

**Adaptive Culture, Ethnic-Racial Identity, and Social Class Identity: Associations with Academic Adjustment Among Latinx College Students**

by

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## **Dedication**

To all my past selves. To the Jess who went to the river to find herself that day; it is over, you are safe, and you are home. I am so incredibly proud of you.

## Acknowledgements

Per Ecological Systems Theory, I would like to express my greatest appreciation and gratitude to the people who supported me throughout this journey. It truly takes a village and I could not have done it without you.

### At the Chronosystem Level

*COVID-19 Pandemic.* Navigating the pandemic amidst graduate school was harrowing, yet the experience put things into perspective for me. It reminded me of how privileged I am to have my basic needs met on a daily basis, how important my family and friends are, and how much an in-person hang out can do for the soul. For better or for worse, the pandemic showed me the ways in which I was neglecting my health and the ways in which I had let my academic pursuits strip me of my wellbeing. It made me pivot quickly, and just in the nick of time. It also showed me what I value most in this life, and how a life without health and without the physical presence of your loved ones is not a life well-lived.

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### At the Macrosystem Level

*Privileges afforded to me because of Socioeconomic status and ethnicity-race.* As an identity scholar who examines social class and ethnic-racial identity, I would be remiss in not acknowledging the privileges afforded to me by my socioeconomic status and ethnicity-race (which work in tandem to shape adjustment). I am fortunate to know poverty only in narrative form, via my parents' stories of growing up poor in Cuba and Colombia. Their own successful pursuits of the American dream have allowed me to be able to afford a life in and travel between Los Angeles and Ann Arbor, two very wealthy cities. Without my Papi, I would not have the financial resources, literacy, fiscal habits, and importantly, the understanding of generational wealth that I have today. As a Cuban and Colombian doctoral student, my research is my me-search. It is one thing to speak of your work through a lens of theory and data, and it is another

thing entirely to live the very thing you study. I am immensely grateful that I am capable of both, and this work will always be close to my heart because of my identities. To me, being Latina is not only synonymous with my ethnic-racial group; it is synonymous with community, with *amiguis*, and with *familia*. It is synonymous with *café con leche*, *café de olla*, *flan*, *arepas*, *tamales*, *tacos*, *ropa vieja*, *papa rellena*, *puerco*, *la comparsa*, *bachata*, *cumbia*, *un cigarro*, *Agua de Violeta*, y *salsa*. I am forever honored, forever proud, forever grateful to be welcomed by my Latinx family wherever I go.

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## Table of Contents

<b>Dedication .....</b>	<b>ii</b>
<b>Acknowledgements .....</b>	<b>iii</b>
<b>List of Tables .....</b>	<b>xvi</b>
<b>List of Figures.....</b>	<b>xvii</b>
<b>List of Appendices.....</b>	<b>xviii</b>
<b>Abstract.....</b>	<b>xix</b>
<b>Chapter I: Introduction.....</b>	<b>1</b>
Statement of the Problem .....	3
Significance of the Study .....	4
Theoretical Framework .....	6
Research Questions .....	8
Organization of the Dissertation.....	9
References .....	11
<b>Chapter II (Study 1): A Latent Profile Analysis of Adaptive Culture Among Latinx College Students.....</b>	<b>18</b>
Current Study .....	28
Method.....	28
Results .....	33
Discussion .....	40
Conclusion.....	45
References .....	47
<b>Chapter III (Study 2): Intersections of Ethnic-Racial and Social Class Identity Among Latinx College Students.....</b>	<b>64</b>
Theoretical Framework .....	67
Research Aims and Hypotheses .....	84
Method.....	86
Results .....	92
Discussion .....	103
Conclusion.....	110
References .....	112
<b>Chapter IV: Discussion.....</b>	<b>132</b>
Research Question 1: What is the Variability of Aspects of Adaptive Culture Among a Sample of Socioeconomically Diverse Latinx Students?.....	132
Research Question 2: How do Various Aspects of Adaptive Culture Inform Latinx Students' Academic Adjustment, Specifically their Academic Engagement and Academic Self-Concept? .....	136

