# TACKLING THE POBRECITO MINDSET: LATINX STUDENT COMMUNITY CULTURAL WEALTH AND ACADEMIC ACHIEVEMENT

by

NUVIA MADALY NEVAREZ

### A DISSERTATION

Presented to the Department of Educational Methodology, Policy, and Leadership and the Graduate School of the University of Oregon in partial fulfillment of the requirements for the degree of Doctor of Education

June 2020

#### DISSERTATION APPROVAL PAGE

Student: Nuvia Madaly Nevarez

Title: Tackling the *Pobrecito* Mindset: Latinx Student Community Cultural Wealth and Academic Achievement

This dissertation has been accepted and approved in partial fulfillment of the requirements for the Doctor of Education degree in the Department of Educational Methodology, Policy, and Leadership by:

Heather McClure	Chairperson
Mark Van Ryzin	Core Member
Audrey Lucero	Core Member
Ellen McWhirter	Institutional Representative

and

Kate Mondloch Interim Vice Provost and Dean of the Graduate School

Original approval signatures are on file with the University of Oregon Graduate School.

Degree awarded June 2020

© 2020 Nuvia Madaly Nevarez This work is licensed under a Creative Commons Attribution-NonCommerical-NoDerivs (United States) License.



#### DISSERTATION ABSTRACT

#### Nuvia Madaly Nevarez

#### Doctor of Education

Department of Educational Methodology, Policy, and Leadership

June 2020

# Title: Tackling the *Pobrecito* Mindset: Latinx Community Cultural Wealth and Academic Achievement

Researchers and practitioners have searched for methods to increase the academic achievement of Latinx students. Unfortunately, many of these efforts have been based on a *pobrecito* mindset or deficit ideology that ignores the strengths of Latinx students and shifts the focus away from eliminating systemic inequities. Instead of remediating deficits, researchers and practitioners should consider a strength-based approach. Yosso's (2005) Community Cultural Wealth Model identifies six community cultural capitals (CCCs) or strengths of Latinx students: aspirational, familial, linguistic, navigational, resistant, and social. The majority of studies on Latinx community cultural wealth have been qualitative. located in the Southwest, and focused on Latinx graduates who attributed much of their academic success in obtaining a high school diploma or college degree to their CCCs. Thus, this study seeks to fill gaps in research by focusing on the Northwest region of the United States, using middle school Latinx students as the unit of analysis, and running correlations to quantitatively examine the relationships among their CCCs and academic achievement. This study also uses a hierarchical multiple regression to assess the effects of two moderator variables: teacher-student relationships and school climate.

#### CURRICULUM VITAE

#### NAME OF AUTHOR: Nuvia Madaly Nevarez

#### GRADUATE AND UNDERGRADUATE SCHOOLS ATTENDED:

University of Oregon, Eugene New York University, New York City Arizona State University, Tempe

#### DEGREES AWARDED:

Doctor of Education, 2020, University of Oregon Master of Arts, 2014, New York University Bachelor of Arts in Education, 2012, Arizona State University

#### AREAS OF SPECIAL INTEREST:

Community Cultural Wealth Social Justice Latinx Students

#### PROFESSIONAL EXPERIENCE:

Assistant Principal, Nellie Muir Elementary School, 2019-Present

Teacher, French Prairie Middle School, 2017-2019

Teacher, Desert Edge High School, 2014-2017

Advisor/Instructor, Bronx Community College, 2012-2014

#### GRANTS, AWARDS, AND HONORS:

Summa Cum Laude, New York University, 2014

Summa Cum Laude, Arizona State University, 2012

#### ACKNOWLEDGMENTS

I wish to thank my committee members for their support and guidance throughout this project: Dr. Heather McClure, Dr. Mark Van Ryzin, Dr. Ellen McWhirter, and Dr. Audrey Lucero. To my advisor and chair, Heather McClure, your positivity and praise was the wind under my wing. Thank you to Dr. Joanna Smith and Dr. Julie Alonzo for your tremendous dedication to the EMPL program. To my cohort, thank you for answering my calls and text messages, cheering me on through career moves, and sharing your knowledge. Like geese, we flew as a team; honk!

A huge thank you to all my former and current students at Nellie Muir Elementary School, French Prairie Middle School, Desert Edge High School, and Bronx Community College. You are constant reminders of why I decided to pursue this dream. To all my current and former colleagues at these schools, thank you for listening and offering advice, making me smile and laugh, sharing your food and support, and giving me so much love as I balanced work and school.

¡Muchísimas gracias a mi familia y amigxs! The person I am today is thanks to you. To my friends, thank you for all the beautiful memories, words of encouragement, for expanding my consciousness, and strengthening my passion for social justice. Gracias a mi abuelita y todo mi familia en México por darme amor incondicional. To my siblings, thank you for being my role models, my mentors, my confidants, my best friends, and for always staying by my side through every obstacle in my life. Mami y Papi, gracias por todo tu amor y sacrificios. Su ejemplo de trabajar duro y nunca rendirse ha sido la inspiración de mi vida. Con su ayuda y apoyo llegué a la cima de la montaña.

vi

Para mis padres que llegaron sin nada pero me dieron todo.

### TABLE OF CONTENTS

Chapter	Page
I. INTRODUCTION	1
Theoretical Framework: Yosso (2005) Community Cultural Wealth Model	3
II. LITERATURE SYNTHESIS	5
Community Cultural Capitals and Latinx Academic Achievement	6
Academic Motivation: Familial, Resistant, and Aspirational Capital	6
Familial Capital	6
Resistant Capital	7
Aspirational Capital	8
Academic Perseverance: Navigational, Social, and Linguistic Capital	9
Navigational Capital	9
Social Capital	9
Linguistic Capital	10
Influence of Teacher-Student Relationships	11
Influence of School Climate	12
Gaps and Importance of Study	13
Research Questions	14
III. METHODS	15
Research Design	15
Unit of Analysis	15
Time Aspect	16

#### Chapter

### Sources of Data ..... 16 Study Procedure of Extant Data..... 16 Recruitment..... 17 Assessment 17 Juntos Study Participants 18 Sampling Logic ..... 18 Academic Achievement: Grade Point Average and Self-Reported Grades..... 19 Community Cultural Capitals Sub-Scales 19 Aspirational Capital Scale..... 20 Familial Capital Scale 21 Linguistic Capital Scale 21 Navigational Capital Scale 21 Resistant Capital Scale..... 22 Social Capital Scale 22 Moderators: Teacher-Student Relationships and School Climate 23 Teacher-Student Relationships Scale 23 School Climate Scale 23 ..... 24 Analysis Research Question 1 ..... 24 Research Question 2 24

Page

# Chapter

IV. RESULTS	
Research Question 1: CCCs and Academic Achievement	26
Research Question 2: Teacher-Student Relationships Moderator	27
Aspirational Capital and Self-Reported Grades	27
Aspirational Capital and GPA	27
Familial Capital and Self-Reported Grades	28
Familial Capital and GPA	29
Linguistic Capital and Self-Reported Grades	29
Linguistic Capital and GPA	30
Navigational Capital and Self-Reported Grades	31
Navigational Capital and GPA	31
Resistant Capital and Self-Reported Grades	32
Resistant Capital and GPA	33
Social Capital and Self-Reported Grades	33
Social Capital and GPA	34
Research Question 3: School Climate Moderator	35
Aspirational Capital and Self-Reported Grades	35
Aspirational Capital and GPA	35
Familial Capital and Self-Reported Grades	36
Familial Capital and GPA	37
Linguistic Capital and Self-Reported Grades	37
Linguistic Capital and GPA	38

Page

Navigational Capital and Self-Reported Grades	39
Navigational Capital and GPA	39
Resistant Capital and Self-Reported Grades	40
Resistant Capital and GPA	41
Social Capital and Self-Reported Grades	41
Social Capital and GPA	42
Summary of Results by Research Question	43
Research Question 1	43
Research Question 2	43
Research Question 3	44
V. DISCUSSION	
Discrepancy Between GPA and Self-Reported Grades	45
Strengths of Latinx Students' Self-Reported Grades	46
CCCs Associated with Self-Reported Grades	47
Utilizing Latinx Student Strengths in Middle School	48
Dismantling Middle School Systemic Inequities	50
Limitations	52
Instrumentation	52
Statistical Analysis	52
Response Bias	53
Threats to External Validity	53
Implications for Future Research	53

# Chapter

Implications of Practice	55
VIII. CONCLUSION	56
APPENDIX	59
REFERENCES CITED	68

Page

### LIST OF TABLES

Tal	Pa	
1.	RQ1: Min, Max, Range, Means, Standard Deviations, and Correlations of the Variables	. 26
2.	Hierarchical Regression Results on Moderation Effect of Teacher Student Relationships on Relationship between Aspirational Capital and Self-Reported Grades	. 27
3.	Hierarchical Regression Results on Moderation Effect of Teacher Student Relationships on Relationship between Aspirational Capital and GPA	. 28
4.	Hierarchical Regression Results on Moderation Effect of Teacher Student Relationships on Relationship between Familial Capital and Self-Reported Grades	. 28
5.	Hierarchical Regression Results on Moderation Effect of Teacher Student Relationships on Relationship between Familial Capital and GPA	. 29
6.	Hierarchical Regression Results on Moderation Effect of Teacher Student Relationships on Relationship between Linguistic Capital and Self-Reported Grades	. 30
7.	Hierarchical Regression Results on Moderation Effect of Teacher Student Relationships on Relationship between Linguistic Capital and GPA	. 30
8.	Hierarchical Regression Results on Moderation Effect of Teacher Student Relationships on Relationship between Navigational Capital and Self-Reported Grades	
9.	Hierarchical Regression Results on Moderation Effect of Teacher Student Relationships on Relationship between Navigational Capital and GPA	. 32
10.	Hierarchical Regression Results on Moderation Effect of Teacher Student Relationships on Relationship between Resistant Capital and Self-Reported Grades	. 32
11.	Hierarchical Regression Results on Moderation Effect of Teacher Student Relationships on Relationship between Resistant Capital and GPA	. 33
12.	Hierarchical Regression Results on Moderation Effect of Teacher Student Relationships on Relationship between Social Capital and Self-Reported Grades	. 34

## Table

Page	
------	--

13.	Hierarchical Regression Results on Moderation Effect of Teacher Student Relationships on Relationship between Social Capital and GPA	34
14.	Hierarchical Regression Results on Moderation Effect of School Climate on Relationship between Aspirational Capital and Self-Reported Grades	35
15.	Hierarchical Regression Results on Moderation Effect of School Climate on Relationship between Aspirational Capital and GPA	36
16.	Hierarchical Regression Results on Moderation Effect of School Climate on Relationship between Familial Capital and Self-Reported Grades	36
17.	Hierarchical Regression Results on Moderation Effect of School Climate on Relationship between Familial Capital and GPA	37
18.	Hierarchical Regression Results on Moderation Effect of School Climate on Relationship between Linguistic Capital and Self-Reported Grades	38
19.	Hierarchical Regression Results on Moderation Effect of School Climate on Relationship between Linguistic Capital and GPA	38
20.	Hierarchical Regression Results on Moderation Effect of School Climate on Relationship between Navigational Capital and Self-Reported Grades	39
21.	Hierarchical Regression Results on Moderation Effect of School Climate on Relationship between Navigational Capital and GPA	40
22.	Hierarchical Regression Results on Moderation Effect of School Climate on Relationship between Resistant Capital and Self-Reported Grades	40
23.	Hierarchical Regression Results on Moderation Effect of School Climate on Relationship between Resistant Capital and GPA	41
24.	Hierarchical Regression Results on Moderation Effect of School Climate on Relationship between Social Capital and Self-Reported Grades	42
25.	Hierarchical Regression Results on Moderation Effect of School Climate on Relationship between Social Capital and GPA	42

#### **CHAPTER I**

#### **INTRODUCTION**

Due to the financial, health, and social benefits of educational attainment, researchers continue to study graduation rates among different demographic groups (Baum & Ruhm, 2009; Cutler & Lleras-Muney, 2010; Dee, 2004; Hout, 2012; Ma, Pender, & Welch, 2016; Mirowsky & Ross, 2003; Robinson, Crozier, Borland, Hammond, Barker, & Insip, 2004; U.S. Census Bureau, 2016). Unfortunately, Latinx students have among the lowest high school graduation rates, associate degree completion rates, bachelor's degree completion rates, and advanced degree completion rates when compared to other racial/ethnic groups (U.S. Census Bureau, 2016). Only 27.8% of Latinx people over the age of 25 in the United States had a high school diploma in 2016, only 13% had a bachelor's degree, and the percentage with a master's, professional, or doctorate degree was even lower, at 5.4% (U.S. Census Bureau, 2016). Researchers and practitioners have written studies to draw attention to low Latinx educational attainment and designed school intervention programs to improve these rates. Yet, many of these studies and intervention programs are based on a deficit ideology or pobrecito mindset (Garcia & Ozturk, 2017; Gutierrez, 2008; Ladson-Billings, 2006; Ladson-Billings, 2007).

Deficit ideology is the belief that inequalities result, not from systems of oppression such as systemic racism or economic injustice, but from intellectual, moral, cultural, or behavioral deficiencies inherent in certain demographic groups (Brandon, 2003; Gorski, 2008; Valencia, 1997; Yosso, 2005). Although current researchers and practitioners might refrain from labeling Latinx students as "inherently deficient," a large

number of studies and school programs aimed at increasing Latinx students' educational attainment are still based in a deficit ideology or rather a *pobrecito* mindset (Gutierrez, 2008; Ladson-Billings, 2006; Ladson-Billings, 2007). The word *pobrecito* is a Spanish word that is often used as an endearing term to refer to someone who is poor or for whom you feel sympathy. In this study, this term is being used to highlight that despite good intentions, many researchers and practitioners still aim to increase Latinx graduation rates by remediating perceived behavioral and academic deficits rather than by utilizing Latinx students' community and cultural strengths and dismantling systemic inequities (Castagno, 2014; Flores, 2005; Ladson-Billings, 1998; Valencia, 1997, 2010).

Although there might be good intentions behind the *pobrecito* mindset, this approach ignores the strengths of Latinx, as well as the systemic inequities that contribute to low academic achievement rates. An example of the *pobrecito* approach in action is the implementation of trauma-informed care, which encourages educators to acknowledge how severe harm or trauma impacts Latinx students' physical, emotional, and mental well-being and contributes to behavior issues at school (Chafouleas, Johnson, Overstreet, & Santos, 2015; Cole, Eisner, Gregory, Ristuccia, 2013; Dorado, Martinez, McArthur, Liebovitz, 2016; Ginwright, 2008; Overstreet & Chafouleas, 2016). The focus is on empathizing with the trauma behind perceived social and emotional deficits rather than acknowledging Latinx students' resiliency and strengths in experiencing trauma and the systemic inequities that contribute to trauma. Studies that document the "academic achievement gap" also serve as examples of how research has focused on the academic deficits of Latinx students instead of recognizing their strengths and breaking down systemic inequities (Gutierrez, 2008). Ladson-Billings (2007) argued that instead of

concluding that Latinx students' low educational attainment lies in their inability to perform well on exams, we should place Latinx students' academic struggles in the larger context of social failure including health, wealth, and funding gaps that have impeded their success. For this reason, efforts to increase Latinx educational attainment should not be based on academics alone, but rather on the underlying problems or as Ladson-Billings (2006) described it the "education debt," which includes a historical, moral, sociopolitical, and economic debt. Hence, instead of focusing on remediating perceived academic and behavior deficiencies in Latinx students, we should dismantle systemic inequities, such as the "education debt," and recognize the strengths of Latinx students. Yosso's (2005) Community Cultural Wealth Model describes six types of community cultural capitals (CCCs) or strengths among Latinx students.

