen questions involving parents, siblings, and extended family, or general questions addressing "family". All dependent measures used were self-report items. Support scales were created using dummy variables, where each dummy variable represents whether an indicator of support is present with respondents answering “yes” (1) or “no” (0). Some original variables within the scales included choices such as “strongly agree” (1) “agree” (2) “disagree” (3) “strongly disagree” (4). These were condensed into two categories ["agree" (1) and "disagree" (0)], so they could be appropriately added into the scales. A score on each scale indicates how many total indicators of support were reported as present.

The networks (institution and family) have subscale variables for emotional/appraisal and instrumental/informational support. As mentioned earlier, emotional support includes relationships with trust and care, appraisal support involves positive feedback, informational support is given through aid, advice and sharing of information, and instrumental support involves some form of aid or service. Due to the conceptual similarities of emotional and appraisal support, and institutional and informational support, each pair was measured together. Previous work, in some cases, does not clearly distinguish between the four support types (Wang

and Neihart 2015, Wenz-Gross and Siperstein 1997) and in others, intentionally measures the same pairs of emotional/appraisal and informational/institutional (del Valle, Bravo and López 2010). Emotional and appraisal support scales consisted of questions discussing respect, fairness, value of students' ideas, and freedom to discuss personal problems, along with questions regarding feedback, encouragement, and affirmation. Questions indicated prior school course and career planning, class information, college application assistance, classroom aid, and finances. In order to ensure that concepts being measured are, in fact, related, reliability tests confirmed they are associated strongly and appropriately.

The institutional support type reliabilities are strong (alphas = .75, .72) for emotional/appraisal and informational/instrumental, respectively. The overall institutional support scale reliability is high with a Chronbach's alpha of .71. Family support reliabilities are similar in power (alphas = .77, .68) for the emotional/appraisal and informational/instrumental subscales, respectively. Additionally, the composite family support scale maintains its reliability, evidenced by a Chronbach's alpha of .73.

Institutional Support

Emotional/Appraisal. This subscale includes ten items measuring student perceptions of emotional or appraisal support from school teachers or staff. Students were asked the same questions regarding their science and math teachers [e.g. your (science/math) teacher 1) thinks all students can be successful 2) thinks mistakes are okay if students learn 3) values and listens to students' ideas 4) treats students with respect 5) treats every student fairly]. Response options ranged from "strongly agree" to "strongly disagree," recoded into "agree" (1) and "disagree" (0) for consistency with the dichotomous variables in the composite scales. Chronbach's alpha for this subscale is strong at $\alpha=.75$.

Informational/Instrumental. This subscale is composed of six items measuring perceptions of informational or instrumental support received or offered by the school. Students were asked questions to gauge their relationships with teachers (e.g. teacher makes science interesting, talked to teacher about: 1) math courses 2) science courses 3) going to college 4) adult jobs and careers 5) taking other courses in the following school year). Measures of internal consistency for this subscale are strong ($\alpha = .72$).

Institutional Composite. The composite scale for *overall institutional support* contains the subscales for both types of institutional support described above. The combined scaled ranges from 0-16 increasing in count by items coded as 1, which could indicate responses of "yes" or "agree." These responses show that the student felt that particular support indicator was present. Reliability for the scale indicates consistency ($\alpha = .71$).

Family Support

Emotional/Appraisal. Eight items measuring perception of emotional or appraisal support from family by students were used to create this subscale. Students responded to questions indicating that their family members were giving them positive and encouraging feedback when choosing courses [e.g. (taking 2009/2012 math/science because 1) family member encouraged it 2) parent(s) encouraged it) or (plans to take more math/science courses because 1) parents want him/her to). Students responded to parallel science and math questions at both waves 1 (2009) and 2 (2012). Reliability measure for this subscale was strong ($\alpha=.77$).

Family Composite. The overall family support scale consists of all items from both subscales of familial support, ranging from 0-17, contingent on how many items were marked "yes" or "agree" signifying that a given marker of family support is present. The total scale indicates a strong internal consistency ($\alpha=.73$)

Informational/Instrumental. This subscale was composed of nine items measuring perceptions of informational or instrumental support received or offered by family. Both students and parents provided information for this scale. Parent responses compose five possible points on the scale. They indicate how confident parents felt helping with their child's homework in ninth grade and in eleventh grade for math and English, and for science homework, additionally, in eleventh grade. Student responses made up four indicators for this subscale with responses regarding communication with their parents for their career plans [e.g. 1) talk to parents about future plans 2) talked to mother about adult jobs/careers 3) talked to father about adult jobs/careers 4) had parent help putting together education/career plan). The reliability for this scale indicates adequate internal consistency ($\alpha = .68$)

Independent variables

Differences by generational status are the primary focus of the study. The regression models compare the ways in which students of varying generational status experience academic support differently. Taking into account prior conceptualizations of generational status, variables in the dataset were recoded and combined to create three separate variables for first generation, second generation, and third-plus students. First generation students are those who immigrated to the U.S. themselves while second generation immigrants are those born in the U.S. with at least one foreign-born parent (Fry and Passel 2009). Third-plus students are those who both themselves and one (if single parent household) or both parents (if two parent household) are also born in the U.S. Because the study is limited to Hispanic students, generational status was created by only using students and at least one parent who self-identified as Hispanic.