Research Question 3: How do Dimensions of Social Class Identity (SCI) Intersect with Dimensions of Ethnic-Racial Identity (ERI) to Shape Latinx College Students' Academic Adjustment at PWIs, Specifically their Feelings of Campus Inferiorization, Perceived Ethnic Fit, and College Competence?.....	139
Research Question 4: How are the Relations of SCI and ERI with Academic Outcomes Moderated by Gender Among Latinx College Students Attending PWIs?.....	144
Integrative Discussion: How do Ethnic-Racial Experiences and Socioeconomic Experiences Interact to Influence Academic Adjustment Among Latinx College Students? .....	146
Limitations and Future Directions.....	150
Implications for Practice and Policy .....	153
Conclusion.....	154
References .....	156
<b>Appendices.....</b>	<b>163</b>

## List of Tables

<b>Table 2.1</b> Sample Characteristics for Full Sample and by Adaptive Culture Profiles .....	59
<b>Table 2.2</b> Pearson Correlations Among Socioeconomic Indicators, Ethnic-racial Socialization, and Academic Adjustment ( $N = 979$ ) .....	60
<b>Table 2.3</b> Model Fit Statistics from Latent Class Analyses of Adaptive Culture ( $N = 894$ ).....	61
<b>Table 2.4</b> Adaptive Culture Profile Differences Across Indicators .....	62
<b>Table 2.5</b> Relationship Between Adaptive Culture Profiles and Academic Adjustment.....	63
<b>Table 3.1</b> Sample Characteristics for Social Class Groups .....	126
<b>Table 3.2</b> Pearson Correlations Among Ethnic-Racial Identity, Social Class Identity, and Academic Adjustment ( $N = 313$ ) .....	127
<b>Table 3.3</b> Model Fit Statistics from Latent Class Analyses of ERI and SCI ( $N = 313$ ).....	128
<b>Table 3.4</b> Sample Characteristics for Latent Classes .....	129
<b>Table 3.5</b> ERI and SCI Profile Differences Across Indicators.....	130
<b>Table 3.6</b> Hierarchical Multiple Regression Predicting Academic Adjustment from ERI x SCI Classes and Gender ( $N = 313$ ) .....	131

### **List of Figures**

<b>Figure 2.1</b> Summary of Adaptive Culture Profiles Using Standardized Means .....	36
<b>Figure 3.1</b> Summary of ERI x SCI Profiles Using Standardized Means .....	95

**List of Appendices**

**Appendix A:** Study 1 Measures .....164

**Appendix B:** Study 2 Measures .....167

## **Abstract**

Via two studies, this dissertation examined the way in which ethnic-racial experiences and social class experiences work in tandem to shape academic adjustment among Latinx college students attending an HSI (Hispanic-Serving Institutions) and various PWIs (Predominantly White Institutions). In Study 1, I answered two research questions: 1) What is the variability of aspects of adaptive culture among a sample of socioeconomically diverse Latinx students? 2) How do various aspects of adaptive culture such as ethnic-racial socialization (ERS) messages inform Latinx students' academic adjustment, specifically their academic engagement and academic self-concept? In Study 2, I answered two additional research questions: 3) How do dimensions of social class identity (e.g., SCI identification, SCI centrality, SCI pride, SCI shame, and SCI guilt) intersect with dimensions of ethnic-racial identity (e.g., ERI centrality, ERI private regard, and ERI public regard) to shape Latinx college students' college experiences at PWIs, specifically their feelings of campus inferiorization, perceived ethnic fit, and college competence? 4) How are the relations of SCI and ERI with academic outcomes (e.g., campus inferiorization, perceived ethnic fit, and college competence) moderated by gender among Latinx college students attending PWIs? Across both studies, four main takeaways emerged: a) ERS and ERI manifested as adaptive culture and bolsters Latinx college students' academic adjustment, b) identification with a higher social class or socioeconomic advantage, coupled with positive feelings about one's social class identification promotes academic adjustment, c) socioeconomic disadvantage or negative feelings about one's social class coupled with bias-focused ERS messages or negative affect about one's ERI hinders academic adjustment, and d) ERS messages

may bolster academic engagement among Latinx college students with fewer socioeconomic resources attending a PWI. Gender did not moderate any of the predominant patterns. This dissertation is unique in that it is one of the few to rely on person-centered analyses, as well as multiple objective and subjective SES factors to elucidate how ethnic-racial and social class experiences shape Latinx college students' academic adjustment. Findings from this dissertation can be used by universities committed to a) supporting Latinx students in fulfilling their career and academic pursuits, and b) curating inclusive, equitable campuses and classrooms that acknowledge Latinx students' cultural assets as well as their social identities. Universities could look to these findings to design and implement interventions, programs, and policies that promote campus belonging, fit, and feelings of academic and social competence.