#### **Theoretical Framework: Yosso (2005) Community Cultural Wealth Model**

Community cultural wealth is an "array of knowledge, skills, abilities, and contacts possessed and utilized by Communities of Color to survive and resist macro and micro-forms of oppression" (Yosso, 2005, p.77). Community cultural wealth includes aspirational, familial, linguistic, navigational, resistant, and social capital. *Aspirational capital* is the resiliency to maintain hopes and dreams despite real and perceived barriers (Yosso, 2005). *Familial capital* refers to carrying a sense of community history, memory, and cultural intuition (Yosso, 2005). *Linguistic capital* reflects the idea that students of color possess multiple language and communication skills, which include oral histories, advice/lectures (*consejos*), stories (*cuentos*), and proverbs (*dichos*) (Yosso, 2005). *Navigational capital* is the ability to maneuver through social institutions that historically were not created with communities of color in mind (Yosso, 2005). *Resistant capital* is

the resilience, knowledge, and skills fostered through challenging inequalities (Yosso, 2005). Finally, *social capital* is the ability to build networks and use social contacts and community resources to attain education, justice, employment, and healthcare (Yosso, 2005).

#### **CHAPTER II**

#### LITERATURE SYNTHESIS

Using the ERIC database, I searched for peer-reviewed articles containing the terms Latinx and its synonyms, education or students and their synonyms, and community cultural wealth. I limited the search to articles published after 2005 because this is the year that Yosso's Community Cultural Wealth Model was published. This approach resulted in 79 articles. I then narrowed my search to only peer reviewed articles, which resulted in 54 articles being retained. Of those, 41 were research studies focused on Latinx and community cultural wealth. Seven of the articles were about Latinx parents. Because my study focuses on community cultural wealth of Latinx students, I excluded these articles, resulting in a literature pool of 34, peer-reviewed research studies.

Of these articles, 12 focused on Latinx graduate students, some of whom are now educators at public schools or universities. The unit of analysis in 18 of the articles was Latinx college students. In four of the articles, the unit of analysis was Latinx high school students. The pool of 34 peer-reviewed articles contained 30 qualitative studies and four mixed methods studies. Fully 22 of these studies were set in the Southwest, three took place in the Northeast, two in the Midwest, and one in the Southeast region of the United States. The remaining six were nationwide US studies. Additional articles were provided to me by my dissertation committee and were found through ancestral searches to discuss the moderators in this study, teacher-student relationships and school climate, and to provide evidence of the relationship between resistant capital and Latinx students' academic achievement in the Pacific Northwest.

#### **Community Cultural Capitals and Latinx Academic Achievement**

A synthesis of literature on Yosso's (2005) Community Cultural Wealth Model revealed that the six types of community cultural capitals (familial, linguistic, resistant, aspirational, navigational, and social) all contributed to Latinx students' academic success in elementary school, high school, GED programs, community college, undergraduate colleges/universities, and graduate school programs. A common theme found in the literature was the interconnectedness of all the capitals in instilling the motivation and perseverance for Latinx students to succeed academically. Familial, resistant, and aspirational capital interconnected and contributed to Latinx students' academic motivation. Additionally, the interconnectedness of Latinx students' navigational, social, and linguistic capital helped them persevere through school.

#### Academic Motivation: Familial, Resistant, and Aspirational Capital

As stated previously, familial, resistant, and aspirational capital are all interconnected, and all contribute to Latinx students' academic motivation.

**Familial Capital.** Latinx parents' absence in school parent organizations or low attendance at school events may be seen as deficits or indicators that Latinx students have low familial capital (Dinh, Roosa, Tein, & Lopez, 2002; Durand, 2011; Ramirez, 2003; Shah, 2009). However, the Latinx students in the literature synthesized here reported having a high amount of familial capital in ways that are often unknown or invisible to schools. For example, Latinx students explained how their parents supported them financially and modeled hard work through their labor-intensive jobs (Aragon, 2017; Bejarano & Valverde, 2012; Jimenez, 2016; Peralta, 2013; Perez-Huber, 2009). One Latinx student recalled how her dad's hands and face were scarred from working so hard,

"when I saw his face and his hands, I was like, 'Ugh! This is the reason why I'm going to school!"" (Perez-Huber, 2009). Latinx students also reported that their parents talked to them about their grades and the value of an education (Chang et al., 2017; Cuevas, 2016; Luna & Martinez, 2013; Saenz et al., 2017). Their parents also made sure they attended school every day, went to bed early and got up on time, and excused them from work, chores, cooking, or family events to give them time for academic commitments (Espino, 2016; Liou et al., 2009; Locke et al., 2017; Perez, 2017; Perez & Taylor, 2016). Thus, Latinx students' definition and description of their familial capital challenged dominant, deficit-based notions of Latinx parental involvement. This parental support or familial capital academically motivated Latinx students and helped them develop many other types of capital such as linguistic, resistant and aspirational capital (Aragon, 2017; Burciaga & Erbstein, 2012; Espino, 2016; Liou et al., 2009; Locke et al., 2017; Perez-Huber, 2009; Saenz, et al., 2018).

**Resistant Capital.** In addition to familial capital, Latinx students also gained resistant capital from their parents (Aragon, 2017; Araujo & Piedra, 2013; Cuevas, 2016; Espino, 2016; Locke et al., 2017; Perez, 2014; Saenz et al., 2018; Saenz, et al., 2017). Latinx students recalled how their parents modeled the use of resistant capital by overcoming racism, microaggressions, work exploitation, and anti-immigrant environments. Their parents' example inspired Latinx students to model the same resiliency and strength throughout their challenges at school (Aragon, 2017; Araujo & Piedra, 2013; Espino, 2016; Saenz et al., 2017; Saenz, et al., 2018). Many Latinx students expressed that being proud of their culture and pursuing an education was an act of resistance against social inequities and negative stereotypes of Latinx (Cuevas, 2016;

Locke et al., 2017; McWhirter, Gomez, & Rau, 2019; Perez, 2014; Saenz et al., 2017). Finally, many Latinx students also developed resistant capital after taking social justice courses, joining or forming social justice organizations, getting involved in community organizing, and making sense of their personal experiences with inequities (Aragon, 2017; Chang et al., 2017; Duran & Perez, 2017; Duncheon, 2017; Martinez, 2012; McWhirter et al., 2019; Perez, 2014; Perez-Huber, 2009; Perez & Taylor, 2016; Saenz, et al., 2018). One Latinx student stated, "we learned about different issues whether history, racism, or homophobia...they helped us understand how they operate in society and impact my life and my parent's life" (Aragon, 2017). Therefore, Latinx students built resistant capital or the desire to break down stereotypes and inequities, which often formed the foundation for their aspirational capital and academic motivation, and was associated with their school achievement (Cuevas, 2016; Locke et al., 2017; McWhirter, Gomez, & Rau, 2019; Perez, 2014; Saenz et al., 2017).

Aspirational Capital. As mentioned before, Latinx students' aspirational capital was closely connected to their familial and resistant capital. Some Latinx students' aspirations were based on a duty and responsibility to take care of their family, pay back their parents' hard work and sacrifices, and make their family proud (Aragon, 2017; Araujo & Piedra, 2013; Burciaga & Erbstein, 2012; Espino, 2016; Kouyoumdijan et al., 2017; Liou et al., 2009; Locke et al., 2017; Perez-Huber, 2009; Perez & Taylor, 2016; Saenz, et al., 2018). Additionally, many Latinx students expressed that they aspired to pursue an education as a form of resistance against social inequities and to break down stereotypes about Latinx (Cuevas, 2016; Locke et al., 2017; McWhirter, Gomez, & Rau, 2019; Perez, 2014; Saenz et al., 2017). In sum, Latinx students' familial and resistant

capital interconnected with aspirational capital and formed the basis of their academic motivation.

#### Academic Perseverance: Navigational, Social, and Linguistic Capital

Latinx students used their navigational, social, and linguistic capital to persevere academically.

Navigational Capital. Many Latinx students were first-generation college students or the first to attend a school in the U.S; thus, they had to use their navigational capital to persevere through schools that were historically not created with Latinx students in mind to make their aspirations a reality. For instance, they had to navigate through poverty, immigration status, and language barriers (Chang et al., 2017; Jimenez, 2016; Saenz, et al., 2018). Latinx students also navigated through unfamiliar institutional systems such as financial aid methods, the college application process, and the pathways to graduation (Bejarano & Valverde, 2012; Peralta, 2013; Perez, 2014; Ventura, 2017). They had to navigate past cultural barriers, racism and bias in institutions (Espino, 2014; Jimenez, 2016; Liou et al., 2009; Perez & Taylor, 2016). One of the primary ways that they were able to navigate through these obstacles was with their social and linguistic capital (Alarcon & Bettez, 2017; Burciaga & Erbstein, 2012; Duncheon, 2017; Duran & Perez, 2017; Straubhaar, 2013).

**Social Capital.** Latinx students built relationships with other students of color and staff members of color (e.g., cooks, custodians, and student services workers) on campus who gave them insight on how to obtain resources, supported them with learning language, offered words of encouragement, told them what courses to take or avoid, and informed them about which professors were allies (Alarcon & Bettez, 2017; Burciaga &

Erbstein, 2012; Duncheon, 2017; Duran & Perez, 2017; Espino, 2014; Jimenez, 2016; Liou et al., 2009; Saenz et al., 2018). Finally, they used their social capital to join social justice clubs and multicultural organizations, which became their community or "chosen family" and support system on campus (Bejarano & Valverde, 2012; Luna & Martinez, 2013; Perez, 2014, 2017; Perez-Huber, 2009). Thus, Latinx students' and community involvement contributed to their academic success (Espino, 2014; Jimenez, 2016; Luna & Martinez, 2013; Perez, 2014, 2017).

Linguistic Capital. Latinx students also credited much of their academic perseverance to their linguistic capital. Many students reported their linguistic capital was based on the intellectual and social skills attained through their bilingualism, which derived from their parents communicating with them in Spanish at home and the students taking on the responsibility of translating for family members (Aragon, 2017; Burciaga & Erbstein, 2012; Jimenez, 2016; Liou et al., 2009; Peralta, 2013; Peralta et al., 2013; Perez-Huber, 2009). The linguistic capital that Latinx students built also came from their parents sharing oral histories, stories (*cuentos*), lectures/advice (*platicas/consejos*), words of affirmation, and proverbs (*dichos*). Growing up in this linguistically rich environment taught Latinx students social and political awareness, social and communication skills, self-worth and cultural pride, memorization and attention to detail, empathy, morals, and values (Chang et al., 2017; Cuevas, 2016; Espino, 2016; Perez, 2014, 2017; Perez & Taylor, 2016; Saenz et al., 2017; Straubhaar, 2013). Hence, Latinx students utilized these linguistic skills and words of affirmation to persevere through school and reach academic success (Aragon, 2017; Burciaga & Erbstein, 2012; Saenz et al., 2017; Straubhaar, 2013).

#### Influence of Teacher-Student Relationships

According to the literature, strong teacher-student relationships often affirmed Latinx students' community cultural capitals (CCCs) and increased their academic success (Alarcon & Bettez, 2017; Chang et al., 2017; DeNicolo, Gonzalez, Morales, & Romani, 2015; Jimenez, 2016; Liou & Rojas, 2016; Martin-Beltran, Montoya-Avila, Garcia, Canales, 2018). For example, Jimenez (2016) who graduated with her Ph.D., explains that the only Latina teacher she had throughout her K-12 schooling was her Kindergarten teacher. Jimenez wrote, "She was one of the most influential teachers I had that affirmed my cultural experiences" (p.71). In another study, Latina tenure-track faculty reported that they gained support from '*madrinas*' (the senior Latina faculty) who served as role models and affirmed their CCCs (Alarcon & Bettez, 2017). In McWhirter, Valdez, and Caban (2013), Latinx participants reported that they believed they would graduate because of one teacher's dedication to them.

On the other hand, the absence of strong teacher-student relationships could also deny Latinx students' CCCs or create obstacles for Latinx students to recognize and build on their CCCs to succeed academically (Espino, 2014; Jimenez, 2016; Liou et al., 2009; Liou & Rojas, 2016; Perez, 2017). For example, one Latinx student stated, "teachers in high school, as well as faculty in college/graduate school, served as obstacles to achieving educational aspirations and did little to nurture various forms of capital" (Espino, 2014, p. 559). In Liou et al. (2009), although some Latinx students defined a caring teacher as someone who affirmed their CCCs and challenged them academically, the majority of Latinx students did not view their own teachers as caring. In her autoethnography, Jimenez (2016) reported her personal experiences with teachers who

pushed her out of school and ignored her community cultural wealth; hence, she was motivated to become an educator herself and work with a sixth-grade teacher to create a community cultural wealth curriculum. For this reason, it is important to consider the influence that teacher-student relationships have on the relationship between Latinx students' CCCs and their academic success.

#### Influence of School Climate

A school's climate may also influence the relationship between Latinx students' CCCs and their academic success (Aragon, 2017; Arce, 2010; Burciaga & Erbstein, 2012; DeNicolo et al., 2015; Espino, 2014; Peralta, 2013; Valenzuela, 1999; Ventura, 2017; Viloria, 2019). For example, one dual language elementary school supported the implementation of a community cultural wealth curriculum in third grade (DeNicolo et al., 2015). By creating a climate where teachers were welcome to use community cultural wealth as a framework for teaching reading/writing, the school found that Latinx students who were identified as struggling readers with little participation in class demonstrated an increase in class participation and produced a significant amount of writing about their own CCC (DeNicolo et al., 2015). The Tucson Ethnic Studies program's focus on community cultural wealth also had academic benefits. Latinx students who participated in the program graduated at a rate of 97.5%, compared to the national average of 44% for Latinx students (Arce, 2010). Unfortunately, Latinx students' civic engagement was viewed as problematic, and the program was banned. Although Latinx teachers, parents, and students protested the ban, the school ignored their voices. Latina doctoral students also experienced hostile campus climates where they felt discrimination, stigmatization, and tokenism threatened their authenticity and disregarded their CCCs, backgrounds, and

cultures (Espino, 2014). In one study, a Latinx student who attended a predominately White high school stated, "I don't like high school. I don't like the people in it. I don't feel part of it" (Ventura, 2017). Thus, many educational institutions do not create a climate where Latinx students' community cultural wealth is recognized, welcomed and valued (Burciaga & Erbstein, 2012; Espino, 2014; Huber & Cueva, 2012; Peralta, 2013; Valenzuela, 1999; Ventura, 2017).