Generational status variables include data from both the first and second waves of data in order to include participants who did not provide such information in the initial survey. I include

students who provided enough information to determine their race and ethnicity and whether they are first generation, second generation, or third-plus students. Three composite variables using the first and second waves of data were created in order to determine if parent 1, parent 2, and the student were born in the U.S. or outside of the U.S. If the responses indicated a single parent household, generational status was determined using just the one parent's responses. I then created further composite variables, based on parent and student U.S. born composite variables to define whether students were second or third-plus generation. Students born outside the U.S. are coded as first generation immigrants. Second generation is a dummy variable coded as 0 if the student is not a second generation immigrant and 1 if they are. This status is established if at least one parent was born outside the United States, but the child was born in the United States. Third-plus students were determined if parent 1, parent 2 (if available) and the student were *all* born in the U.S. Missing cases were decreased by factoring in single parent households when parent 2 information was missing, increasing the non-immigrant sample by 410 participants.

Controls

A variety of factors may influence the relationship between generational status and academic support and are thus included as controls in the analysis. These include student sex, socioeconomic status (SES), destination state type and whether or not a student earned good grades in school.

Previous literature shows conflicting evidence in the significance of support by gender (Hombrados-Mendieta et al. 2012, Malecki and Demaray 2003, Rueger, Malecki and Demaray 2008, Rueger, Malecki and Demaray 2010) but rather consistently shows differences by gender among Hispanics (Cupito, Stein and Gonzalez 2015, Demaray et al. 2005). Student sex was self-

identified in the analysis and coded into a dichotomous variable (female = 1; male = 0).

Socioeconomic status may mean a student has more or less social capital and therefore should be examined when running analyses. The HSLs data include a composite variable for SES which combines parent education, parent occupation and family income. The current analysis categorized the results into three ordinal categories (Low SES, Moderate SES, High SES), with students in Low SES as the reference category for regression models.

Finally, destination state type is determined by whether a state falls under the current category of new destination state, traditional destination state, or non-destination state. New destination states include South Carolina, Alabama, Tennessee, Delaware, Arkansas, South Dakota, Nevada, Georgia, Kentucky, North Carolina, Wyoming, Idaho, Indiana, and Mississippi (Terrazas 2011). These states have seen a growth of at least 49% of their foreign-born population between 2000 and 2009 (Terrazas 2011). Traditional destination states are those who attracted over 60 percent of U.S. immigrants between the 1960s and 1990s including California, New York, Florida, Texas, New Jersey, Illinois, and Massachusetts. Non-destination states are those who fall outside of either of the aforementioned categories. The significance of destination states as controls for this analysis lies in the social attitudes and policy differences between such states (Marrow 2009, Portes and Salas 2015, Stanton-Salazar, Chávez and Tai 2001) which could influence student academic experiences positively or negatively depending on the destination state type. New destination states, including Alabama, Georgia, and South Carolina have the strictest higher education policies in the country in terms of barring undocumented students from university admission whereas some traditional states, including Texas and California, have policies making higher education among the most accessible and affordable in the country (Mendoza 2015, NCSL 2014). Although the current study cannot identify undocumented

students, these policies certainly affect some in the sample and are reflective of the cultural climate towards immigrants, generally, within the states. Students from traditional destination states are expected to have higher levels of institutional support and students from new destination states are expected to receive the lowest levels of institutional support in line with recent reporting of perceived discrimination by immigrants in new destination states (Jain et al. 2015, Marrow 2009, Portes and Salas 2015).

Another factor that may change the relationship with student support is whether or not a student receives good grades. Previous work indicates positive relationships with academic outcomes and social support (Dubow et al. 1991, Malecki and Demaray 2006, Tennant et al. 2015), therefore it is likely to be strong in the current study as well. Students who received a B or higher in all of their classes were coded “1” for good grades, with those who received a C or lower for any class coded as “0.”

CHAPTER 7

Analytic Strategy

The current analysis proceeds in three steps. Initially, I used STATA 14 to create support scales and ran reliability tests to examine the strength of the concepts being measured, confirming internal validity in the study. Next, I ran several Poisson models in order to compare the likelihood ratios and determine which was most appropriate for the study. Negative binomial was the best fit for the data and was used to test the relationship between academic support and foreign-born status. Finally, Sobel-Goodman mediation tests were used to determine which variables were influencing the differences in the primary predictor variables between the two regression models used. The models allow for analysis of how institutional and family support may vary between first, second, and third-plus generation students and what factors may effect this relationship.