## **Chapter I: Introduction**

Latinx students are the largest minoritized ethnic-racial group in the U.S. and have the lowest educational attainment rates in the country (Anthony, 2021). Latinx college enrollment has significantly increased, yet Latinx students' education attainment and graduation rates are lower than that of their White and Asian American peers (Flink, 2018; Murphy & Murphy, 2018). Moreover, within institutions of higher education, Latinx students are often faced with navigating a culturally incongruent landscape (Camacho & Echelbarger, 2021). Universities often privilege and embody middle- and upper-class values of the dominant White culture that deem Latinx students as lacking the social capital necessary to thrive in post-secondary institutions (Stephens et al., 2012; Walpole, 2003). Such deficit perspectives and cultural discrepancies perpetuated in higher education, and more so in Predominantly White Institutions (e.g., PWIs), frame Latinx emerging adults as lacking the necessary capital to succeed academically (Yosso, 2005). Among Latinx college students, cultural discrepancies have been associated with more negative perceptions of campus climate, hindered academic belongingness and persistence, and increased perceptions of barriers to educational attainment (Bordes & Arredondo, 2005; Gloria et al., 2005, 2009).

Moreover, the current tumultuous sociopolitical climate and xenophobic rhetoric targeted at Latinx communities further hinders their success within institutions of higher education. Due to their ethnic-racial group membership, Latinx college students' marginalized social position may expose them to ethnic-racial discrimination, racial microaggressions, and xenophobia in post-secondary education settings (Azmitia & Syed, 2008; Brittan et al., 2013; Castillo-

Lavergne & Destin, 2019; Syed & Azmitia, 2010). Furthermore, Latinx college students of low or working-class backgrounds must also navigate classism, particularly at PWIs that privilege the middle and upper-class (Walpole, 2003).

Additionally, Latinx college students' academic outcomes and perceptions of their college experience may differ by gender (Lopez, 2013). For one, prior research suggests that males show worse academic adjustment, including lower high school graduation, as well as college admission and completion rates, when compared to females (Buchman et al., 2008). The ways in which Latinx males and females are socialized is also relevant to their interactions, experiences, and perceptions on campus (Alfaro et al., 2009; Barajas & Pierce, 2001; Holt, 2014). Within Latinx culture, females are socialized and encouraged to undertake more familial and community-oriented pursuits and may be more likely to form relationships with co-ethnic peers (Alfaro et al., 2009; Umaña-Taylor et al., 2012). This is in contrast to males, who are socialized to undertake more individualistic pursuits that are often outside of the family or home context (Alfaro et al., 2009). Moreover, gender norms also play a role in Latinx students' academic well-being. Latinx males are often encouraged to take on a breadwinner, financial decision-maker role. This differs from female gender norms that perpetuate notions of women solely prioritizing their role in the home or within the family (Richman et al., 2015). Thus, these distinct gender socialization patterns and norms have implications for minority college students' relationships with co-ethnic peers on campus, their college satisfaction, as well as their academic and social experiences on campus (Barajas & Pierce, 2001). Elucidating the ways in which gender may moderate the links between ERI, SCI, and Latinx college students' academic success is particularly important, given the current climate within and values embodied by institutions of higher education.