In contrast, many Latinx students have taken part in what Valenzuela (1999) calls "subtractive schooling." The subtractive process divests these youth of important social and cultural resources, leaving them progressively vulnerable to academic failure (Valenzuela, 1999). In other words when institutions "strip away students' identities" they are much more vulnerable and left without resources important to academic success (Valenzuela, 1999). McWhirter, Garcia, and Bines (2017) found that school connectedness was a mediator, reducing the relationship between discrimination experiences and dropouts by 25%. In addition, McWhirter, Luginbuhl, and Brown (2014) found that Latinx students in one Northwest state advised schools to increase academic achievement by providing more programs and opportunities for belonging, involvement and attachment to school. For this reason, it is likely that school climate influences the relationship between Latinx students' community cultural wealth and their academic achievement.

#### Gaps and Importance of Study

Most of the studies in this literature synthesis involved a *qualitative* analysis of the relationships between Latinx students' CCCs and their academic achievement. Additionally, the majority of studies used samples of Latinx graduates who had already

obtained a level of academic success and were reflecting on their previous schooling experiences. My dissertation fills a gap in the research by addressing the topic from a quantitative perspective and involving current middle school Latinx students, regardless of their academic achievement level. In other words, this study explores whether the relationship between Latinx students' self-reported CCCs and their academic achievement exists in middle school. In addition, because prior qualitative studies suggest that teacher-student relationships and school climate may have an influence on the relationship between Latinx students' CCCs and their academic achievement, my dissertation study tests those influences quantitatively. Finally, this study takes place in the Northwest region of the United States, an area that has not been well represented in prior research.

#### **Research Questions**

My dissertation addresses the following research questions:

1. What are the relationships among middle school Latinx students' six types of CCC (aspirational, familial, linguistic, navigational, resistant, and social) and their academic achievement?

2. Do middle school Latinx students' relationships with teachers influence the relationships among CCC and academic achievement?

3. Do middle school Latinx students' reports of equity in school climate influence the relationships among CCC and academic achievement?

#### **CHAPTER III**

#### **METHODS**

In this chapter, I describe the research design, sampling logic, and analytic approach used in my study. In addition, I discuss the ways in which I addressed threats to internal and external validity.

#### **Research Design**

I used a correlational research design. Creswell and Creswell (2018) state that the correlational design is a nonexperimental form of quantitative research in which "investigators use the correlational statistic to describe and measure the degree or association (or relationship) between two or more variables or sets of scores" (p.49). In this study, I sought to measure the relationship between Oregonian, Latinx middle school students' CCC and their academic achievement. Additionally, I used a moderator analysis to examine the influence of teacher-student relationships and school climate on these correlations between students' CCC and academic achievement.

#### **Unit of Analysis**

Babbie (2012) states that the unit of analysis is the what or whom being studied. Oregonian, Latinx middle school students were my unit of analysis. Although this is a specific group, my unit of analysis was the individual Latinx students. According to Babbie (2012), "if the researcher is interested in exploring, describing, or explaining how different groups of individuals behave as individuals, the unit of analysis is the individual, not the group" (p.97). Because the quantitative data was based on Latinx students' individual insight on their CCC and their academic achievement, my unit of analysis was at the individual, student level.

#### Time Aspect

According to Remler and Van Ryzin (2015), many data are cross-sectional and "contain measurements taken at a single point in time" (p.184). In addition, "surveys are often cross-sectional, a snapshot of public opinion or behavior during one period of time" (Remler & Van Ryzin, 2015, p.184). The data used in this study were extant survey responses collected as baseline data for the Juntos Study. Therefore, they were collected during one point in time and the time aspect is cross-sectional.

#### Sources of Data

The following sources of data were used to measure the relationship among Oregonian, middle school Latinx students' CCC and their academic achievement, as well as how teacher-student relationships and school climate influence these relationships.

#### Study Procedure of Extant Data

The data used for this study derived from the Juntos Study. Prior to the beginning of the study, researchers held conversations with three superintendents from three school districts located in the Eugene/Springfield area of Oregon. The Superintendents identified two middle schools that were socio-demographically similar (i.e., in regard to percentage of students enrolled in free and reduced lunch, emerging bilingual student population) in each of their districts to participate in the Juntos Study. One school from each district was randomly selected to be the intervention school. The second school served as the control school.

The Juntos Study included three populations: students, parents/gaurdians, and the equity leadership team members (ELTs), which consisted of teachers, administrators, and other school staff. To be eligible for the study, families needed to: have a middle school

student enrolled in one of the participating schools; identify as Latinx/Hispanic or hail from a Latin American or Spanish speaking Caribbean nation; speak Spanish; and be available to attend the intervention classes in the event that their child's school were assigned the intervention. My study focused on the Wave 1 assessments, which occurred at the baseline before intervention.

**Recruitment.** The Juntos staff worked closely with the school to recruit families (students and their parents/guardians) to be participants through phone calls, bilingual letters, and public announcements at informational events that took place at the school and in community settings (e.g., school orientation, parent/teacher conferences, Spanish language church services, and Latino community events). A description of the project with contact numbers and consent forms were provided to prospective study participants in both Spanish and English.

Assessment. All family assessments were conducted over the telephone in either English or Spanish depending on the language the participant selected. Juntos Study interviewers only conducted in person interviews to participants who preferred this method. The Juntos Study researchers had regular contact with families and school staff during the school year, to minimize the likelihood that they would move without their knowledge. The assessment protocol was culturally sensitive and relevant to make the assessments as non-aversive as possible for families. The Juntos research teach compensated participants for the completion of the surveys in the form of gift cards. For the baseline assessment, parents received \$30 for an approximately 45-minute survey, and the youth received \$15 for an approximately 30-minute long survey. The Juntos Study researchers deemed these amounts appropriate for the time commitment. They

were not too high to risk coercing participants to take part in the study. The University of Oregon IRB reviewed and approved all of the Juntos Study protocols and procedures.

Juntos Study Participants. Ninety-five Latinx parents/guardians participated in the Juntos Study at Wave 1 of which 95.8% were mothers, 3.2% were fathers, and 1.1% were grandparents. The average age of the parents/guardians was 38.5 years old (SD= 6.46). There were forty-two school equity leaders who participated in Wave 1 of the study. Their average age was 42.97 years old (SD =10.37). There was a total of ninetyfive Latinx middle school students in Wave 1 of the Juntos Study. Overall, 54% selfidentified as male and 46% identified as female. The mean age of the students was 11.97 years old (SD=.95). Again, there were a total of six middle schools in the Juntos Study. The Latinx student participation rate at school 1 was approximately 24.1%. In school 2, approximately 21.3% of the Latinx students participated in the study. In school 3, approximately 20% of Latinx students participated. The Latinx student participation rate at school 4 was 14%. At school 5, the Latinx participation rate was 13%. Finally, school 6 had a Latinx participation rate of 11%. Of the total middle school students, 36.8% were in 6th grade, 40% were in 7th grade, and 23.2% were in 8th grade.

#### Sampling Logic

I used a nonprobability, purposeful sampling method to measure the relationship between middle school Latinx students' CCC and their academic achievement. Babbie (2012) explains that purposive sampling is "a type of nonprobability sampling in which the units to be observed are selected on the basis of the researcher's judgement about which ones will be the most useful or representative" (p.190). As mentioned before, the data used in this study were baseline survey data from a larger study, the Juntos Study,

where middle school Latinx student, Latinx parent/guardians, and equity school leaders' survey responses were collected. The Juntos Study collected baseline survey data on all the participants. Again, schools were randomly selected to take part in the control or treatment group. Because I only used the baseline survey data, my sample included every Latinx student participant, whether assigned to control or treatment. My research questions were focused specifically on Oregonian, Latinx middle school students. Thus, only a purposeful sample of the Oregonian, Latinx middle school students were used to answer my research questions. As stated previously, this included a total of 95 Oregonian Latinx middle school students.

#### Academic Achievement: Grade Point Average and Self-Reported Grades

The first source of data used to measure academic achievement was Latinx students' grade point average (GPA). The schools provided this data. The second source of academic achievement data was Latinx students' self-reported grades. Latinx middle school students were asked to select one of the following responses regarding their grades: 8-"mostly A's", 7-"mostly A's and B's", 6-"mostly B's", 5-"mostly B's and C's", 4-"mostly C's", 3-"mostly C's and D's", 2-"mostly D's", or 1-"not passing." Average student GPA and student-reported grades with standard deviations and range are reported in Table 1.

#### Community Cultural Capitals Sub-Scales

Because the Juntos Student Questionnaire was not intended to test CCC constructs, I attempted to establish the reliability and content validity of each CCC subscale. Tindal and Marston (1990) define content validity as "the degree to which a test has an explicated domain (or universe) represented by items in the test" (p. 121). To

establish content validity, I consulted the definition of each type of CCC and used the help of members of my committee to match each CCC to one or more existing standardized and validated sub-measures on the Juntos Student Questionnaire. Creswell and Creswell (2018) argue that "the most important form of reliability for a multi-item instrument is internal consistency, which is the degree to which sets of items on an instrument behave in the same way" (p. 260). Cronbach's alpha was used to assess the reliability, or internal consistency, of the CCC sub-scales. I ensured that the strength of the coefficient for each sub-scale was .70 or higher. See Table A7 in the Appendix for the reliability of the independent measures.

Items on the Juntos Student Questionnaire were recoded and categorized into one of the CCCs (aspirational, navigational, resistant, linguistic, social, and familial) to create six separate sub-scales or measures. The Center for Equity Promotion in the UO College of Education created the Juntos Student Questionnaire as a composite of several standardized and validated measures that had been normed for Latinx populations.

Aspirational Capital Scale. This sub-scale was computed using the standardized and validated Brief 10-item Center for Epidemiological Studies of Depression Scale (CESD; Radloff, 1977). The CESD is a measure of self-reported depressive symptoms during the past week (e.g., "During the past week... I felt that everything I did was an effort," "I was happy"; see Appendix, Table A1 for a full listing of CESD items). Student responses ranged from 1 ("Rarely or none of the time"; less than 1 day) to 4 ("Most or all of the time"; 5-7 days). Typically, CESD scales are computed through reversing positive responses (e.g., "I was happy") so that higher final sum scores reflect more self-reported depressive symptoms. To compute the aspirational capital sub-scale, items appraising

negative feelings instead were reversed so that students' final higher sum scores reflected more positive affect and fewer depressive symptoms. The Cronbach's alpha for this scale computed with this sample of Juntos youth was .76.

**Familial Capital Scale.** This sub-scale consists of 6 items and was derived from a larger appraisal of parent-youth relationship quality created for the *Familias Saludables* (Healthy Families) Youth Questionnaire (Hyers, 2012). Sample items include, "During the last three months...my parents and I regularly did things together we both enjoy" (a full listing of items can be found in the Appendix, Table A2). Response choices ranged from 1-"Never" to 4-"Often." Students' responses were averaged with higher final scores reflecting stronger relationships with parents and greater familial capital. The Cronbach's alpha for this sub-scale was .76.

Linguistic Capital Scale. This is the second sub-scale including 8 items from Szapocznik, Kurtines, and Fernandez's (1980) Biculturalism Scale for Youth. Items appraise a student's comfort speaking each of Spanish or English at home, in school, with friends, and in general (a full listing of items can be found in the Appendix, Table A3). Response choices range from 1-"Not at all comfortable" to 5-"Very comfortable." Students' responses were averaged with higher final scores reflecting greater comfort speaking Spanish and English (bilingualism) or greater linguistic capital in various domains. The Cronbach's alpha for this sub-scale was .71.

**Navigational Capital Scale.** This is a scale computed from 11 items appraising students' academic self-efficacy and ability to navigate academic systems and to seek information relevant to their educational goals (e.g., "I know... ... the steps I need to take in order to pursue my educational and/or career dreams"; for a complete list of items, see

Appendix Table A4). All items ranged from 1-"Strongly disagree" to 4-"Strongly agree." A mean score for each student's responses were averaged with higher scores reflecting greater academic self-efficacy or navigational capital. The Cronbach's alpha for this subscale was .90.

**Resistant Capital Scale.** This scale is the Children's Hope Scale from Syder, Hoza, Pelham, Rapoff, Ware, Danovsky, Highberger, & Stahl (1997), which is composed of 6 items reflecting a student's ability to persevere (e.g., "Even when others want to quit, I know that I can find ways to solve the problem" and "When I have a problem, I can come up with lots of ways to solve it"; all items are listed in the Appendix, Table A5). Response choices range from 1-"None of the time" to 6-"All of the time." The resistant capital sub-scale reflected 5 of 6 items on the original Children's Hope Scale (the item "I am doing just as well as other kids my age" was omitted); student responses were averaged with higher final scores reflecting greater resistant capital or ability to persevere in the face of obstacles. The Cronbach's alpha for student resistant capital was .83.

**Social Capital Scale.** This sub-scale combined two distinct scales: the first focused on 4 items that appraised peer relationships (e.g., "I can talk to my friend (s) when I have a problem") and the second focused on 13 items focused on a youth's school and community involvement (e.g., "I participate in groups/activities outside of school [sports, scouts, soccer, church, music, etc.]"). Both scales were developed by the Oregon Social Learning Center's Latino Research Team (Martinez & Ruth, 2002, 2005). A full listing of items for this sub-scale can be found in the Appendix Table A6. Both scales had answer choices ranging from 1-"Strongly disagree" to 4-"Strongly agree." Average scores were computed for each student, with higher scores reflecting stronger peer

relationships and greater involvement in school and community activities. The Cronbach alpha for the sub-scale including all 17 items was .80.

### Moderators: Teacher-Student Relationships and School Climate

To measure the moderator of teacher-student relationships and school climate, I created two additional subscales from the extant survey data: one for teacher-student relationships and another for school climate. Sub-scales were created by Hyers, Martinez, & Ruth (2016). See Tables A8 and A9 in the Appendix for a description of all items used in these sub-scales. Again, Cronbach's alpha was used to assess the reliability, or internal consistency, of the sub-scales (see Table A7 in the Appendix).

**Teacher-Student Relationships Scale.** This scale contained 11 items reflecting students' perceptions of the quality of their relationships with their teachers (e.g., "This school year... I feel at least one of my teachers cares about me"; "This school year... If I had a conflict with a teacher, I feel confident we would work through it together"). Response options ranged from 1-"Strongly disagree" to 4-"Strongly agree." All items were averaged to create a final score, with higher scores reflecting higher quality teacher-student relationships. The Cronbach's alpha for this sub-scale was .91.

School Climate Scale. This scale was composed of 15 items appraising students' perceptions of how equitable and supportive they feel their school climate is (e.g., "This year, at my school I feel...I am treated with respect and that my opinions matter"). Response options ranged from 1-"Strongly disagree" to 4-"Strongly agree." Items were averaged for each student with higher final scores reflecting students' reports of a more equitable school climate. The Cronbach's alpha for this sub-scale was .89.

### Analysis

The following sections describe my data analysis approach.