The primary dependent variables, family and institutional support, are scaled count data. Positively skewed count data is best modeled through negative binomial regression compared to OLS regression (Hilbe 2007). The primary reason for which OLS is not appropriate for the data is its assumption of homoscedasticity, or a normal distribution. Poisson models, the model type from which negative binomial regression is derived, account for heteroskedasticity, thus making it more suited to the data being used.

Generally used for count data due to its adjustment for heteroskedasticity, Poisson regression also assumes that there is no overdispersion in the data, meaning that the mean and variance are equal. Cases where the variance is greater than the mean, however, are indicative of

overdispersion. When overdispersion is present, standard error may be underestimated, making possible false reports of significance. Descriptive statistics demonstrate that the variance is greater than the mean for both family ($M=5.67$; $V=8.24$) and institutional ($M=8.46$; $V=14.84$) support, thus, Poisson regression is not an appropriate model for this data. Negative binomial regression, on the other hand, has the same specifications as a Poisson model, while correcting for overdispersion leading to more conservative estimates (Reynolds and Baird 2010). This reduces the possibility of committing type I error. The likelihood-ratio tests for both family and institutional support were statistically significant offering further evidence that negative binomial is more appropriate than a Poisson model for the current study.

Another potential model for analyzing count data is a Zero Inflated Negative Binomial (ZINB) Regression, which is recommended for count data with excessive zeros. For both family and institutional support, the zero count was under five percent. For assurance, however, a ZINB was run and the Vuong test, which indicates whether standard negative binomial or ZINB is better suited to the data, was not statistically significant, confirming that negative binomial is the best model.

After confirming the efficacy of negative binomial regression, two parallel models were run for family and institutional support. The initial model only includes generational status as a dependent variable. It is then replicated with gender, SES, destination state and good grades to determine if changes by generational status are entirely contingent on potentially moderating variables, or if the relationship continues to exist when accounting for these factors. Doing so helps to understand what may affect how much academic support a student may receive.

CHAPTER 8

Results

Table 1: Descriptive Statistics

<i>Descriptive Statistics for Study Variables (n=1990)</i>				
Variable	Mean	S.D.	Min.	Max.
Institutional Support	8.46	3.85	0	16
Family Support	5.67	2.87	0	17
First Generation Immigrant	0.19	0.40	0	1
Second Generation Immigrant	0.44	0.50	0	1
Moderate SES	0.35	0.48	0	1
High SES	0.22	0.41	0	1
Non-Destination State	0.31	0.46	0	1
Traditional Destination State	0.51	0.50	0	1
Female	0.49	0.50	0	1
Good Grades	0.55	0.50	0	1
<i>Reference Categories</i>				
Third Plus Generation Immigrant	0.36	0.48	0	1
Low SES	0.43	0.50	0	1
New Destination State	0.18	0.38	0	1

N=1990* *All N's rounded to nearest tens place

Table 1 displays descriptive statistics for variables used in the models. The sample was made up of 20% first generation students, 44% second generation students, and 36% third-plus generation students. About half (49%) of the sample was female. The descriptive statistics indicate that 43% of students were in the Low SES category, 35% were of moderate SES, and only 22% were of high SES. About half of students lived in traditional destination states, a third

of students were from non-destination states, and just under a fifth were from new destination states. Fifty-five percent of students received Bs or better in their classes the previous year.

Table 2: Negative Binomial Regression: Third Generation Comparisons

Predictor	Family Support		Institutional Support	
	Model 1	Model 2	Model 1	Model 2
First Generation	-0.200**	-0.106**	-0.127**	-0.066**
Second Generation	-0.127**	-0.054**	-0.053**	-0.027
Moderate SES	-	0.165**	-	0.078**
High SES	-	0.328**	-	0.081**
Non Destination State	-	0.005	-	0.103**
Traditional	-	0.020	-	0.123**
Destination State				
Female	-	0.036†	-	0.016
Good Grades	-	0.182**	-	0.105**

† $p < .10$ * $p < .05$ ** $p < .01$; N=1990

N=1990* *All N's rounded to nearest tens place

Table 3: Negative Binomial Regression: First Generation Comparisons

Predictor	Family Support		Institutional Support	
	Model 1	Model 2	Model 1	Model 2
Second Generation	0.073*	0.051†	0.074*	0.039
Third Generation	0.200**	0.106**	0.127**	0.066*
Moderate SES	-	0.165**	-	0.078**
High SES	-	0.328**	-	0.081**
Non Destination State	-	0.005	-	0.103**
Traditional	-	0.020	-	0.123**
Destination State				
Female	-	0.036†	-	0.016
Good Grades	-	0.182**	-	0.105**