## Statement of the Problem

Understanding how ethnic-racial and social class experiences shape Latinx college students' distinct realities may provide greater insight into their lived experiences and academic adjustment as they navigate higher education (Castillo-Lavergne & Destin, 2019). *Ethnic-racial socialization* and *ethnic-racial identity* may be two salient manifestations of ethnic-racial experiences that inform Latinx students' college experience. Ethnic-racial socialization (ERS), or the implicit and explicit messages youth receive around their ethnicity and race, has been associated with positive academic adjustment, including greater academic engagement and efficacy, as well as increased academic persistence and achievement among Latinx youth (Battle & Lewis, 2002; Hughes et al., 2009; Huynh & Fuligni, 2008). Similarly, *ethnic-racial identity*—or the beliefs, attitudes, and processes that one has about one's ethnic-racial group membership—has been linked to optimal academic and social outcomes for Latinx youth (Rivas-Drake et al., 2014; Umaña-Taylor & Hill, 2020). Indeed, ERI has been known to bolster students' academic and social adjustment, and it has been linked to greater self-esteem and fewer perceived threats at PWIs among Latinx college students (Ethier & Deaux, 1990; Miller-Coto & Byrnes, 2016).

Socioeconomic factors also have implications for Latinx students' academic adjustment. Both objective and socioeconomic status (SES) markers such as income, education levels, and occupational prestige, have been linked to Latinx youth's academic outcomes (Diemer & Li, 2012, Sirin, 2005; Walpole, 2003). For instance, parental income and occupation is relevant for how affordable and feasible youth perceive college to be, their postsecondary persistence, and their college completion (Diemer & Li, 2012; Diemer et al., 2019; Ma, 2009). We know less about how subjective social status (SSS) indicators—or an individual's subjective perception of

their personal, social, and cultural capital—influences academic adjustment among Latinx college students (Diemer et al., 2013). Although prior research has shown that SSS indicators, including social class identity, is central to minoritized college students’ self-concept, and may be more strongly related to their academic adjustment and college experience, how these socioeconomic factors function synergistically with ethnic-racial experiences is less clear (Webb, 2014; Wilson & Liu, 2003). Moreover, how the interactions of ethnic-racial experiences and socioeconomic factors are influenced by gender among Latinx college students remains understudied (Lopez, 2014). Despite the well-established associations between ethnic-racial experiences (e.g., ethnic-racial socialization, ethnic-racial identity), socioeconomic experiences (e.g., objective and subjective socioeconomic indicators, social class identity), and academic adjustment among Latinx early adults, the two phenomena have been examined mostly qualitatively and in isolation (e.g., Aries & Seider, 2007; Hurst, 2010). Relying on a strength-based perspective to investigate how both ethnic-racial and socioeconomic experiences interact to shape academic outcomes may elucidate ways to address academic disparities among Latinx college students.

### **Significance of the Study**

To my knowledge, this dissertation is one of the few to consider both ethnic-racial and social class experiences as intersecting realities, and how they function in tandem to inform Latinx college students’ academic adjustment. More specifically, I consider *ethnic-racial socialization* and three distinct dimensions of *ethnic-racial identity* (i.e., centrality, private, and public regard) as examples of salient ethnic-racial experiences that shape Latinx students’ college-going experiences and academic success (Hughes et al., 2006; Rivas-Drake, 2011; Wang et al., 2020). Both have been empirically linked to Latinx college students’ academic adjustment,

including their academic engagement (Martinez-Fuentes et al., 2020), sense of community on campus (Rivas-Drake, 2012), perceptions of campus climate (Rigali-Oiler & Kurpius, 2013), and academic attainment (Miller-Coto & Byrnes, 2016). Additionally, we explore how various socioeconomic factors (i.e., parental education, parent occupational prestige, relative family financial hardship, dimensions of social class identity) shape Latinx students' academic outcomes. However, no studies have examined how the two function synergistically to shape academic adjustment among Latinx college students. Importantly, where prior research has relied on deficit perspectives to illustrate the lived experiences of Latinx students in higher education, this dissertation takes a strengths-based approach to highlight the potentially promotive and protective nature of ethnic-racial and social class experiences among Latinx college students.

To address aforementioned gaps in the literature, in Study 1 I consider whether and how messages youth receive around their ethnicity and race (e.g., ethnic-racial socialization), as well as objective and subjective indicators of socioeconomic status work synergistically to support Latinx college students' adaptation to college. Prior scholarly work illustrates subjective indicators of socioeconomic status are important predictors of college students' academic adjustment (Ostrove & Long, 2007); however, few have empirically examined how subjective socioeconomic status indicators relate to Latinx college students' academic outcomes (e.g., Castillo-Lavergne & Destin, 2019). Moreover, little is known about how cultural resources like ethnic-racial socialization may amplify socioeconomic support, or the extent to which parental ERS potentially compensates for the presence of fewer socioeconomic resources.