### **Research Question 1**

I ran Pearson correlations to answer research question 1. I correlated the six types of CCCs (aspirational, linguistic, navigational, resistant, familial, and social capital) and academic achievement, more specifically GPA and self-reported grades.

### **Research Question 2**

To answer research question 2, I conducted a hierarchical multiple regression to assess the effects of the moderator variable, teacher-student relationships, on the relationships between Latinx students' CCCs and their GPA and self-reported academic achievement. In this analysis, Latinx students' CCCs were the independent variables while GPA and self-reported grades (academic achievement) were the dependent variables. First, I centered and standardized all variables to avoid multicollinearity. Then, I created the interactions effects manually. Next, I used the regular linear regression model in SPSS and a *p*-value of .05 to measure the significance of each model. In model 1, I ran the regression without the interaction. In model 2, I included the interaction. Finally, I assessed the effects of the moderation by analyzing whether model 2 accounted for significantly more variance than model 1. I also conducted the hierarchical multiple regression again using PROCESS, developed by Andrew F. Hayes, which does the centering and creates the interaction automatically, to check that the results were the same.

## **Research Question 3**

For research question 3, I also conducted a hierarchical multiple regression to assess the effects of the moderator variable. For this analysis, students' reported equity in school climate was the moderator variable, Latinx students' CCCs were the independent variables, and Latinx students' self-reported grades and GPA (academic achievement) were the dependent variables. Once more, I standardized and centered the variables to avoid multicollinearity, calculated the effects manually, and used the regular linear regression model in SPSS with a *p*-value of .05 to measure the significance. Model 1 did not include the interaction whereas model 2 included the interaction. To assess the effects of the moderator, I analyzed whether model 2 accounted for significantly more variance than model 1. Again, I used PROCESS developed by Andrew F. Hayes, which does the centering and interaction automatically, to cross-check my results.

#### **CHAPTER IV**

### RESULTS

In this chapter, I provide the results of my study, organized by research question.

### **Research Question 1: CCCs and Academic Achievement**

I found non-significant relations between (a) aspirational capital and either selfreported grades (r(93)= -.02, p=.98) or grade point average (GPA), (r(93)= -.11, p=.30); (b) familial capital and either self-reported grades (r(93)=.19, p=.06) or GPA, (r(93)=.07, p=.49); (c) linguistic capital and GPA (r(93)=.09, p=.38); (d) navigational capital and either self-reported grades (r(93)=.20, p=.057) or GPA (r(93)=.06, p=.55); (e) resistant capital and GPA (r(93)=.15, p=.14); (f) social capital and GPA, (r(93)=.09, p=.37).

I found a statistically significant positive correlation between self-reported grades and linguistic capital (r(93)=.21, p=.03), resistant capital (r(93)=.26, p=.01), and social capital (r(93)=.23, p=.02). (see Table 1).

Table 1

RQ1: Min, Max, Range, Means, Standard Deviations, and Correlations of the Variables

Variable	Min	Max	Range	М	SD	Self-Reported Grades	GPA
Aspirational Capital	1.91	4.0	2.09	3.48	.39	02	11
Familial Capital	2.50	4.0	1.50	3.62	.41	.19	.07
Linguistic Capital	2.75	5.0	2.25	4.27	.48	.21*	.09
Navigational Capital	2.36	4.0	1.64	3.19	.37	.20	.06
Resistant Capital	2.60	6.0	3.40	4.73	.82	.26*	.15
Social Capital	2.35	3.85	1.49	3.13	.29	.23*	.09
Teacher-Student Rel.	2.64	4.0	1.36	3.27	.37	.21*	.07
School Climate	2.07	3.85	1.73	3.07	.31	.11	02
Self-Reported Grades	2.00	4.0	6.0	6.6	1.15		.63**
Grade Point Average	.3	4.0	3.7	2.8	.92	.63**	

*Note.* \**p* <.05. \*\**p* <.01.

#### **Research Question 2: Teacher-Student Relationships Moderator**

The results of research question 2 are described below by each type CCC.

### Aspirational Capital and Self-Reported Grades

Model 1, without the interaction, was not significant, F(2, 88) = 2.19, p = .11. Model 2, with the interaction of aspirational capital and teacher-student relationships, was also non-significant, F(3,87) = 1.45, p = .23. Model 2 did not account for significantly more variance than model 1,  $R^2$  change =.00, p = .88. In both model 1 and model 2, the main effect of teacher-student relationships on self-reported grades was statistically significant, p = .04 (see Table 2).

Table 2

Hierarchical Regression Results on Moderation Effect of Teacher Student Relationships on Relationship between Aspirational Capital and Self-Reported Grades

Variables Entered	$R^2$	F	df	$R^2$ change	Beta	SE	β	t	р
Model 1	.047	2.19	88	.047					.11
(Constant)						.11		55.58	
Aspirational					06	.11	05	50	.61
Teacher-Student					.25	.12	.21	2.08	.04*
Model 2	.048	1.45	87	.000					.23
(Constant)						.12		54.78	
Aspirational					06	.12	05	50	.61
Teacher-Student					.25	.12	.21	2.06	.04*
Asp x Teach-Stud					.01	.11	.01	.14	.88

### Aspirational Capital and GPA

Without the interaction, model 1 was not statistically significant, F(2, 91) = .99, p = .38. With the interaction term of aspirational capital and teacher-student relationships, model 2 was also non-significant, F(3,90) = .81, p = .48. Model 2 did not account for significantly more variance than model 1,  $R^2$  change =.006, p = .47. There were no main effects on GPA detected for any of the independent variables (see Table 3).

Hierarchical Regression Results on Moderation Effect of Teacher Student Relationships

Variables Entered	$R^2$	F	df	$R^2$ change	Beta	SE	β	t	р
Model 1	.021	.97	91	.021					.38
(Constant)						.09		29.78	
Aspirational					11	.09	12	-1.19	.23
Teacher-Student					.08	.09	.09	.90	.36
Model 2	.027	.81	90	.006					.48
(Constant)						.09		29.47	
Aspirational					11	.09	12	-1.18	.23
Teacher-Student					.09	.09	.09	.93	.35
Asp x Teach-Stud					06	.09	07	72	.47

on Relationship between Aspirational Capital and GPA

## Familial Capital and Self-Reported Grades

Model 1, without the interaction, neared significance, F(2, 88) = 2.78, p = .06. Model 2, with the interaction of familial capital and teacher-student relationships, was not significant, F(3,87) = 1.87, p = .13. Model 2 did not account for significantly more

variance than model 1,  $R^2$  change =.001, p = .72. The main effects of the independent

variables were not statistically significant (see Table 4).

## Table 4

Hierarchical Regression Results on Moderation Effect of Teacher Student Relationships

on Relationship between Familial Capital and Self-Reported Grades

Variables Entered	<i>R</i> <sup>2</sup>	F	df	$R^2$ change	Beta	SE	β	t	р
Model 1	.059	2.78	88	.059					.06
(Constant)						.11		55.95	
Familial					.15	.12	.13	1.17	.24
Teacher-Student					.18	.13	.15	1.39	.16
Model 2	.061	1.87	87	.001					.13
(Constant)						.13		50.66	
Familial					.13	.14	.11	.93	.35
Teacher-Student					.19	.13	.17	1.43	.15
Fam x Teach-Stud					05	.14	04	35	.72

## Familial Capital and GPA

Model 1, without the interaction, was not significant, F(2, 91) = .35, p = .70. Additionally, model 2, with the interaction of familial capital and teacher-student relationships, was non-significant, F(3,90) = .23, p = .87. Model 2 did not account for significantly more variance than model 1,  $R^2$  change =.00, p = .99. The main effects of teacher-student relationships and familial capital were non-significant (see Table 5).

Table 5

Hierarchical Regression Results on Moderation Effect of Teacher Student Relationships on Relationship between Familial Capital and GPA

Variables Entered	$R^2$	F	df	$R^2$ change	Beta	SE	β	t	р
Model 1	.00	.35	91	.00					.70
(Constant)						.09		29.58	
Familial					.04	.10	.04	.43	.66
Teacher-Student					.05	.10	.05	.49	.62
Model 2	.00	.232	90	.00					.87
(Constant)						.10		26.78	
Familial					.04	.11	.04	.39	.69
Teacher-Student					.05	.11	.05	.46	.64
Fam x Teach-Stud					00	.11	00	00	.99

## Linguistic Capital and Self-Reported Grades

Model 1, without the interaction, was statistically significant, F(2, 88) = 3.20, p=.04. However, model 2, with the interaction of linguistic capital and teacher-student relationships, was not statistically significant, F(3,87) = 2.25, p = .08. Model 2 did not account for significantly more variance than model 1,  $R^2$  change =.004, p = .52. In model 2, main effects of linguistic capital and teacher-student relationships were not statistically significant (see Table 6).

Hierarchical Regression Results on Moderation Effect of Teacher Student Relationships

on Relationship between Linguistic Capital and Self-Reported Grades

Variables Entered	<i>R</i> <sup>2</sup>	F	df	$R^2$ change	Beta	SE	β	t	р
Model 1	.068	3.20	88	.068					.04*
(Constant)						.11		56.20	
Linguistic					.18	.12	.16	1.47	.14
Teacher-Student					.17	.12	.15	1.38	.17
Model 2	.072	2.24	87	.004					.08
(Constant)						.12		52.27	
Linguistic					.17	.12	.15	1.35	.18
Teacher-Student					.19	.13	.17	1.49	.14
Lin x Teach-Stud					08	.13	06	64	.52

## Linguistic Capital and GPA

Without the interaction, model 1 was not significant, F(2, 91) = .47, p = .62.

Model 2, with the interaction of linguistic capital and teacher-student relationships, was

also not significant, F(3,90) = .59, p = .62. Model 2 did not account for significantly

more variance than model 1,  $R^2$  change =.009, p = .36. There were no statistically

significant main effects detected (see Table 7).

## Table 7

Hierarchical Regression Results on Moderation Effect of Teacher Student Relationships

on Relationship between Linguistic Capital and GPA

Variables Entered	$R^2$	F	df	$R^2$ change	Beta	SE	β	t	р
Model 1	.010	.47	91	.010					.62
(Constant)						.09		29.62	
Linguistic					.06	.10	.07	.66	.50
Teacher-Student					.04	.10	.04	.43	.66
Model 2	.019	.59	90	.009					.62
(Constant)						.10		27.74	
Linguistic					.05	.10	.05	.50	.61
Teacher-Student					.07	.10	.07	.65	.51
Lin x Teach-Stud					09	.11	09	90	.36

## Navigational Capital and Self-Reported Grades

Model 1, without the interaction, was not significant, F(2, 88) = 2.22, p = .11.

Model 2, with the interaction of navigational capital and teacher-student relationships,

was also not significant, F(3,87) = 1.68, p = .17. Model 2 did not account for

significantly more variance than model 1,  $R^2$  change =.007, p = .43. The main effects of

the independent variables were non-significant in both models (see Table 8).

Table 8

Hierarchical Regression Results on Moderation Effect of Teacher Student Relationships on Relationship between Navigational Capital and Self-Reported Grades

Variables Entered	$R^2$	F	df	$R^2$ change	Beta	SE	β	t	р
Model 1	.048	2.22	88	.048					.11
(Constant)						.11		55.54	
Navigational					.10	.19	.09	.56	.57
Teacher-Student					.16	.19	.14	.85	.39
Model 2	.055	1.68	87	.007					.17
(Constant)						.16		41.21	
Navigational					.14	.19	.12	.72	.47
Teacher-Student					.17	.19	.15	.91	.36
Nav x Teach-Stud					11	.14	09	79	.43

## Navigational Capital and GPA

Without the interaction, model 1 was not significant, F(2, 91) = .25, p = .77. With the interaction of navigational capital and teacher-student relationships, model 2 was not significant, F(3,90) = .30, p = .82. Model 2 did not account for significantly more variance than model 1,  $R^2$  change =.004, p = .52. The main effects for all independent variables were not statistically significant (see Table 9).

# Hierarchical Regression Results on Moderation Effect of Teacher Student Relationships

Variables Entered	$R^2$	F	df	$R^2$ change	Beta	SE	β	t	р
Model 1	.006	.25	91	.006					.77
(Constant)						.09		29.55	
Navigational					.01	.15	.01	.07	.93
Teacher-Student					.06	.14	.06	.40	.68
Model 2	.010	.30	90	.004					.82
(Constant)						.13		22.17	
Navigational					.03	.15	.03	.20	.83
Teacher-Student					.06	.15	.07	.44	.65
Nav x Teach-Stud					07	.11	07	63	.52

on Relationship between Navigational Capital and GPA

## **Resistant Capital and Self-Reported Grades**

Without the interaction, model 1 was significant, F(2, 88) = 4.21, p = .01. With the

interaction of resistant capital and teacher-student relationships, model 2 was also

significant, F(3,87) = 3.24, p = .02. Yet, model 2 did not account for significantly more

variance than model 1,  $R^2$  change =.013, p = .26 (see Table 10).

Table 10

Hierarchical Regression Results on Moderation Effect of Teacher Student Relationships

on Relationship between Resistant Capital and Self-Reported Grades

Variables Entered	<i>R</i> <sup>2</sup>	F	df	$R^2$ change	Beta	SE	β	t	р
Model 1	.087	4.21	88	.087					.01*
(Constant)						.11		56.74	
Resistant					.24	.12	.21	2.03	.04*
Teacher-Student					.16	.12	.13	1.2	.20
Model 2	.101	3.24	87	.013					.02*
(Constant)						.12		53.73	
Resistant					.19	.13	.16	1.45	.14
Teacher-Student					.19	.12	.16	1.52	.13
Res x Teach-Stud					14	.12	12	-1.12	.26

## Resistant Capital and GPA

Model 1, without the interaction, was not significant, F(2, 91) = 1.10, p = .33. With the interaction of resistant capital and teacher-student relationships, model 2 was not significant, F(3,90) = .75, p = .52. Model 2 did not account for significantly more variance than model 1,  $R^2$  change =.001, p = .79. The main effects of resistant capital and teacher-student relationships were not statistically significant (see Table 11).

Table 11

Hierarchical Regression Results on Moderation Effect of Teacher Student Relationships on Relationship between Resistant Capital and GPA

Variables Entered	$R^2$	F	df	$R^2$ change	Beta	SE	β	t	р
Model 1	.024	1.10	91	.024					.33
(Constant)						.09		29.83	
Resistant					.13	.10	.14	1.30	.19
Teacher-Student					.02	.10	.02	.25	.79
Model 2	.025	.75	90	.001					.52
(Constant)						.10		28.07	
Resistant					.12	.10	.13	1.11	.26
Teacher-Student					.03	.10	.03	.30	.76
Res x Teach-Stud					02	.10	03	26	.79

## Social Capital and Self-Reported Grades

Without the interaction, model 1 neared statistical significance, F(2, 88) = 2.79, p = .06. Model 2 for self-reported grades, with the interaction of social capital and teacherstudent relationships, was not significant, F(3,87) = 1.84, p = .14. Model 2 did not account for significantly more variance than model 1,  $R^2$  change =.000, p = .96. The main effects of social capital and teacher-student relationships on self-reported grades were not significant in either model (see Table 12).