† $p < .10$ * $p < .05$ ** $p < .01$; N=1990

N=1990* *All N's rounded to nearest tens place

Table 2 demonstrates the results of analyses comparing institutional and family support by generational status. Table 3 presents negative binomial regression using the same variables

while allowing for additional comparisons between the first and second generation, providing tests of all four hypotheses. For both support networks, Model 1 includes the primary dependent variable – generational status. Model 1 measures the association between generational status and support where the first and second generations receive less support than the third generation ($p < .01$) and the second generation also demonstrates higher levels of support than the first generation ($p < .05$) for both family and institutional support. Model 2 accounts for the effect of socioeconomic status, destination state type, gender, and good grades. The coefficients in the tables indicate the predicted change in the logged amount of support for each student for a one-unit change in predictors. When exponentiated, the slope becomes equal to the predicted change in support for a one-unit change in the outcome variables. The difference between second and third generation students diminishes when they are taken into account. The loss of significance, then, implies that the second/third-plus generation disparity in institutional support is not due to generational status alone, rather, may be more strongly related to one of the other predictors tested.

Institutional Support

In the full model, the exponentiated slope for first generation students ($e^{.066} = .935$) shows that foreign-born students can expect less scaled institutional support as compared to families of U.S. born students *and* parents. By contrast, this model shows no significant difference between the first and second generation *or* second and third-plus generations. So, in addition to the established barriers first generation immigrants are prone to, they receive the least amount of institutional support in school, further barring their access to resources which could aid in their success. Even when taking gender, SES, destination state type, and good grades into account, students still evidence differences in institutional support likelihood based off of their

generational status. Recall that hypotheses 3 and 4 predict significant differences in institutional support across all generations. The results, however, indicate that while significant differences always occur between the first and third generations, second generation students do not report significantly different school relationships than either the first *or* the third generation.

Prior to adding the controls, second generation students indicate significantly less support than third-plus generation students (-.053; $p < .01$) and significantly more than first generation students (.074; $p < .05$). These differences, however, diminish in significance when control variables are included. A Sobel Goodman mediation test evidences SES as a statistically significant ($p < .01$) mediator in the relationship between generational status and institutional support, likely accounting for the loss of significance.

The results for the SES variables indicate notable differences across three ordinal categories. Exponentiating the slope ($e^{.078} = .919$) reveals that those in the second level of socioeconomic status receive 8.1% more institutional support than those in the lowest category of socioeconomic status (.078; $p < .01$). This would mean a difference of 1.3 indicators of support on a 16-point scale where the mean student reported 8.46 indicators. Following suit, students in the highest level of socioeconomic status receive 8.5%, or 1.36 more indicators of institutional support than students in the lowest category when all other variables are held constant (.081; $p < .01$).

Model 2 also suggests that students in new destination states receive the least support overall. Exponentiated slopes for non-destination state students and traditional destination state students indicate that non-destination state students receive 10.8%, or 1.73 indicators, (.103; $p < .01$) and traditional destination state students receive 13.1%, or 2.10 indicators, (.123; $p < .01$) more support than students living in new destination states, respectively.

Interestingly, student gender does not have a significant effect on the relationship with generational status and institutional support. It is possible that the other variables in the model are more important than gender when determining institutional support, thus reducing its significance. On the other hand, students who receive good grades receive about 11.1%, or 1.78 indicators, more support than students who have grades below a B in their classes (.105; $p < .01$) when examining the exponentiated slope ($e^{.105} = 1.11$). Of course, it is possible that other factors increase student support in earlier years of schooling, leading to better academic outcomes, and then more support and attention from teachers, but the model only accounts for group differences rather than the directionality of this relationship. While the order of support to good grade relationship may be indeterminable, the positive relationship is consistent with cases of high GPA and test scores with teacher support (Dubow et al. 1991, Malecki and Demaray 2006, Tennant et al. 2015)

Family Support

Both first and second generation students indicate significantly less family support than third-plus generation students. Those in the third-plus generation receive 10.1% more support than first generation students (-.106; $p < .01$) and 5.3% more than those who were born in the U.S. of at least one foreign born parent (-.054; $p < .01$). This translates to 1.7 and .9 more indicators of support, respectively, on a 17-point scale where the mean student reports 5.67 indicators of support. Second generation students demonstrate significantly more family support than first generation students in Model 1 ($p < .05$), however, this declines considerably but not entirely ($p < .1$) when additional factors are included in the analyses. Hypotheses 1 and 2 predicted first generation students to have the most family support, second generation students to receive the least, and third-plus generation students to report less than the first generation but more than the

second. Results, however, indicate that, similar to institutional support, family support increases with generational status where second generation students report only slightly more support than the first generation and significantly less than those in the third-plus generation.