In our examination of ethnic-racial and social class experiences among Latinx college students, Study 2 investigates how dimensions of ethnic-racial identity (i.e., ERI centrality, ERI private, and ERI public regard) and social class identity (i.e., SCI identification, SCI centrality,

and SCI affect) intersect to shape Latinx college students' academic outcomes. I also examine whether the link between intersections of ERI, SCI, and academic outcomes differ by gender. By investigating ethnic-racial and social class identity among Latinx college students, this study considers two social identities that are a) often explored in adolescence, b) often examined in isolation, c) remain understudied in emerging adulthood, and d) to my knowledge, have yet to be explored via quantitative methods (Azmitia et al., 2008; Castillo-Lavergne & Destin, 2019).

## **Theoretical Framework**

### ***Study 1***

Across both studies, I was guided by various theoretical frameworks. To examine how ethnic-racial socialization and socioeconomic factors work in tandem to build various forms of cultural capital transmitted to Latinx youth, Study 1 was guided by the integrative model of developmental competencies in minority children (Coll et al., 1996). More specifically, I looked to the construct of *adaptive culture* within the integrative model, or the attitudes, values, and goals that differ from those of the dominant culture. Adaptive culture has been shown to promote positive academic adjustment among Latinx college students (Constante et al., 2019; Perez-Brena et al., 2018). Ethnic-racial socialization is one example of adaptive culture, in that it refers to the implicit and explicit messages youth receive about their minoritized ethnic-racial group (Perez-Brena et al., 2018). Via the integrative model (Coll et al., 1996), I take a strengths-based perspective to a) explore how ERS messages and socioeconomic factors work synergistically to cultivate adaptive culture among Latinx college students, and b) to explore how adaptive culture informs Latinx college students' academic self-concept and academic engagement.

### ***Study 2***

To investigate how various dimensions of ethnic-racial identity (i.e., ERI centrality, ERI private regard, and ERI public regard) and social class identity (i.e., SCI identification, SCI centrality, SCI pride, SCI shame, and SCI guilt) interact to inform Latinx college students' experiences at a PWI, I ground Study 2 in three distinct theoretical frameworks: a) Webb's (2014) Multidimensional Framework of Social Class Identity and b) Social Identity Theory (Tajfel & Turner, 1986). Webb's (2014) Multidimensional Framework of Social Class Identity (SCI) postulates that a) membership within a collective group informs individuals' thoughts, feelings, and behaviors and b) identity is multidimensional and best examined with various individual level variables. The Multidimensional Framework (Webb, 2014) also argues that three dimensions of identity are particularly salient when considering social class identity within the context of higher education: *identification*, *centrality*, and *affect*. *Identification* refers to the self-categorization aspect of identity, where individuals' categorization of themselves and others is contingent upon perceived similarities and differences (Ashmore et al., 2004; Turner et al., 1987). *Centrality* refers to how much an individual considers an identity to be relevant or important to one's self-concept (Tajfel & Turner, 1986). Lastly, the Multidimensional framework also considers the positive and negative emotions, or affect, that accompany a particular social identity. In the present study, I borrow from Webb's (2014) framework and measure of SCI to capture the identification, centrality, and affective dimensions (i.e., pride, shame, and guilt) of social class identity among Latinx college students.

In my examination of ethnic-racial identity, I draw on Social Identity Theory (SIT; Tajfel & Turner, 1986). SIT posits that membership within a group shapes an individual's thoughts, emotions, and behaviors (Tajfel & Turner, 1986). Moreover, SIT (Tajfel & Turner, 1986) considers the environment in shaping an individual's identity and relations with in- and out-

group members, thus making it particularly relevant when examining ERI within the context of a PWI. ERI dimensions such as how important one's ERI is to one's self-concept (e.g., ERI centrality), how one perceives their ethnic-racial group (e.g., ERI private regard), and how one believes others perceive one's ethnic-racial group (e.g., ERI public regard) are all dependent on the social context (Verkuyten, 2016). Moreover, ethnic-racial identity and social class identity are experienced in conjunction with one another, thus creating distinct experiences of both oppression and privilege (Castillo-Lavergne & Destin, 2019; Cole, 2009; Rogers, 2019). Importantly, Study 2 does not explicitly address the dimensions of higher education that perpetuate oppression and inequality (Cole, 2009; Walpole, 2003). Instead, I focus on outcomes that capture Latinx students' subjective experiences of oppression (i.e., campus inferiorization and perceived ethnic fit) within the context of a PWI.