Hierarchical Regression Results on Moderation Effect of Teacher Student Relationships

on Relationship between Social Capital and Self-Reported Grades

Variables Entered	$R^2$	F	df	$R^2$ change	Beta	SE	β	t	р
Model 1	.060	2.79	88	.060					.06
(Constant)						.11		55.93	
Social					.18	.15	.16	1.18	.23
Teacher-Student					.12	.15	.10	.75	.45
Model 2	.060	1.84	87	.000					.96
(Constant)						.15		44.23	
Social					.18	.15	.16	1.17	.24
Teacher-Student					.11	.16	.10	.70	.48
Soc x Teach-Stud					.00	.13	.00	.04	.96

## Social Capital and GPA

Model 1, without the interaction, was not significant, F(2, 91) = .40, p = .66. With the interaction of social capital and teacher-student relationships, model 2 was not significant, F(3, 90) = .66, p = .57. Model 2 did not account for significantly more variance than model 1,  $R^2$  change = .013, p = .28. The main effects of all independent variables were not significant (see Table 13).

## Table 13

Hierarchical Regression Results on Moderation Effect of Teacher Student Relationships

on Relationship between Social Capital and GPA

Variables Entered	$R^2$	F	df	$R^2$ change	Beta	SE	β	t	р
Model 1	.009	.40	91	.009					.66
(Constant)						.09		29.60	
Social					.07	.12	.07	.54	.58
Teacher-Student					.02	.12	.02	.18	.85
Model 2	.022	.66	90	.013					.57
(Constant)						.12		22.88	
Social					.08	.12	.09	.65	.51
Teacher-Student					01	.13	01	11	.90
Soc x Teach-Stud					.12	.11	.11	1.08	.28

### **Research Question 3: School Climate Moderator**

The results of research question 3, the influence of school climate on the

relationship between CCC and academic achievement are described below.

### Aspirational Capital and Self-Reported Grades

Model 1, without the interaction, was not significant, F(2, 88) = .70, p = .49.

Model 2, with the interaction of aspirational capital and school climate, was not

significant, F(3,87) = 1.20, p = .31. Model 2 did not account for significantly more

variance than model 1,  $R^2$  change =.024, p = .14. In both model 1 and model 2, the main

effects were not significant (see Table 14).

Table 14

Hierarchical Regression Results on Moderation Effect of School Climate on Relationship between Aspirational Capital and Self-Reported Grades

Variables Entered	<i>R</i> <sup>2</sup>	F	df	$R^2$ change	Beta	SE	β	t	р
Model 1	.016	.70	88	.016					.49
(Constant)						.12		54.72	
Aspirational					05	.12	05	45	.64
School Climate					.14	.12	.12	1.16	.24
Model 2	.040	1.20	87	.024					.31
(Constant)						.12		54.21	
Aspirational					02	.12	01	17	.86
School Climate					.16	.12	.14	1.36	.17
Asp x Sch Clim					.12	.08	.16	1.48	.14

### Aspirational Capital and GPA

Model 1, without the interaction, was not statistically significant, F(2, 91) = .55, p = .57. Model 2, with the interaction of aspirational capital and school climate, was also not significant, F(3,90) = .37, p = .76. Model 2 did not account for significantly more variance than model 1,  $R^2$  change =.00, p = .86. Finally, there were no significant main effects detected for the independent variables (see Table 15).

# Hierarchical Regression Results on Moderation Effect of School Climate on Relationship

Variables Entered	$R^2$	F	df	$R^2$ change	Beta	SE	β	t	р
Model 1	.012	.55	91	.012					.57
(Constant)						.09		29.65	
Aspirational					10	.09	11	-1.03	.30
School Climate					.00	.09	.00	.04	.96
Model 2	.012	.37	90	.00					.76
(Constant)						.09		28.08	
Aspirational					09	.10	10	98	.32
School Climate					.07	.10	.00	.06	.94
Asp x Sch Clim					.01	.06	.02	.18	.86

between Aspirational Capital and GPA

## Familial Capital and Self-Reported Grades

Model 1, without the interaction, was not significant, F(2, 88) = 1.82, p = .16.

With the interaction of familial capital and school climate, model 2 was not significant,

F(3,87) = 1.58, p = .19. Model 2 did not account for significantly more variance than

model 1,  $R^2$  change =1.10, p = .29. In model 2, the main effect of familial capital was

close to significant, p = .07 (see Table 16).

Table 16

Hierarchical Regression Results on Moderation Effect of School Climate on Relationship

between Familial Capital and Self-Reported Grades

Variables Entered	$R^2$	F	df	$R^2$ change	Beta	SE	β	t	р
Model 1	.040	1.82	88	.040					.16
(Constant)						.12		55.41	
Familial					.20	.13	.18	1.55	.12
School Climate					.04	.13	.03	.33	.74
Model 2	.052	1.58	87	.012					.19
(Constant)						.13		51.80	
Familial					.24	.13	.22	1.80	.07
School Climate					.04	.13	.03	.32	.74
Fam x Sch Clim					.10	.10	.11	1.05	.29

## Familial Capital and GPA

Without the interaction, model 1 was not statistically significant, F(2, 91) = .37, p = .69. Model 2, with the interaction of familial capital and school climate, was also not significant, F(3,90) = .34, p = .79. Model 2 did not account for significantly more variance than model 1,  $R^2$  change =.003, p = .58. Lastly, there were no significant main effects on GPA detected (see Table 17).

Table 17

Hierarchical Regression Results on Moderation Effect of School Climate on Relationship

between Familial Capital and GPA

Variables Entered	$R^2$	F	df	$R^2$ change	Beta	SE	β	t	р
Model 1	.008	.37	91	.008					.69
(Constant)						.09		29.60	
Familial					.09	.10	.09	.84	.40
School Climate					05	.10	06	53	.59
Model 2	.011	.34	90	.003					.79
(Constant)						.10		27.61	
Familial					.10	.11	.11	.96	.33
School Climate					05	.10	06	53	.59
Fam x Sch Clim					.04	.08	.06	.54	.58

## Linguistic Capital and Self-Reported Grades

Model 1, without the interaction, was not significant, F(2, 88) = 2.26, p = .11. Model 2, with the interaction of linguistic capital and school climate, was also not significant, F(3,87) = 1.96, p = .12. Model 2 did not account for significantly more variance than model 1,  $R^2$  change =.014, p = .25. In model 1, the main effect of linguistic capital was close to significant, p = .07 (see Table 18).

Hierarchical Regression Results on Moderation Effect of School Climate on Relationship

Variables Entered	$R^2$	F	df	$R^2$ change	Beta	SE	β	t	р
Model 1	.049	2.26	88						.11
(Constant)						.11		55.69	
Linguistic					.23	.12	.20	1.81	.07
School Climate					.04	.12	.03	.34	.72
Model 2	.063	1.96	87						.12
(Constant)						.13		51.64	
Linguistic					.20	.13	.17	1.53	.12
School Climate					.11	.14	.09	.79	.43
Lin x Sch Clim					15	.13	13	-1.15	.25

between Linguistic Capital and Self-Reported Grades

## Linguistic Capital and GPA

Model 1, without the interaction, was not statistically significant, F(2, 91) = .54, p = .58. With the interaction of linguistic capital and school climate, model 2 was also not significant, F(3,90) = .46, p = .71. Model 2 did not account for significantly more variance than model 1,  $R^2$  change =.003, p = .58. Finally, there were no significant main effects detected for any of the independent variables (see Table 19).

## Table 19

Hierarchical Regression Results on Moderation Effect of School Climate on Relationship

between Linguistic Capital and GPA
------------------------------------

Variables Entered	$R^2$	F	df	$R^2$ change	Beta	SE	β	t	р
Model 1	.012	.54	91	.012					.58
(Constant)						.09		29.64	
Linguistic					.10	.10	.11	1.02	.30
School Climate					05	.10	06	56	.57
Model 2	.015	.46	90	.003					.71
(Constant)						.10		27.41	
Linguistic					.09	.10	.10	.89	.37
School Climate					03	.11	03	28	.77
Lin x Sch Clim					06	.11	06	55	.58

## Navigational Capital and Self-Reported Grades

Without the interaction, model 1 was not significant, F(2, 88) = 1.90, p = .15. With the interaction of navigational capital and school climate, model 2 was not significant, F(3,87) = 2.19, p = .09. Model 2 did not account for significantly more variance than model 1,  $R^2$  change =.029, p = .10. In both model 1 and model 2, the main effects were not significant (see Table 20).

### Table 20

Hierarchical Regression Results on Moderation Effect of School Climate on Relationship between Navigational Capital and Self-Reported Grades

Variables Entered	$R^2$	F	df	$R^2$ change	Beta	SE	β	t	р
Model 1	.042	1.90	88	.042					.15
(Constant)						.12			.11
Navigational					.27	.17	.23	1.61	.11
School Climate					05	.16	05	34	.72
Model 2	.070	2.19	87	.029					.09
(Constant)						.14		45.94	
Navigational					.20	.17	.17	1.16	.24
School Climate					.16	.21	.14	.75	.45
Nav x Sch Clim					19	.12	23	-1.64	.10

## Navigational Capital and GPA

Model 1, without the interaction, was not statistically significant, F(2, 91) = .51, p = .59. Model 2, with the interaction of navigational capital and school climate, was also not significant, F(3,90) = .44, p = .71. Model 2 did not account for significantly more variance than model 1,  $R^2$  change =.003, p = .57. There were no significant main effects detected for the independent variables (see Table 21).

## Hierarchical Regression Results on Moderation Effect of School Climate on Relationship

Variables Entered	$R^2$	F	df	$R^2$ change	Beta	SE	β	t	р
Model 1	.011	.51	91	.011					.59
(Constant)						.09		29.63	
Navigational					.13	.13	.14	.99	.32
School Climate					10	.13	11	82	.41
Model 2	.015	.44	90	.003					.71
(Constant)						.11		24.90	
Navigational					.11	.13	.12	.87	.38
School Climate					05	.16	05	33	.74
Nav x Sch Clim					05	.09	07	56	.57

between Navigational Capital and GPA

# Resistant Capital and Self-Reported Grades

Model 1, without the interaction, was significant, F(2, 88) = 3.32, p = .04. With the interaction of resistant capital and school climate, model 2 was not significant, F(3,87) = 2.24, p = .08. Thus, model 2 did not account for significantly more variance than model 1,  $R^2$  change =.002, p = .69. Yet, in model 2, the main effect of resistant capital was significant, p = .04 (see Table 22).

## Table 22

Hierarchical Regression Results on Moderation Effect of School Climate on Relationship

between Resistant Capital and Self-Reported Grades

Variables Entered	$R^2$	F	df	$R^2$ change	Beta	SE	β	t	р
Model 1	.070	3.32	88	.070					.04*
(Constant)						.11		56.21	
Resistant					.30	.13	.26	2.31	.02*
School Climate					00	.13	00	06	.94
Model 2	.072	2.24	87	.002					.08
(Constant)						.13		50.42	
Resistant					.28	.14	.25	2.02	.04*
School Climate					.00	.13	.00	.02	.98
Res x Sch Clim					04	.12	04	39	.69

## **Resistant Capital and GPA**

Model 1, without the interaction, was not statistically significant, F(2, 91) = 1.54, p = .22. Model 2, with the interaction of resistant capital and school climate, was also not statistically significant, F(3,90) = 1.03, p = .38. Model 2 did not account for significantly more variance than model 1,  $R^2$  change =.001, p = .82. Finally, in both model 1 and model 2 the main effect of resistant capital was close to significant, p = .08 (see Table 23).

Table 23

Hierarchical Regression Results on Moderation Effect of School Climate on Relationship

between Resistant Capital and GPA

Variables Entered	<i>R</i> <sup>2</sup>	F	df	$R^2$ change	Beta	SE	β	t	р
Model 1	.033	1.54	91	.033					.22
(Constant)						.09		29.98	
Resistant					.18	.10	.20	1.74	.08
School Climate					10	.10	11	95	.34
Model 2	.033	1.03	90	.001					.38
(Constant)						.10		27.09	
Resistant					.19	.11	.20	1.71	.08
School Climate					10	.10	11	97	.33
Res x Sch Clim					.02	.09	.02	.22	.82

### Social Capital and Self-Reported Grades

Model 1, without the interaction, was not significant, F(2, 88) = 2.52, p = .08.

With the interaction of social capital and school climate, model 2 was not significant,

F(3,87) = 1.81, p = .15. Model 2 did not account for significantly more variance than

model 1,  $R^2$  change = .005, p = .51. In both model 1 and model 2 the main effect of social

capital was close to significant, p = .05 and p = .06, respectively (see Table 24).

Hierarchical Regression Results on Moderation Effect of School Climate on Relationship

Variables Entered	$R^2$	F	df	$R^2$ change	Beta	SE	β	t	р
Model 1	.054	2.52	88	.054					.08
(Constant)						.14		55.75	
Social					.28	.14	.25	1.95	.05
School Climate					03	.14	03	25	.80
Model 2	.059	1.81	87	.005					.15
(Constant)						.14		46.90	
Social					.27	.14	.24	1.85	.06
School Climate					.02	.17	.01	.12	.90
Soc x Sch Clim					08	.12	08	64	.51

between Social Capital and Self-Reported Grades

## Social Capital and GPA

Model 1, without the interaction, was not statistically significant, F(2, 91) = .79, p = .45. Model 2, with the interaction of social capital and school climate, was also not significant, F(3,90) = .88, p = .45. Model 2 did not account for significantly more variance than model 1,  $R^2$  change =.011, p = .30. No significant main effects were detected for any of the independent variables (see Table 25).

## Table 25

Hierarchical Regression Results on Moderation Effect of School Climate on Relationship

between Social Capital and GPA	between	Social	Capital	and	GPA
--------------------------------	---------	--------	---------	-----	-----

Variables Entered	$R^2$	F	df	$R^2$ change	Beta	SE	β	t	р
Model 1	.017	.79	91	.017					.45
(Constant)						.09		29.74	
Social					.14	.12	.16	1.24	.21
School Climate					10	.11	11	89	.37
Model 2	.029	.88	90	.011					.45
(Constant)						.11		24.60	
Social					.16	.12	.17	1.33	.18
School Climate					17	.13	19	-1.28	.20
Soc x Sch Clim					.10	.10	.12	1.02	.30

### **Summary of Results by Research Question**

The main findings in this study are summarized below by research question.

**Research question 1.** Linguistic, resistant, and social capital all had significant positive relationships with self-reported grades. The relationship between familial and navigational capital and self-reported grades neared statistical significance, and there was no statistically significant relationship between aspirational capital and self-reported grades. There were no statistically significant relationships between GPA and any of the six CCCs (aspirational, familial, linguistic, navigational, resistant, and social).