As with institutional support, the higher a student's level of SES, the more support the student is likely to have. Students with moderate SES receive 18.0% more support, or 3.06 indicators, compared to those in the lowest category of SES ($e^{.165} = 1.18$; $p < .01$). Those of high SES also report significantly more support than both students of low and moderate SES ($-.328$; $p < .01$; $-.16$ $p < .01$).²

Family support levels do not change significantly by destination state. Gender plays an unexpectedly small role in the relationship. For family support, the difference in support between females and males is only significant at the .1 level. The implication that females receive more (.036; $p < .1$), even if only slightly, is, however in line with expectations. Similar to institutional support, good grades have a significant relationship with support received (.182; $p < .01$), but the time order in the relationship remains ambiguous.

In all cases, first generation students receive less support than do third-plus generation students, with variation in differences for second generation comparisons. Additionally, students are more likely to receive both support types when they were of higher socioeconomic status. Overall, the results carry implications for upward mobility as we think about the ways in which first, second and third-plus generation Hispanic students experience the education system differently.

² The comparison between second and third level SES was done in subsequent analysis using High SES as the reference category

CHAPTER 9

Discussion

The current study brings together components of the Hispanic student experience that have not been previously studied, using support as an outcome of generational status. The following summarizes and interprets the primary findings of my research. Bearing in mind the importance of an institutional context when understanding discrimination, the level of support students feel by teachers and administrators alike, serves as a mechanism for their achievement as well as a by-product of systemic discrimination. A student reporting that they disagree with the notion that their teachers treat students with respect and that their teachers value their ideas is perceiving low levels of support. While they may not be stating or perceiving discrimination outright, the significant differences in first and third-plus generation students' perceptions of institutional support approaches what may very well be a reflection of larger institutional differences. Given the evidence citing discrimination, disadvantage, and inequality among Hispanic immigrant students, the findings are then situated in a larger context contributing to previous findings on the matter.

Because third-plus generation students tend to have the highest levels of educational attainment, it becomes important to examine mechanisms that may propel or hinder their academic success for those in the first and second generations who fall behind. Within a larger context, although third-plus generation students reported higher levels of support, Hispanic students, generally, face significant lags when compared to other ethnic groups (Krogstad 2016, NCES 2016a, NCES 2016b). While they do not choose to come to the U.S. on their own merit,

first generation students are still placed in an academic setting with majority native-born students. Those in the first generation are prone to receiving the lowest levels of *both* institutional and family support comparing to second and third-plus students. These findings suggest a difference in the academic experiences of students with different foreign-born status, which can hinder or propel a student's academic outcomes given the influence that higher levels of social capital have in the academic context (Tennant et al. 2015). For example, a first and a third-plus generation student may have similar math ability. If the third-plus generation student is encouraged to take a higher level course and the first generation student is not, then the third-plus generation student may do better on more challenging math questions on their SAT or ACT. Additionally, when applying to college, the third-plus generation student now has more challenging coursework on their transcript than does the first generation student who was equally competent

The gap between first and third-plus generation students, apparent in all cases, carries with it strong implications for understanding mobility. As they navigate a foreign setting, these students could be the most likely to benefit from support, as suggested by the stress-buffering hypothesis. Their low levels, then, may leave them behind their native counterparts who are already more accustomed to the U.S. education setting and have more resources available to them through the support they receive.

At first glance, the similarities that the second generation demonstrates with both first and third-plus generation students, may seem to diminish the problem of differences among students. Taken together, however, the second generation falling between, but not showing consistently stark differences than either generation is suggestive of the important nuances of generational status in an institutional context. While differential treatment may be obvious if a classroom only

consisted of first and third-plus students, the second generation may soften these differences so that they are subtle and incremental rather than outright. In this way, inequality is not always overt, but it is, nonetheless, present. In the case of institutional support, the second-third generation similarity, but first-third generation difference may be a result and reflection of acculturation occurring over time (Dillon, La Rosa and Ibañez 2013, Luthra and Soehl 2015, Zhou 1997). Students in the second generation, more acculturated than those in the first, are perceived as having better behavior and stronger academic abilities, creating stronger ties between the second generation and their teachers than first generation students.

Contrary to my first hypothesis, family support indicated differences between first and third-plus and second and third-plus generation students when other important factors (SES, gender, state, grades) were held constant. It is possible that in the case of family support, the family unit is dealing with adjustment, language barriers, and discrimination in ways that prevent family interaction from being as strong as it could be for more recent immigrants (Borrero 2011, Orfield, Lee and Harvard Civil Rights Project 2006). As parental acculturation increases and the gap between parent and student cultural understanding decreases, this allows for more regular and positive family interaction (De Santis and Ugarriza 1995, Dillon, La Rosa and Ibañez 2013). These interactions contribute to student feelings of support, serving as a catalyst for increased well-being, motivation, and academic success. One study indicated that Mexican parenting styles became less authoritarian, in line with American norms, as generational status increased (Driscoll, Russell and Crockett 2008). Students, then are likely to perceive more family support as the cultural distance between them and their parents decreases.