### **Research Questions**

To contribute to the scholarly discourse on how ethnic-racial experiences in concert with social class experiences to shape Latinx emerging adults' academic adjustment, the proposed dissertation comprises two studies that address unique but related questions. The first part of this dissertation (Chapter 2, Study 1) considers both ethnic-racial socialization and socioeconomic factors as sources of adaptive culture among Latinx emerging adults navigating higher education. Accordingly, research Question 1 is: *What is the variability of aspects of adaptive culture among a sample of socioeconomically diverse Latinx students?* Moreover, how do ethnic-racial socialization messages intersect with students' socioeconomic factors to inform their academic engagement and academic self-concept is not well understood. As such, Research Question 2 is: *How do various aspects of adaptive culture inform Latinx students' academic adjustment, specifically their academic engagement and academic self-concept?*

The second part of this dissertation (Chapter 3, Study 2) examines whether social identities shaped by both ethnic-racial and social class experiences relate to Latinx students' experiences attending Predominantly White Institutions (PWIs) of higher education. Exploring Latinx college students' social identities around their ethnic-racial group and social class may provide insight into how they experience and thrive in institutions of higher education. Accordingly, Research Question 3 is: *How do dimensions of SCI (e.g., SCI identification, SCI centrality, SCI pride, SCI shame, and SCI guilt) intersect with dimensions of ERI (e.g., ERI centrality, ERI private regard, and ERI public regard) to shape Latinx college students' college experiences at PWIs, specifically their feelings of campus inferiorization, perceived ethnic fit, and college competence?* Additionally, Research Question 4 is: *How are the relations of SCI and ERI with academic outcomes (e.g., campus inferiorization, perceived ethnic fit, and college competence) moderated by gender among Latinx college students attending PWIs?*

### **Organization of the Dissertation**

This dissertation will be completed in a journal article format. Each chapter will consist of a different manuscript, complete with its own introduction, method, results, and discussion section. Chapter 1 will provide a brief, overarching theoretical and empirical background on our current understanding of how ethnic-racial experiences in concert with social class experiences shape Latinx emerging adults' academic adjustment. I present the statement of the problem, the rationale for each of the three studies, and my overarching research questions/aims. Chapter 2 presents Study 1, in which I : a) explore and describe adaptive culture variability among a sample of socioeconomically diverse Latinx college students and b) investigate how profiles of adaptive culture inform Latinx students' academic engagement and academic self-concept. Chapter 3 presents Study 2, in which I explore how dimensions of ethnic-racial identity (i.e., ERI

centrality, ERI private regard, and ERI public regard) and social class identity (i.e., SCI identification, SCI centrality, SCI pride, SCI shame, and SCI guilt) intersect to shape Latinx college students' perceived ethnic fit, campus inferiorization, and college competence. In Chapter 4, I will provide an integrative discussion of the empirical findings across the two studies contained in this dissertation.

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## **Chapter II (Study 1): A Latent Profile Analysis of Adaptive Culture Among Latinx College Students**

Despite increases in Latinx college enrollment, Latinx students' educational attainment and graduation rates are consistently lower than those of their White and Asian American peers (Flink, 2018; Miller, 2005; Murphy & Murphy, 2018). One contributing factor to Latinx youth's academic disparities is that universities often cater to so-called mainstream students and place greater value on middle-class values of the dominant White culture (Hurtado, 1994; Stephens et al., 2012; Walpole, 2003). For Latinx first-generation students, navigating postsecondary environments is often synonymous with underrepresentation and invisibility, particularly at Predominantly White Institutions (Pyne & Means, 2013). In contrast, Latinx first-generation students attending Hispanic-Serving Institutions (HSIs) experience less alienation and more cultural congruence, as they are represented numerically at these institutions that are designed with the Latinx experience in mind (Laden, 2004). Furthermore, traditional models of social capital perpetuate the harmful notion that only students of higher socioeconomic status and of non-minority racial backgrounds possess the capital necessary to thrive in postsecondary settings (Bourdieu, 1983; Walpole, 2003; Yosso, 2005). This positions first-generation Latinx college students as lacking the cultural and social capital necessary to succeed academically (Ceballos, 2004; Yosso 2005).