**Research question 2.** The model with resistant capital and teacher-student relationships was significant in predicting self-reported grades. When the interaction between resistant capital and teacher-student relationships was added to the model, it was also significant. However, there was not a significant  $R^2$  change. Thus, I did not find a statistically significant moderation effect of teacher-student relationships on resistant capital and self-reported grades. Moderation also did not occur in the model with aspirational capital and self-reported grades. Yet, the main effect of teacher-student relationships was significant in predicting self-reported grades in these models. The regression model with linguistic capital, teacher-student relationships, and no interaction did significantly predict self-reported grades, but when the interaction was added, the model was not significant and there was no significant  $R^2$  change. Neither the main effects nor the moderation effect was statistically significant in the models with social capital, navigational capital, familial capital, and self-reported grades. Lastly, no statistically significant moderation was found in any of the regression models with GPA, and the main effects were not significant in any of these models.

**Research question 3.** The regression model with resistant capital and school climate did significantly predict self-reported grades. However, when the interaction between resistant capital and school climate was added, the model was not significant. Hence, no moderation occurred. Yet, the main effect of resistant capital was significant in the second model with the interaction. No moderation occurred in the models with the remaining CCC and self-reported grades. No additional main effects were significant in predicting self-reported grades. Moderation did not occur between CCC and GPA. Finally, the main effects did not significantly predict GPA.

#### **CHAPTER V**

### DISCUSSION

Latinx students' self-reported grades and grade point averages were used as the instruments to measure academic achievement. Yet, there were discrepancies in the results between these two dependent measures. The following section discusses this discrepancy and the overall findings in the context of literature on community cultural wealth, existing knowledge, a strengths-based approach, and a focus on systemic inequities.

#### **Discrepancy Between GPA and Self-Reported Grades**

Although GPA and self-reported grades did have a significant, positive correlation with one another (see Table A7 in Appendix), the results for GPA were different than for Latinx students' self-reported grades. The mean GPA score was 2.8 with a standard deviation of .92. This is equivalent to having mostly C's and D's. The mean score for self-reported grades was 6.6 and the standard deviation was 1.15. This was equivalent to answering "mostly A's & B's" or "mostly B's" on the survey question. Therefore, Latinx students' self-reported grades were higher than their GPA scores. As stated in the literature synthesis, too often research focuses on the deficits of Latinx students rather than on their strengths. Too often we look to remediate Latinx students' deficits instead of dismantling systemic inequities. Thus, in the following sections, I discuss some systemic inequities and strength-based conclusions that can be drawn from the discrepancy between Latinx students' GPA and their self-reported grades.

### **Strengths of Latinx Students' Self-Reported Grades**

Latinx students self-reported grades were higher on average than their GPA scores. First, it is important to consider that Latinx students were honest when reporting their grades. When looking at the wording of the survey question for self-reported grades, it asked Latinx students to select one of the following options: "mostly A's", "mostly A's and B's", "mostly B's", "mostly B's and C's", "mostly C's", "mostly C's and D's", "mostly D's", or "not passing." It is common for students to have mostly passing or high grades, but one or two low or failing grades. Unfortunately, when a student has one or two low or failing grade point average (GPA) drops. Therefore, it is possible that a student who selected the survey response "mostly A's" or mostly "A's & B's" was being honest but has a lower grade point average due to a few failing grades.

Latinx students could have also reported higher grades than their grade point average because it is socially desirable or because this was their honest perception of their grades. Either possibility can be looked at as a strength. If they were reporting grades that are socially desirable, this demonstrates that middle school Latinx students understand the negative stigma of having low or failing grades. Provided that this is the case, it is a strength that Latinx students understand the benefits of reporting higher grades in middle school. If on the other hand, Latinx students reported their honest perception of their grades, this could indicate that Latinx students have a positive academic self-perception. Having a positive academic identity would be a strength to Latinx students' esteem and confidence. Even more promising is that there were some CCCs that were positively associated with Latinx students' self-reported grades.

### **CCCs** Associated with Self-Reported Grades

There was a positive relationship between linguistic capital and self-reported grades. It is important to note that the variable linguistic capital did not capture the full definition that Yosso (2005) provided; it focused on students' bilingualism and language confidence in English and Spanish but did not include the oral and communication strengths such as telling oral histories, giving advice/lectures (*consejos*), telling stories (*cuentos*), and speaking in proverbs (*dichos*) (Yosso, 2005). Nevertheless, the relationship among Latinx middle school students' self-reported grades and their linguistic capital substantiates existing literature where Latinx graduates reported that being bilingual gave them intellectual and social skills to navigate through school (Aragon, 2017; Burciaga & Erbstein, 2012; Liou et al., 2009; Peralta et al., 2013).

The middle school Latinx students' social capital was also associated with their self-reported grades. This upholds findings in the literature where Latinx students reported using their social capital to persevere through school (Alarcon & Bettez, 2017; Bejarano & Valverde, 2012; Jimenez, 2016; Luna & Martinez, 2013). Similar to the literature, the scale used for Latinx students' social capital in this study included student's friendships and involvement in community and school-based organizations. Hence, Latinx students social support system could be just as important in middle school and it is in higher education.

Of all the CCCs, resistant capital had the strongest relationship with middle school Latinx students' self-reported grades. Additionally, in the regression models with teacher-student relationships and school climate, the main effect of resistant capital significantly predicted self-reported grades. Again, Yosso (2005) defines resistant capital

as the resilience, knowledge, and skills fostered through challenging inequalities.

Although the scale used for resistant capital measured Latinx students' resilience, it did not specifically ask them whether they have challenged inequalities. However, findings from McWhirter, Gomez, & Rau (2019), reveal that high school Latinx students in the Pacific Northwest did have resistance capital, an awareness of inequalities, and how to make a difference in their community. McWhirter & McWhirter (2016) also found that for high school Latinx students in the Pacific Northwest, critical consciousness was associated with post-secondary plans, more engagement in school, and motivation. Luginbuh, McWhirter, & McWhirter (2016) found that sociopolitical development directly predicted Latinx students' school achievement and educational outcome expectations. Thus, it is possible that this relationship may be stronger if the scale captured middle school Latinx students' socio-political consciousness along with their resiliency. Nevertheless, the finding that resiliency itself is connected to Latinx student's self-reported grades supports findings from literature where Latinx graduates described their parent's resiliency as inspiring their own (Aragon, 2017; Araujo & Piedra, 2013; Espino, 2016; Saenz et al., 2017; Saenz, et al., 2018).

### **Utilizing Latinx Student Strengths in Middle School**

Again, rather than examining the deficits of middle school Latinx students, it is important to search for and recognize their overall strengths. Although the remaining CCCs (aspirational, familial, navigational) were not significantly related to Latinx students' self-reported grades and none of the CCCs were related to GPA scores, Latinx students did report having high levels of each CCC. For example, the students in this study did have a high amount of aspirational capital. Although there was no significant

relationship between aspirational capital and self-reported grades, the literature synthesis demonstrated that students' aspirational capital often derived from other types of capital; students aspired to succeed academically because of their family (familial capital) or to break down stereotypes of Latinx and combat systems of inequity (resistant capital) (Cuevas, 2016; Chang et al., 2017; Luna & Martinez, 2013; Perez, 2017). Hence, it could be that aspirational capital needs to be examined with other types of capital in order to detect trending or significant associations with students' self-reported grades.

The relationship between familial capital and Latinx students' self-reported grades was close to significant. This did not support findings in which Latinx students reported a strong connection between their family capital and academic success (Cuevas, 2016; Chang et al., 2017; Luna & Martinez, 2013; Perez, 2017; Perez & Taylor, 2016). In almost all of the literature, Latinx students expressed that their family helped them form many of the other types of capital, such as linguistic, resistant, aspirational (Espino, 2016; Locke et al., 2017; Perez-Huber, 2009; Saenz, et al., 2018). In this study, the middle school Latinx students also reported having high familial capital. Thus, it was surprising that the relationship between familial capital and self-reported grades was not significant. However, this could also indicate that familial capital is only associated with Latinx students' academic achievement when it interconnects or is combined with the other types of capital.

Like familial capital, the relationship between Latinx middle school students' navigational capital and self-reported grades was close to significant. Similar to aspirational capital, which also did not have a significant relationship, navigational capital was largely described as being based in the other types of capital by Latinx

students. For example, Latinx students stated that they used their social and linguistic to navigate through school (Duncheon, 2017; Duran & Perez, 2017; Straubhaar, 2013). Thus, the reason there was no significant relationship could be that navigational capital alone is not strongly associated with middle school Latinx students' self-reported grades. Like aspirational and familial capital, it is possible that navigational capital may only be significant when combined with the other types of CCC.

It is also likely that the reason there were so many insignificant relationships in this study is because the strengths Latinx students utilize to succeed in middle school are different than what is useful in high school or post-secondary school. It is important to acknowledge that the middle school Latinx students in this study are much younger in age than the high school, college, and graduate students that made up the majority of participants in prior CCC literature. Thus, the cognitive abilities of the Latinx students in my study was likely lower. However, I would caution against assuming that this difference in cognitive ability is an issue. The strengths Latinx students are mobilizing in middle school are likely appropriate for their age. Lastly, it could be that these strengths are entirely different than Yosso's (2005) six CCCs and have yet to be identified.

### **Dismantling Middle School Systemic Inequities.**

In addition to acknowledging middle school Latinx students' strengths, it is important to consider systemic inequities that could be contributing to the number of insignificant results in this study, as well as the discrepancy between Latinx students' self-reported grades and their GPA. Ideally, if Latinx students are reporting high grades, one would hope that their GPA scores would match those reports. Additionally, one

would hope that Latinx students' reports of high amounts of CCCs, would be positively associated with their academic achievement.

Often, inequities can exist in a school's climate or among teacher-student relationships. Even though school climate and teacher-student relationships were not significant moderators in this study, participants did report having positive teacherstudent relationships and an equitable school climate on average. In one of the regression models, the main effect of teacher-student relationships significantly predicted selfreported grades. Therefore, the insignificant relationship between middle school Latinx students CCCs and their academic achievement, as well as the discrepancy between GPA & self-reported grades, may be due to other systemic inequities. For example, it is important to acknowledge that the grade point average system may not be the most equitable, objective, and unbiased measure for academic achievement. Often students are failing one or two academic core subjects, which can drop a GPA score significantly. Unless grading is weighted, it is difficult to improve a GPA score. Therefore, in many ways students' grade point averages are heavily influenced by what students do not know and could be considered deficit-based. Also, due to the low stakes environment in middle school where GPA is not directly tied to credits, a diploma, or degree, teachers could be more inclined to give lower grades. Finally, often grades are tied to homework completion. Often inequities (i.e., poor housing, low income, limited food supply, limited access to internet, absence of childcare, parent/guardian's low education level, parent/guardian's high work load) stand as barriers to completing homework in middle school. Rather than place the burden on middle school Latinx students and their families,

perhaps schools should consider more equitable measures for academic achievement while working to combat some of these systemic inequities.

### Limitations

As with all research, my dissertation includes threats to both internal and external validity. Because my dissertation uses a single-group design, with data collected from a single point in time, the primary threats to internal validity in this study is instrumentation and response bias.

#### **Instrumentation**

One of the independent variables, linguistic capital, had some limitations. Yosso's (2005) definition for linguistic capital included students' bilingualism and language confidence in English and Spanish, as well as the oral and communication strengths such as telling oral histories, giving advice/lectures (*consejos*), telling stories (*cuentos*), and speaking in proverbs (*dichos*). Unfortunately, the scale used in this study only measured students' self-reported language confidence or strengths in Spanish and English. Therefore, the scale only represented half of Yosso's definition of linguistic capital. One other independent variable that did not fully incorporate the definition provided by Yosso (2005) was resistant capital. Yosso (2005) describes resistant capital as the resilience, knowledge, and skills fostered through challenging inequalities. The scale used in this study did measure Latinx students' resiliency but did not specifically mention inequalities.

### Statistical Analysis

Nested data (students inside of schools) was not accounted for with a hierarchical modeling approach so the degree of bias is unknown.

### **Response Bias**

Latinx students' self-reported grades could have some response bias. Although there was a moderately strong and statistically significant positive correlation between students' self-reported grades and their official GPA (R = .63), the two were not perfectly related. As a result, analytic results differ depending on whether the dependent variable was self-reported grades or official GPA. The discrepancy could be due to students wanting to report socially desirable grades. In spite of this, Latinx students' self-reported grades were still included as one of the measures in this study as the two sources of achievement-related data added important topics to the discussion regarding the deficitbased aspects of GPA, as well as middle school systemic inequities and Latinx students' strengths in middle school.

### Threats to External Validity

This study focused on Oregonian, Latinx middle school students in three school districts. The data may not be generalizable to all Oregonian, Latinx middle school students. The three districts included in this study are all located in the Springfield or Eugene, Oregon area. This region is different from other areas of Oregon where Latinx students live in smaller, rural cities, or more populous urban areas. Although the population of Latinx students in Oregon is growing, this study is not generalizable to other states with different historical trends in the population of Latinx students.

#### **Implications for Future Research**

This quantitative study focused on the relationship between six different types of CCC and academic achievement. Due to the lack of quantitative research on this topic, I recommend further quantitative research with original scales that are designed with the

intent of measuring the CCCs. Linguistic capital had a significant relationship with selfreported grades, but not GPA. However, this study only measured the bilingual aspect of linguistic capital and did not capture the oral communication strengths: oral histories, giving advice/lectures (consejos), telling stories (cuentos), and speaking in proverbs (dichos). Thus, further quantitative research could include all aspects of linguistic capital to see if the relationship between linguistic capital and academic achievement is significant. Resistant capital also did not capture the full definition as it focused on Latinx students' resiliency but did not measure resiliency developed from challenging inequalities. Therefore, I recommend quantitative research using a resistant capital scale that fully measures Yosso's (2005) definition of resistant capital. Although social capital and resistant capital were not significantly associated with GPA, they were associated with self-reported grades. Hence, further mixed methods research could explore methods for increasing social and resistant capital at the middle school level and measuring whether these programs are associated with Latinx students' academic achievement. In addition, more research is needed to explore whether these relationships exist in upper elementary school.

Familial, navigational, and aspirational capital did not have significant relationships with self-reported grades nor GPA. Therefore, further quantitative research could explore whether familial, navigational, and aspirational capital are significant when combined with the other CCCs or whether they act as moderators and influence the strength of the other significant capitals. This might also be worth exploring as Latinx students reported the interconnectedness of the CCCs throughout the literature synthesis (Espino, 2016; Liou et al., 2009; Locke et al., 2017). The discrepancy between Latinx

students' self-reported grades and their GPA could also be explored further. Future qualitative research could compare middle school Latinx student's academic selfperception to their GPA scores. Finally, it is important to continue to explore why the relationships among Latinx students' grade point average and their CCC were not significant. The literature synthesis demonstrated that the relationship was significant among Latinx graduates who obtained success (Aragon, 2017; Liou et al., 2009; Peralta, 2013; Perez-Huber, 2009). For this reason, it would be interesting to study whether a certain amount of CCC, a combination of CCCs, or other CCCs that are not yet identified are significantly related to academic achievement among middle school Latinx students.