When looking at institutional support, those of the first generation are less likely to have support than are students of the third generation in all cases. The differences between second and

third-plus generation lost significance once other variables were considered. As previous literature notes, factors such as language barriers, bias, and fear of undocumented disclosure may all be contributing factors in their relationships with schools (Olivos and Mendoza 2010). These factors tend to be stronger for first than second-generation students. Immigrant parents and teachers indicate communication distance as one of the biggest problems in their children's achievement (Good, Masewicz and Vogel 2010). When students do not feel supported in school, they are less likely to succeed (Rosenfeld, Richman and Bowen 2000, Tennant et al. 2015) meaning that first (especially) and second generation students are less prone to these outcomes because they do not receive as much of this valuable support.

For both family and institutional types, support increased as the level of socioeconomic status increased. The findings are consistent with previous work regarding socioeconomic status related factors indicating a positive relationship with support (Hao and Yeung 2015). The added disadvantage in support that students of lower levels of SES experience demonstrates an even greater disparity in family support than for institutional support. It is possible that this is because families of low SES have fewer resources to offer children whereas a student's SES is not a direct result of the resources available in their school. Students of lower SES, then, are challenged through both the stressors and disadvantages associated with low-SES, along with less support than their classmates, which may simultaneously hinder their confidence, motivation, and achievement. Although support differences were apparent even when controlling for SES, both SES and generational status are important for positive academic outcomes (Wilbur and Roscigno 2016). Given the likelihood that recent Hispanic immigrants will be of lower SES, and the challenges that these two factors may present, social support is critical for those in the first generation (Bradley and Corwyn 2002, Leidy, Guerra and Toro 2012).

The slight increase that females experienced in family support has implications for the cultural expectations of Hispanic youth. Traditional gender roles, where males are viewed as stronger and more independent than females have been documented as being salient within Hispanic families where femininity and masculinity are valued characteristics for sons and daughters (Bettie 2002, Cammarota 2004, Good, Masewicz and Vogel 2010) That said, gender was not a significant factor for institutional support. This is indicative that, for the population of Hispanic high schoolers, students receive marginally similar levels of support from school personnel including counselors, teachers, and administrators. Previous research shows mixed results including gender losing significance for parental support but not teacher support (Rueger, Malecki and Demaray 2010), no relationship between gender and teacher support (Rueger, Malecki and Demaray 2008), and no relationship with support once controls were taken into account (Suarez-Orozco, Pimetel and Martin 2009).

In contrast, whether or not a student lived in a destination state did not significantly affect the level of family support. Given the strength of culture (Bettie 2002, Cupito, Stein and Gonzalez 2015), it follows that family values would remain intact regardless of destination. Inversely, institutional support varied by destination state status. Students from traditional destination states received the most support out of all three categories - traditional, non, and new destination state. This is consistent with expected patterns of discrimination as the shift in state population leads to tension with the new, possibly unwelcome, classroom diversity (Portes and Salas 2015), barring these students from the benefits associated with institutional support which could ease the transition for first generation students, especially. One possible explanation is that, due to the previous settlement of immigrants to traditional destination states, where Hispanic immigrant presence has existed for a longer period of time, discrimination and anti-immigrant

policies are less likely to occur (Silver 2015). Teachers and administrators in new destination states may have higher levels of outward bias in expectations and student treatment in due to the recency and antagonism immigrants face in these locales. So, while immigrants may move to these states for increase in job opportunity present after the year 2000, their children's achievement may be hindered because they are less likely to receive institutional support (Degarmo and Martinez 2006).

Finally, good grades, demonstrated a significant relationship with both family and institutional support. Because the grade reports included grades prior to the year of the study, it is unclear if students were receiving support because they already had good grades, or if they did well in school after receiving support at some previous point in time. That said, the relationship was consistent with the large body of literature indicating strong positive associations between academic achievement and support (Demaray et al. 2005, Rosenfeld, Richman and Bowen 2000, Wang and Neihart 2015). As support functions to transmit resources to students and resources serve to improve academic achievement, it is useful to see how students who received good grades also had significantly higher levels of both family and institutional support.