Existing research on the various forms of cultural capital inherent within Latinx families presents quite a different picture. Contrary to deficit perspectives on Latinx students' college readiness, there is ample empirical evidence that Latinx students arrive on college campuses with

*adaptive culture*, or valuable cultural knowledge and skills that differ from that of the dominant culture that can support them throughout their college experience (Coll et al., 1996). One valuable and salient form of adaptive culture often overlooked in the literature on the Latinx college experience is *ethnic-racial socialization* (Hughes et al., 2006; Juang & Syed, 2010). Ethnic-racial socialization (ERS), or implicit and explicit messages centered around one's ethnic-racial background, has been associated with positive academic outcomes among Latinx college students (Rivas-Drake, 2011; Wang et al., 2020); yet, how these messages intersect with students' socioeconomic factors is not well understood.

Socioeconomic factors are particularly relevant for college adjustment (Diemer & Ali, 2009; Diemer et al., 2013; Walpole, 2003). Objective indicators of SES, such as parental income and occupation, and subjective perceptions of social class, or one's perception of where one stands in society, have been linked to youth's perceived academic competence, achievement and belonging in college (Browman et al., 2017; Castillo-Lavergne & Destin, 2019; Loeb & Hurd, 2019; Ostrove & Long, 2007; Webb, 2014). Moreover, Latinx youth's socioeconomic background and self-perceptions of their societal standing shapes how they perceive themselves within academic contexts, as well the extent to which they participate in campus or classroom activities (Pérez & Sáenz, 2017; Torres & Solberg, 2001).

In the present study, I explored and described adaptive culture variability among a sample of socioeconomically diverse Latinx college students. I also investigated how adaptive culture profiles inform Latinx students' academic adjustment, specifically their academic engagement and self-concept. I examined both academic self-concept and academic engagement as specific aspects of Latinx students' academic adjustment. *Academic self-concept* refers to individuals' self-perception and knowledge of themselves in academic settings (Bong & Skaalvik, 2003;

Marsh, 1990). *Academic engagement* includes the various behaviors, such as participating in tasks or activities, asking, and answering questions, that contribute to active, goal-directed, and constructive interactions within the classroom (Furrer & Skinner, 2003; Greenwood et al., 2002). Some research suggests Latinx college students draw on cultural resources to support their academic engagement (Ceballo et al., 2014; Pérez & Sáenz, 2017) and academic self-concept (Torres & Solberg, 2001). Moreover, pursuing higher education to better the family's financial status has been shown to motivate Latinx students to persevere academically via increased classroom engagement (Ceballo et al., 2014; Pérez & Sáenz, 2017).

### **Theoretical Framework**

Guided by the integrative model (Coll et al., 1996), I examine how ethnic-racial socialization and social class factors work in tandem to build various forms of adaptive culture transmitted to Latinx youth (Coll et al., 1996). Minoritized groups' adaptive culture—or the values, attitudes, and goals that differ from those of the dominant culture—is thought to promote positive academic adjustment among Latinx college students (Perez-Brena et al., 2018). Ethnic-racial socialization is one manifestation of adaptive culture, as it inherently speaks to the various messages that minoritized youth receive about their ethnic-racial group. Yet, there has been a lack of scholarly attention to social position factors such as social class, and adaptive culture factors such as ERS, when exploring youth's academic adjustment (e.g., Marks & Coll, 2018). Relying on the integrative model (Coll et al. 1996), I apply a strengths-based approach to investigate how ERS messages and socioeconomic factors work together to foster adaptive culture among a socioeconomically diverse sample of Latinx college students. I also explore how adaptive culture informs Latinx college students' academic engagement and self-concept. More specifically, I argue that ERS messages may imbue Latinx students of lower SES with cultural

tools for maneuvering through White-centering, middle class institutions of higher education that often underestimate their strengths and neglect their needs (Ceballo, 2004; Saunders & Serna, 2004).