### **Implications of Practice**

Of the six CCCs examined in this study, resistant capital had one of the strongest relationships with self-reported grades. This finding supports the idea that schools should offer more programs or clubs/organizations where Latinx students can discuss and address sociopolitical issues as resistant capital is built from resiliency and the experience of challenging inequalities. As mentioned, McWhirter and McWhirter (2016) found that critical consciousness was associated with more academic motivation and post-secondary plans. Social capital and linguistic capital were also significantly related to self-reported grades. McWhirter and McWhirter (2016) also found that critical consciousness in Latinx students in the Pacific Northwest was associated with speaking more Spanish and higher participation in social activities. Therefore, the implementation of programs that foster critical consciousness would not only build on Latinx students' resistant capital, but their linguistic and social capitals as well.

This study also raised questions regarding the equity of grade point average as a measure for academic achievement. Often grades are connected to homework completion. However, there are many inequities such as poor housing, low income, limited food supply, limited access to internet, absence of childcare, parent/guardian's low education level, parent/guardian's high work load that contribute to low homework completion in middle school. Schools could work to break down these systemic inequities. In addition, middle schools might consider designing other measures for academic achievement that are more equitable.

### Conclusion

Instead of focusing on Latinx students' deficits, this study focused on Latinx students' strengths and dismantling systemic inequities. This study adds to existing literature on the important relationship between Latinx students' community cultural capitals (CCCs) and their academic achievement. Specifically, it adds new insight into this relationship among middle school, Latinx students in the Pacific Northwest.

The measures for academic achievement in this study were grade point average and self-reported grades. Latinx students reported higher grades than their GPA. This could be because they understood which grades were more socially desirable or because they have a positive academic self-perception. Both can be looked at as strengths in middle school Latinx students. It was also promising that Latinx students' linguistic, resistant, and social capital were associated with their self-reported grades. This could make a case for increasing more socio-political programs, clubs, or organizations in middle school. These might provide spaces for Latinx students to build on their existing linguistic, social, and resistant capitals or strengths. Even though Latinx students reported

that their navigational, aspirational, and familial capitals were high, none were significantly related to self-reported grades. This finding creates an opportunity to examine whether these capitals are significant when interconnected with the other types of capital or whether they act as moderators for the other types of capital.

Existing CCC literature demonstrates that when Latinx graduates reflect on their previous schooling experiences, their CCCs were significantly related to their academic achievement. Surprisingly, none of the CCCs were significantly related to GPA in my study. This could be because my participants were in middle school whereas the participants in prior literature were mainly high school, college, or graduate students with different cognitive abilities. In addition, it could be that Latinx students are utilizing entirely different capitals for academic success in middle school than those that were identified by Yosso (2005).

The Latinx students in this study did report having a high amount of each CCC. When middle school Latinx students' capitals do not positively relate to their academic achievement, we should also consider systemic inequities that might be barriers to this link. In my study, I found that teacher-student relationships and school climate were not moderators on the relationships between CCC and academic achievement. Yet, on average, Latinx students did report having positive relationships with their teachers and having an equitable school climate. Thus, it is likely that other inequities might influence the relationship between Latinx students CCCs and their academic achievement in middle school. It is important to note that grades are assigned by teachers and can be subjective. For example, because middle school is a low stakes environment, teachers may be more comfortable giving lower grades. Additionally, grades are often based on homework

completion. Yet, many inequities can stand in the way of a students' ability to complete homework. Thus, schools could consider working to reduce inequities, improving the equity of their grading practices, or designing a more equitable measure for academic achievement.

Again, the Latinx students in this study reported higher self-reported grades, a high amount of CCCs in middle school, an equitable school climate, and positive relationships with their teachers. Yet, there were few significant results in this study. One would hope that if Latinx students are making positive reports on their grades, CCC, relationships with teachers, and school climate, that this would be related to their grade point averages. For this reason, further research on Latinx students' strengths and equitable changes to school practice are needed to ensure that Latinx students' strengths relate to their academic success in middle school.

#### APPENDIX

Table A1

Aspirational Capital Items

Aspirational Capital Questions	Aspirational Capital Scale
1. During the past weekI felt depressed.	1 = Most or all of the time (5-7 days) 2 = Occasionally or a moderate amount of time (3-4 days)
2. During the past week I felt that everything I did was an effort.	<ul><li>3 = Some or a little of the time (1-2 days)</li><li>4= Rarely or none of the time (-1 day)</li></ul>
3. During the past week I felt fearful.	
<ol> <li>During the past week My sleep was restless.</li> </ol>	
5. During the past week I was happy.	
<ol> <li>During the past week I felt lonely.</li> </ol>	
<ol> <li>During the past weekpeople were unfriendly.</li> </ol>	
8. During the past week I enjoyed life.	
9. During the past week I felt sad.	
10. During the past weekI felt that people disliked me.	
11. During the past week I could not "get going."	

### Familial Capital Items

Famili	ial Capital Questions	Familial Capital Scale
1.	During the last three monthsmy parents listened attentively when I needed to talk to them.	4=Often 3=Sometimes 2=Rarely 1=Never
2.	During the last three monthsmy parents and I regularly did things together we both enjoy.	
3.	During the last three monthsI have had several friendly chats with my parents.	
4.	During the last three monthsmy parents have said or done things that showed me that they care about/love me (like kind words, hugs.)	
5.	During the last three monthsI felt close with my parents.	
6.	During the last three monthsmy parents are aware of the goals I have for my life.	

# Linguistic Capital Items

Linguistic Capital Questions	Linguistic Capital Scale for All Items
<ul><li>1.How comfortable do you feel speaking Spanish at home?</li><li>2.How comfortable do you feel speaking</li></ul>	5= Very Comfortable 4= Comfortable 3= More or Less Comfortable 2= Somewhat Comfortable
Spanish at school?	1= Not at All Comfortable
3. How comfortable do you feel speaking Spanish with friends?	
4.How comfortable do you feel speaking Spanish in general?	
5.How comfortable do you feel speaking English at home?	
6.How comfortable do you feel speaking English at school?	
7.How comfortable do you feel speaking English with friends?	
8.How comfortable do you feel speaking English in general?	

# Navigational Capital Items

Navigational Capital Questions	Navigational Capital Scale
<ol> <li>I take active steps tounderstand the difference between earning a high school diploma and earning a GED.</li> <li>I take active steps toget involved in school activities (homework club, student activities, clubs, etc.)</li> </ol>	4=Strongly Agree 3=Agree 2=Disagree 1=Strongly Disagree
3. I take active steps todo my best in school so I can reach my future education and career goals.	
4 I take active steps toask my parents to help me think about what I want for my future.	
5. I take active steps toseek out educational opportunities after high school.	
6. I knowthe steps I need to take in order to pursue my educational and/or career dreams.	
7. I knowwhat it takes to continue my education after high school.	
8. I knowwhat the educational and career choices are for me after high school.	
9. I feelI am a good student.	
10. I feeleducation is important to me.	
11. I feelI am making the most of my education and skills to be successful in life after high school.	

# Resistant Capital Items

Resist	ant Capital Questions	Resistant Capital Scale
1.	I think I am doing pretty well.	6= All of the Time 5= Almost Always
2.	I can think of many ways to get the things in life that are most important to me.	4= Often 3= Sometimes 2= Almost Never 1= None of the Time
3.	When I have a problem, I can come up with lots of ways to solve it.	
4.	I think the things I have done in the past will help me in the future.	
5.	Even when others want to quit, I know that I can find ways to solve the problem.	

# Social Capital Items

Social C	Capital Questions	Social Capital Scale
1. I	have at least one good friend at school.	4=Strongly Agree
2. I	can talk to my friend (s) when I have a problem.	3=Agree 2=Disagree
3. I	trust my friend(s).	1=Strongly Disagree
4. N	My friend (s) are a good support for me.	
5. I	am happy with my friend group.	
	During the last month, my friendshave been a good influence on my life.	
	During the last month, my friendshave taken full advantage of school opportunities.	
	During the last month, my friendshave communicated espectfully with adults.	
	During the last month, my friendshave tried smoking eigarettes.	
10. E	During the last month, my friendshave used alcohol or drugs.	
а	During the last month, my friendshave been physically aggressive toward other people (hitting, punching, or physically hreatening).	
	During the last month, my friends encouraged me to do hings that I don't feel comfortable doing.	
	During the last month, my friendsmay have been involved in gangs.	
	I get actively involved in school events such as student government, sports teams, music groups, etc.	
	help out in community events such as programs at my church, or with other community groups.	
	participate in groups/activities outside of school (sports, scouts, soccer, church, music, etc.)	
<u>17. I</u>	t is important to me to be a helpful member of my community.	

# Reliability of Independent Variables

Independent Variable	Cronbach's Alpha	Number of Items
Aspirational Capital	.75	11
Familial Capital	.75	6
Linguistic Capital	.70	8
Navigational Capital	.89	11
Resistant Capital	.83	5
Social Capital	.82	17
Teacher-Student	.91	11
Relationships School Climate	.89	15

# RQ 2 Moderator: Teacher Student Relationship

Teacher Student Relationship Questions	Teacher Student Relationship Scale
1. This school year I have a good relationship with at least one of my teachers.	4=Strongly Agree 3=Agree 2=Disagree
2. This school year I feel at least one of my teachers cares about me.	1=Strongly Disagree
3. This school year I feel supported to do my best by at least one of my teachers.	
4. This school year I am treated with respect by most of my teachers.	
5. This school year There is at least one teacher or adult at my school I feel comfortable talking to if I had concerns or conflicts.	
6. This school year I feel my teachers are fair.	
7. This school year I feel my teachers are willing to help me if I had a hard time understanding something.	
8. This school year I believe my teachers want to see me succeed in school and in life.	
9. This school year If I had a conflict with a teacher, I feel confident we would work through it together.	
10. This school year If I had a problem at school, my parents and my teacher would work together to solve it.	
11. This school year Most of my teachers understand my family's culture and background.	

# RQ3 Moderator: School Climate

School Climate Questions	School Climate Scale
1. This year, at my school I feelI am treated with respect and that my opinions matter.	4=Strongly Agree 3=Agree
2. This year, at my school I feelthe teachers and administrators create a positive learning space.	2=Disagree 1=Strongly Disagree
3. This year, at my school I feelsafe at my school.	
4. This year, at my school I feelmy parents know they are welcome at my school.	
5. This year, at my school I feel that students get along well.	
6. This year, at my school I feel that we see different races, cultures, genders, and differing physical abilities represented in a positive way.	
7. This year, at my school I feel the diversity of races, cultures and languages of the student body is seen as an asset to this school.	
8. This year, at my school I feel opportunities are available for my family members, such as English Language Learner classes, computer access, home-language literacy classes, parenting classes, etc.	
9. This year, at my school I feel family and community members are communicated with in their home language.	
10. This year, at my school I feel there are high expectations for all students.	
11. This year, at my school I feel our textbooks and other materials reflect the culture and ethnicity of all students.	
12. This year, at my school I feel the cultures and experiences of students are welcome in the classroom.	
13. This year, at my school I feel the class materials and readings used contain multiple or diverse perspectives.	
14. This year, at my school I feel discriminated against.	
15. This year, at my school I feellike an important member of this school.	

#### **REFERENCES CITED**

- Alarcón, J. D., & Bettez, S. (2017). Feeling brown in the academy: Decolonizing mentoring through a disidentification muxerista approach. *Equity & Excellence in Education*, 50, 25-40. doi:10.1080/10665684.2016.1250234
- Aragon, A. (2018). Achieving Latina students: Aspirational counterstories and critical reflections on parental community cultural wealth. *Journal of Latinos and Education*, 17, 373-385.doi: 10.1080/15348431.2017.1355804
- Araujo, B., & Piedra, M. T. (2013). Violence on the US–Mexico border and the capital students use in response. *International journal of qualitative studies in education*, 26, 263-278. doi:10.1080/09518398.2012.762475
- Arce, S. (2010). TUSD Mexican American Studies Department: Presentation to the TUSD Governing Board [PowerPoint Slides].
- Babbie, E. (2012). *The practice of social research* (13th ed.) Belmont, CA: Wadsworth.
- Baum, C. L., & Ruhm, C. J. (2009). Age, socioeconomic status, and obesity growth. Journal of Health Economics, 28, 635–648. doi:10.1016/j.jhealeco.2009.01.004
- Bejarano, C., & Valverde, M. (2012). From the fields to the university: Charting educational access and success for farmworker students using a Community Cultural Wealth framework. *Association of Mexican American Educators Journal*, 6(2), 22-29. Retrieved from https://www.semanticscholar.org/paper/From-the-Fields-to-the-University%3A-Charting-Access-Bejarano-Valverde/6d52a1ba376a9cd7ebb3a7c4cb1f50164bb3eb12
- Brandon, W.W. (2003). Toward a white teacher's guide to playing fair: Exploring the cultural politics of multicultural teaching. *Qualitative Studies in Education, 16,* 31-50. doi:10.108 0/0951839032000033518
- Burciaga, R., & Erbstein, N. (2012). Latina/o dropouts: Generating community cultural wealth. Association of Mexican American Educators Journal, 6(1), 24-33.
  Retrieved from https://www.researchgate.net/publication/260018369\_Burciaga\_R\_and\_Erbstein\_N\_2013\_Latinao\_Dropouts\_Generating\_Community\_Cultural\_Wealth\_Associati on\_of\_Mexican\_American\_Educators\_Journal\_v6\_n1\_p24-33
- Castagno, A. E. (2014). *Educated in whiteness: Good intentions and diversity in schools*. University of Minnesota Press.