Among the primary limitations of the study is the inability to distinguish between documented and undocumented students. Undocumented immigrants face higher levels of discrimination, lower socioeconomic status and one of the cited reasons for parental distance from teachers is a fear of schools discovering and then disclosing their undocumented status (Gonzales 2010, Hernandez, Denton and Macartney 2009, Olivos and Mendoza 2009). The HSLs Study did not provide this data. Additionally, the questions for teacher and family support scales were not identical, thus the scales were not parallel. This made it so that comparisons can only be made by differences in generational status rather than between family and institutional

support, directly. Although the study was generalizable for Hispanic immigrants, a larger sample would be necessary to make comparisons between Hispanic country of origin. The data were available, but due to the small N's for any singular country other than Mexico, which accounted for 56% of the sample, strong comparisons could not be made. Because differences by country of origin do exist, variance by this may minimize the effects of immigrants from particular countries or regions. Although there were 4000 Hispanic students in the initial dataset, only 1990 were in the final sample, potentially limiting the significance of the results. While institutional and family support are, indeed, important components of a student's experience, the data did not provide enough information about friends to create substantial scales for investigation. Additionally, support outside of the school environment may affect a student's attitudes and engagement in school, but the data do not account for outside support networks.

The current study lays a foundation for future research projects, which may look at the next wave of data including participants' college enrollment information. Testing for support longitudinally for changes over time would add to support literature by investigating if support carries associations with student outcomes in the high-school to college transition. Follow up research may examine if one network was more important than the other in determining college enrollment. Future research may also examine questions surrounding importance of support networks. How does the strength of support networks interact to affect student outcomes differently? Why might one network be more important for student outcomes than another? Beyond the current dataset, future research may also compare institutional support in destination states by documented status and do a more thorough investigation within them, as well as between them. Subsequent studies may also focus on peer support. It may be useful to understand if peer support is particularly influential in the adjustment of recent immigrant

students. The study may contribute to future programs for immigrant families to offer a buffer to challenges and help students get the support they need to foster more positive academic experiences.

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APPENDIX

Appendix A: Variables of Interest, Descriptions and Coding

<u>Variable Name</u>	<u>Description and Coding</u>	<u>Mean</u>	<u>S.D.</u>	<u>HSLs Variables</u>
Independent Variables				
Parent 1 Race	Parent 1's race: White nonhispanic, Hispanic, Black nonHispanic, or Other	2.785	.795	X1PAR1RACE,X2PAR1RACE, P1RACEWAVE1 P1RACEWAVE2
Parent 1 White Nonhispanic	1 if White Nonhispanic	.634	.482	P1RACEWAVE1, P1RACEWAVE2
Parent 1 Black Nonhispanic	1 if Black Nonhispanic	.105	.306	P1RACEWAVE1, P1RACEWAVE2
Parent 1 Hispanic	1 if Hispanic	.138	.345	P1RACEWAVE1, P1RACEWAVE2
Parent 1 Other	1 if Other	.128	.335	P1RACEWAVE1, P1RACEWAVE2
Parent 2 Race	Parent 2's race: White nonhispanic, Hispanic, Black nonHispanic, or Other	2.826	.747	X1PAR2RACE, X2PAR2RACE, P2RACEWAVE1, P2RACEWAVE2
Parent 2 White Nonhispanic	1 if White Nonhispanic	.664	.472	P2RACEWAVE1, P2RACEWAVE2
Parent 2 Black Nonhispanic	1 if Black Nonhispanic	.084	.278	P2RACEWAVE1, P2RACEWAVE2
Parent 2 Hispanic	1 if Hispanic	.133	.340	P2RACEWAVE1, P2RACEWAVE2
Parent 2 Other	1 if Other	.123	.329	P2RACEWAVE1, P2RACEWAVE2
Student Race	Student's Race White nonhispanic, Hispanic, Black nonHispanic, or Other	2.796	.862	X2RACE, STUDENTRACE
Student White Nonhispanic	1 if White Nonhispanic	.542	.498	STUDENTRACE
Student Black Nonhispanic	1 if Black Nonhispanic	.109	.312	STUDENTRACE
Student Hispanic	1 if Hispanic	.167	.374	STUDENTRACE