- Chafouleas, S. M., Johnson, A. H., Overstreet, S., & Santos, N. M. (2015). Toward a blueprint of trauma-informed service delivery in schools. *School Mental Health*, *8*, 144-162. doi:10.1 007/s12310-015-9166-8
- Chang, A., Torrez, M. A., Ferguson, K. N., & Sagar, A. (2017). Figured worlds and American dreams: An exploration of agency and identity among Latinx undocumented students. *The Urban Review*, 49, 189-216. doi:10.1007/s11256-017-0397
- Cole, S. F. Eisner, A., Gregory, M., & Ristuccia, J. (2013). Creating and advocating for trauma-sensitive schools. *Massachusetts Advocates for Children*, 1, 1-9. Retrieved from https://-www.traumasensitiveschools.com
- Creswell, J. W., & Creswell, J.D. (2018). *Research design: Qualitative, quantitative, and mixed methods approaches.* Thousand Oaks, CA: Sage.
- Cuellar, I., Arnold, B., and Maldonado, R. (1995). Acculturation Rating Scale for Mexican Americans-II: A revision of the original ARSMA scale. *Hispanic Journal of Behavioral Sciences*, *17*:3 275-304. doi:10.1177/07399863950173001
- Cuevas, P. A. (2016). The journey from de-culturalization to community cultural wealth: The power of a counter story-telling curriculum and how educational leaders can transform schools. *Association of Mexican American Educators Journal*, *10*. doi:10.1177/0013161X19847513
- Cutler, D. M., & Lleras-Muney, A. (2010). Understanding differences in health behaviors by education. *Journal of Health Economics*, 29(1), 1–28. doi: 10.1016/j.jhealeco.2009.10.003
- Dee, T. S. (2004). Are there civic returns to education? *Journal of Public Economics*, 88, 1697–1720. doi: 10.1016/j.jpubeco.2003.11.002
- DeNicolo, C. P., González, M., Morales, S., & Romaní, L. (2015). Teaching through testimonio: Accessing community cultural wealth in school. *Journal of Latinos* and Education, 14, 228-243. doi: 10.1080/15348431.2014.1000541
- Dinh, K. T., Roosa, M. W., Tein J.-Y., & Lopez, V. A. (2002). The relationship between acculturation and problem behavior proneness in a Hispanic youth sample: A longitudinal mediational model. *Journal of Abnormal Psychology*, 30, 295-309. doi:10.1023/A:1015111014775
- Dorado, J. S., Martinez, M., McArthur, L. E., & Liebovitz, T. (2016). Healthy Environments and Response to Trauma in Schools (HEARTS): A school based, multi-level comprehensive prevention and intervention program for creating trauma-informed, safe and supportive schools. *School Mental Health*, *8*, 163-176. doi:10.1007/s12310-016-9177-0

- Durand, T. M. (2011). Latino parental involvement in kindergarten: Findings from the early childhood longitudinal study. *Hispanic Journal of Behavioral Sciences*, *33*, 469-489. doi:10.1177/0739986311423077
- Duran, A., & Pérez II, D. (2019). The multiple roles of chosen familia: Exploring the interconnections of queer Latino men's community cultural wealth. *International Journal of Qualitative Studies in Education*, 32, 67-84. doi:org/10.1080/09518398.2018.1523484
- Duncheon, J. C. (2018). "You have to be able to adjust your own self": Latinx students' transitions into college from a low-performing urban high school. *Journal of Latinos and Education*, *17*, 358-372. doi.org/10.1080/15348431.2017.1355248
- Espino, M. M. (2014). Exploring the role of community cultural wealth in graduate school access and persistence for Mexican American PhDs. *American Journal of Education*, *120*, 545-574. doi:10.1086/676911
- Espino, M. M. (2016). The value of education and educación: Nurturing Mexican American children's educational aspirations to the doctorate. *Journal of Latinos and Education*, *15*, 73-90. doi:10.1080/15348431.2015.1066250
- Flores, B. (2005). The intellectual presence of the deficit view of Spanish-speaking children in the educational literature during the 20th century. In Pedraza, P., & Rivera, M. (Eds.), *Latino education: An agenda for community action research*. Mahwah, NJ: Lawrence Erlbaum Associates.
- Garcia, E. E., & Ozturk, M. (2017). An asset-based approach to Latino education in the United States: Understanding gaps and advances. New York: Routledge.
- Ginwright, S. (2018). The future of healing: Shifting from trauma informed care to healing centered engagement. *Medium*, 1-9. Retrieved from https://medium.com/@ginwright/the-future-of-healing-shifting-from-trauma-informed-care-to-healing-centered-engagement-634f557ce69c
- Gorski, P. C. (2008). The myth of the 'culture of poverty.' *Educational Leadership*, 65, 32-36. Retrieved from https://www.researchgate.net/profile/Paul\_Gorski/publication/22862092-4\_The\_Myth\_of\_theCulture\_of\_Poverty%27%27/links/0deec52fb64a071aa30000 00/The-Myth-of-the-Culture-of-Poverty.pdf
- Gutiérrez, R. (2008). A "gap-gazing" fetish in mathematics education? Problematizing research on the achievement gap. *Journal for Research in Mathematics Education*, *39*, 357-364. Retrieved from https://www.jstor.org/stable/40539302?seq=1#metadata\_info\_tab\_c-ontents

- Hout, M. (2012). Social and economics returns to college education in the United States. *Annual Review of Sociology*, 38(1), 379–400. doi:10.1146/annurev.soc.012809.102503
- Huber, L. P., & Cueva, B. M. (2012). Chicana/Latina testimonios on effects and responses to microaggressions. *Equity & Excellence in Education*, 45, 392-410. doi:10.1080/1066568 4.2012.698193
- Hyers, M. (2012). Familias Saludables (Healthy Families) Youth Questionnaire. Center for Equity Promotion, College of Education, University of Oregon. Eugene, OR.
- Hyers, M., Martinez, C. R. & Ruth, B. (2016). Proyecto Juntos (Together Project) Youth Questionnaire. Center for Equity Promotion, College of Education, University of Oregon. Eugene, OR.
- Jiménez, R. M. (2016). "Nuestro camino es más largo" (Our Journey Is Much Longer): A testimonio of immigrant life in the central valley and the road towards the professoriate. *Association of Mexican American Educators Journal*, *10*. doi:10.3102/0002831219866148
- Kouyoumdjian, C., Guzmán, B. L., Garcia, N. M., & Talavera-Bustillos, V. (2017). A community cultural wealth examination of sources of support and challenges among Latino first-and second-generation college students at a Hispanic serving institution. *Journal of Hispanic Higher Education*, 16(1), 61-76. doi:10.1177/1538192715619995
- Ladson-Billings, G. (1998). Just what is critical race theory and what's it doing in a nice field like education? *International Journal of Qualitative Studies in Education*, *11*(1), 7-24. doi:10.1080/095183998236863
- Ladson-Billings, G. (2006). From the achievement gap to the education debt: Understanding achievement in US schools. *Educational Researcher*, 35(7), 3-12. Retrieved from https://journals.sagepub.com/doi/abs/10.3102/0013189x035007003
- Ladson-Billings, G. (2007). Pushing past the achievement gap: An essay on the language of deficit. *The Journal of Negro Education*, *76*, 316-323. Retrieved from https://www.jstor.-org/stable/40034574
- Ladson-Billings, G. (2014). Culturally relevant pedagogy 2.0: Aka the remix. *Harvard Educational Review*, 84(1), 74-84. doi:10.17763/haer.84.1.p2rj131485484751

- Luna, N. A., & Martinez, M. (2013). A qualitative study using community cultural wealth to understand the educational experiences of Latino college students. *Journal of Praxis in Multicultural Education*, 7, 2. Retrieved from https://digitalscholarship.unlv.edu/cgi/viewcontent.cgi?article=1045&context=jp me
- Liou, D. D., Antrop-Gonzalez, R., & Cooper, R. (2009). Unveiling the promise of community cultural wealth to sustaining Latina/o students' college-going information networks. *Educational Studies*, 45, 534-555. doi: 10.1080/00131940903311347
- Liou, D. D., & Rojas, L. (2016). Teaching for empowerment and excellence: The transformative potential of teacher expectations in an urban Latina/o classroom. *The Urban Review*, 48, 380-402. doi: 10.1007/s11256-016-0359-8
- Locke, L. A., Tabron, L. A., & Venzant Chambers, T. T. (2017). "If you show who you are, then they are going to try to fix you": The capitals and costs of schooling for high-achieving Latina students. *Educational studies*, 53(1), 13-36. doi:10.1080/00131946.2016.1261027
- Luginbuhl, P. J., McWhirter, E. H., & McWhirter, B. T. (2016). Sociopolitical development, autonomous motivation, and education outcomes: Implications for low-income Latina/o adolescents. *Journal of Latina/o Psychology*, 4(1), 43. doi:10.1037/lat0000041
- Ma, J., Pender, M., Welch, M. (2016). Education pays 2016: The benefits of higher education for individuals and society. *College Board*, 1, 1-44. Retrieved from https://trends.collegeboa-rd.org/sites/default/files/education-pays-2016-fullreport.pdf
- Martinez, C. R. & Ruth, B. (2002). Peer Relationships. Oregon Social Learning Center. Eugene, OR.
- Martinez, C. R. & Ruth, B (2005). Youth School and Community Involvement. Oregon Social Learning Center. Eugene, OR.
- Martinez, M. A. (2012). Wealth, stereotypes, and issues of prestige: The college choice experience of Mexican American students within their community context. *Journal of Hispanic Higher Education*, 11(1), 67-81. doi:10.1177/1538192711428992
- Martinez, M. A., Chang, A., & Welton, A. D. (2017). Assistant professors of color confront the inequitable terrain of academia: A community cultural wealth perspective. *Race Ethnicity and Education*, 20, 696-710. doi:10.1080/13613324.2016.1150826

- Martin-Beltrán, M., Montoya-Ávila, A., García, A. A., & Canales, N. (2018). Do you want to tell your own narrative?": How one teacher and her students engage in resistance by leveraging community cultural wealth. Association of Mexican American Educators Journal, 12, 97-121. DOI: 10.24974/amae.12.3.408
- McWhirter, E. H., Garcia, E. A., & Bines, D. (2018). Discrimination and other education barriers, school connectedness, and thoughts of dropping out among Latina/o students. *Journal of Career Development*, *45*, 330-344.
- McWhirter, E. H., Gomez, D., & Rau, E. D. (2019). "Never give up. Fight for what you believe in": Perceptions of how Latina/o adolescents can make a difference. *Cultural Diversity and Ethnic Minority Psychology*, 25(3), 403. doi:10.1037/cdp0000254
- McWhirter, E. H., Luginbuhl, P. J., & Brown, K. (2014). ¡Apóyenos! Latina/o student recommendations for high school supports. *Journal of Career Development*, 41, 3-23. doi: 10.1177/0894845312470511
- McWhirter, E. H., & McWhirter, B. T. (2016). Critical consciousness and vocational development among Latina/o high school youth: Initial development and testing of a measure. *Journal of Career Assessment*, 24, 543-558. doi: 10.1177/1069072715599535
- McWhirter, E. H., Valdez, M., & Caban, A. R. (2013). Latina adolescents' plans, barriers, and supports: A focus group study. *Journal of Latina/o Psychology*, 1(1), 35. doi: 10.1037/a0031304
- Mirowsky, J., & Ross, C. E. (2003). *Education, social status, and health*. Somerset, NY: Aldine de Gruyter.
- Overstreet, S., & Chafouleas, S. M. (2016). Trauma-informed schools: Introduction to the special issue. *School Mental Health*, 8(1), 1-6. doi:10.1007/s12310-016-9184-1
- Peralta, C. (2013). Fractured memories, mended lives: The schooling experiences of Latinas/os in rural areas. *Bilingual Research Journal*, *36*, 228-243. https://doi.org/10.1080/15235882.2013.818594
- Peralta, C., Caspary, M., & Boothe, D. (2013). Success factors impacting Latina/o persistence in higher education leading to STEM opportunities. *Cultural Studies* of Science Education, 8, 905-918. doi: 10.1007/s11422-013-9520-9
- Pérez, D. (2014). Exploring the nexus between community cultural wealth and the academic and social experiences of Latino male achievers at two predominantly White research universities. *International Journal of Qualitative Studies in Education*, 27, 747-767. doi:10.1080/09518398.2014.901573

- Pérez II, D. (2017). In pursuit of success: Latino male college students exercising academic determination and community cultural wealth. *Journal of College Student Development*, 58(2), 123-140. die:10.1353/csd.2017.0011
- Perez-Huber, L. (2009). Challenging racist nativist framing: Acknowledging the community cultural wealth of undocumented Chicana college students to reframe the immigration debate. *Harvard Educational Review*, *79*, 704-730. Retrieved https://pdfs.semanticscholar.org/1dc3/a82326dfbed145f30cc42cd879fde1fd21c3.p df? ga=2.151248624.895717748.1586672898-862564762.1586672898
- Pérez, I. I., & Taylor, K. B. (2016). Cultivando logradores: Nurturing and sustaining Latino male success in higher education. *Journal of Diversity in Higher Education*, 9, 1. doi:10.1037/a0039145
- Radloff, L. S. (1977). The CES-D Scale: A self-report depression scale for research in the general population. *Applied Psychological Measurement*, 1(3), 385– 401. doi:10.1177/014662167700100306
- Ramirez, A. F. (2003). Dismay and disappointment: Parental involvement of Latino immigrant parents. *The Urban Review*, 35, 93-110. doi:10.1023/A:1023705511946
- Remler, D. K., & Van Ryzin G. G. (2015). *Research methods: Strategies for Description and Causation*. Thousand Oaks, CA: Sage.
- Robinson, S. M., Crozier, S. R., Borland, S. E., Hammond, J., Barker, D. J. P., & Inskip, H. M. (2004). Impact of educational attainment on the quality of young women's diets. *European Journal of Clinical Nutrition*, 58, 1174. Retrieved from https://www.nature.com/articles/1601946
- Sáenz, V. B., García-Louis, C., Drake, A. P., & Guida, T. (2018). Leveraging their family capital: How Latino males successfully navigate the community college. *Community College Review*, 46, 40-61. doi.org:10.1177/0091552117743567
- Saenz, V. B., Mercedez, C., Rodriguez, S. L., & Garcia-Louis, C. (2017). Latino men and their fathers: Exploring how community cultural wealth influences their community college success. Association of Mexican American Educators Journal, 11, 89. doi:10.24974/amae.11.2.351
- Shah, P. (2009). Motivating participation: The symbolic effects of Latino representation on parent school involvement. *Social Science Quarterly*, 90, 212-230. doi: 10.1111/j.1540-6237.2009.00612

- Snyder, C. R., Hoza, B., Pelham, W. E., Rapoff, M., Ware, L., Danovsky, M., ... & Stahl, K. J. (1997). The development and validation of the Children's Hope Scale. *Journal of pediatric psychology*, 22, 399-421. doi:10.1093/jpepsy/22.3.399
- Straubhaar, R. (2013). Student use of aspirational and linguistic social capital in an urban immigrant-centered English immersion high school. *The High School Journal*, 97, 92-106. doi:10.1353/hsj.2013.0026
- Szapocznik J, Kurtines W, Fernandez T. Biculturalism and adjustment among Hispanic youths. International Journal of Intercultural Relations. 1980;4:353–375.
- Tindal, G. A., & Marston, D. B. (1990). *Classroom-based assessment: Evaluating instructional outcomes*. Columbus, OH: Merrill.
- U.S. Census Bureau (2016). *Educational Attainment in the United States: 2015*. Retrieved from https://www.census.gov/content/dam/Census/library/publications/2016/demo/p20-578.pdf
- Valencia, R. R. (1997). *The evolution of deficit thinking: Educational thought and practice*. London, UK: Falmer.
- Valencia, R. R. (2010). *Dismantling contemporary deficit thinking: Educational thought and practice*. New York: Routledge.
- Valenzuela, A. (1999). Subtractive schooling: U.S Mexican youth and the politics of caring. Albany, NY: SUNY.
- Ventura, J. (2017). "We created that space with everybody:" Constructing a communitybased space of belonging and familia in a Latina/o youth group. *Association of Mexican American Educators Journal*, 11, 23-37. doi:org/10.24974/amae.11.326
- Viloria, M. D. L. (2019). Culturally responsive leadership practices: A principal's reflection. *Journal of Latinos and Education*, 18(2), 171-177. doi:10.1080/15348431.2017.1371604
- Yosso, T. J. (2005). Whose culture has capital? A critical race theory discussion of community cultural wealth. *Race Ethnicity and Education*, 8(1), 69-91. doi:10.1080/1361332052000 341006