Student Other	1 if Other	.181	.385	STUDENTTRACE
Parent 1 Born in U.S.	1 if born in the U.S.	.796	.403	P1USBORN, P1USBORN1, P2USBORN1
Parent 2 Born in U.S.	1 if born in the U.S.	.769	.421	P2USBORN, P1USBORN2, P2USBORN2
Parent 1 or 2 Born in U.S.	1 if either parent is born in the U.S.	.849	.358	P1USBORN, P2USBORN
Student Born in U.S.	1 if born in the U.S.	.922	.269	STUDENTUSBORN, P1USBORN9, P2USBORNT
Both Parents Foreign Born	1 if both parents born outside the U.S.	.200	.400	P1ANDP2FBORN, P1USBORN, P2USBORN
Second Generation Immigrant	1 if student is a second generation immigrant	.190	.392	P1USBORN, P2USBORN, STUDENTUSBORN
Non-Immigrant	1 if student and parents born in U.S.	.723	.447	P1USBORN, P2USBORN, STUDENTUSBORN
Parent 1 Hispanic Origin	1 if of Hispanic Origin	2.027	1.312	P1HISPOR1 P2HISPOR1 P1HISPOR
Parent 1 Mexican	1 if Mexican	.596	.491	P1HISPOR
Parent 1 Cuban	1 if Cuban	.041	.199	P1HISPOR
Parent 1 Puerto Rican	1 if Puerto Rican	.122	.316	P1HISPOR
Parent 1 Other Hispanic Origin	1 if other Hispanic Origin	.254	.435	P1HISPOR
Parent 2 Hispanic Origin	1 if of Hispanic Origin	1.986	1.305	P1HISPOR2 P2HISPOR2 P2HISPOR
Parent 2 Mexican	1 if Mexican	.612	.487	P2HISPOR
Parent 2 Cuban	1 if Cuban	.047	.212	P2HISPOR
Parent 2 Puerto Rican	1 if Puerto Rican	.096	.295	P2HISPOR
Parent 2 Other	1 if other Hispanic Origin	.250	.433	P2HISPOR
Student Hispanic Origin	1 if of Hispanic Origin	2.201	1.348	S1HISPOR, S2HISPOR, SHISPOR
Student Mexican	1 if Mexican	.527	.499	SHISPOR
Student Cuban	1 if Cuban	.046	.209	SHISPOR
Student Puerto Rican	1 if Puerto Rican	.126	.332	SHISPOR
Student Other	1 if other Hispanic Origin	.301	.459	SHISPOR
Parent 1 Hispanic Foreign Born	1 if foreign born and of Hispanic Origin	.079	.270	P1USBORN, P1HISP, FBORNHISPP1
Parent 2 Hispanic Foreign Born	1 if foreign born and of Hispanic Origin	.089	.285	P2USBORN, P2HISP, FBORNHISPP2
Student Hispanic Foreign Born	1 if foreign born and of Hispanic Origin	.028	.165	FBORNHISPS, STUDENTUSBORN, SHISP

Dependent Variables				
Institutional Support	Composite scale of dummy variables ranging 0-16, combining all types of institutional support	8.395	3.904	INSTEA, INSTI
Institutional Support Instrumental/ Informational	Composite scale of dummy variables ranging 0-6, questions regarding instrumental and informational support from school faculty and staff	1.347	1.459	S2STCHINTRST, S1TCHTALKJOB, S1TCHTALKCLG, S1TCHTALKOTH, S1TCHTALKS, S1TCHTALKM
Institutional Support Emotional/Appraisal	Composite scale of dummy variables ranging 0-10, questions regarding emotional and appraisal support from school faculty and staff	8.034	2.386	S1STCHFAIR, S1STCHRESPCT, S1STCHVLUES, S1MTCHFAIR, S1MTCHRESPCT, S1MTCHVALUES, S1STCHMISTKE, S1STCHCONF, S1MTCHMISTKE, S1MTCHCONF
Family Support	Composite scale of dummy variables ranging 0-15, combining all types of family support	4.169	2.783	FAMEA, FAMI
Family Support Instrumental/ Informational	Composite scale of dummy variables ranging 0-7, questions regarding instrumental and informational support from family	2.910	1.537	S1PLANPRNT, S1TALKFUTURE, P1ACCTPAY, P2HELPPAY, P2ACCTPAY, S1MOMTALKJOB, S1DADTAKJOB
Family Support Emotional/Appraisal	Composite scale of dummy variables ranging 0-8, questions regarding emotional and appraisal support from family	1.419	1.805	S2SFAMREC, S2MFAMREC, S1MPARENT, S1MREASPAR, S1SPARENT, S1SREASPAR, S2MPARREC, S2SPARREC

CONTROL VARIABLES				
Student Sex	Dummy variables indicating if student is male or female	.488	.500	SSEX (X1SEX X2SEX S1SEX S2SEX)
Highest Parent Educational Attainment	Composite of parent's highest educational attainment	3.858	1.742	X2PAREDU
Income	Categorical, family income by brackets	4.621	3.050	X2FAMINCOME
Parent 1's Employment Status	Father's employment status, by never worked for pay, not currently working for pay, part time, or full time	3.360	.896	X2PAR1EMP
Parent 2's Employment Status	Mother's employment status, by never worked for pay, not currently working for pay, part time, or full time	3.551	.832	X2PAR2EMP
Did a major life change occur in the last year?	Composite including indication of events such as foreclosure, parent divorce, parent serious health issue, parent or guardian death, student health issue, teen had a child, or parent lost job	.450	.498	P2FORECLOSED, P2PARDIVORCE, P2PARHEALTH, P2PARDIED, P2TEENHEALTH, P2TEENCHILD, P2PARLOSTJOB, (LIFECHANGE)