### **Ethnic-Racial Socialization and Academic Adjustment**

Ethnic-racial socialization (ERS)—the explicit and implicit messages youth receive around their ethnicity and race—has been empirically linked to Latinx students' academic outcomes in adolescence and young adulthood (Hughes et al., 2006; Rivas-Drake, 2011; Wang et al., 2020). For the purposes of our study, we were interested in examining *cultural socialization* and *preparation for bias*. Cultural socialization refers to the messages about cultural pride, history, and values, whereas preparation for bias involves preparing youth to recognize, navigate, and cope with racial bias (Hughes et al., 2006). Within Latinx families, cultural socialization can manifest as speaking the heritage language, celebrating cultural holidays, eating ethnic foods, endorsing cultural values such as *familismo* to bolster cultural pride, and passing on cultural traditions (Ayón et al., 2020; Hughes et al., 2006). Among Latinx families, cultural socialization has been the ERS strategy most frequently examined (Ayón et al., 2020). Following cultural socialization, preparation for bias is also a salient ERS strategy within Latinx families (Ayón et al., 2020).

### ***Cultural Socialization and Academic Adjustment***

Meta-analytic findings suggest positive associations between ERS and academic performance, motivation, and engagement among youth of color (Wang et al., 2020). Cultural socialization, specifically, has been linked to positive academic outcomes among ethnic and racial minority youth (Neblett et al., 2012), including increased academic curiosity, performance, and persistence (Battle & Lewis, 2002), greater academic engagement and efficacy (Hughes et

al., 2009), more cognitive engagement and reading comprehension (Banerjee et al., 2011; Rivas-Drake & Marchand, 2016; Wang & Huguley, 2012), higher academic achievement (Huynh & Fuligni, 2008), and more ambitious educational aspirations (Wang & Huguley, 2012). Cultural socialization messages that promote one's ethnic-racial background and culture as a strength can aid students in navigating institutions where racial discrimination is a frequent occurrence (Neblett et al., 2006). For example, African American youth who received more ERS messages, including cultural socialization, reported greater academic engagement and more positive academic self-beliefs when compared to youth who received a heightened amount of preparation for bias messages, or received few ERS messages (Metzger et al., 2020). Cultural socialization messages similarly benefit Asian American youth and have been linked to increased social competence via ethnic-racial identity (Tran & Lee, 2010). Other research suggests that Asian American adolescents with stronger ethnic-racial identities, high levels of cultural socialization, and low levels of preparation for bias reported greater school engagement (Xie et al., 2021). Seol et al. (2016) similarly found a positive link between cultural socialization and school engagement among Korean American adolescents.

Similar positive associations between cultural socialization and positive academic outcomes have been found among Latinx youth (McDermott et al., 2018; Martinez-Fuentes et al., 2020). Latinx adolescents who received more positive messages about their ethnic-racial group also reported more exploration of and clarity about their ERI, and in turn, greater academic engagement (Martinez-Fuentes et al., 2020). McDermott and colleagues (2018) found that familial messages about one's ethnic-racial group was related to greater proactive coping with discrimination among Latinx adolescents. Moreover, proactive coping with discrimination was linked to increased self-efficacy, and in turn, higher GPA (McDermott et al., 2018).

Furthermore, ERS messages are transmitted beyond adolescence and into early adulthood (Barr & Neville, 2008; Juang & Syed, 2010; Rivas-Drake, 2011). In fact, meta-analytic findings suggest that the positive links between ERS and academic outcomes are strongest for college students (Wang et al., 2020). Individual studies suggest that African American college students at a PWI who received more racial socialization, including both cultural socialization and preparation for bias messages, evinced more positive college adjustment (Anglin & Wade, 2007). Others have also found that African American college students who received racial socialization messages also showed more resiliency in the context of adversity (Brown, 2008) as well as more adaptive coping strategies when faced with discrimination (Blackmon et al., 2016).

### ***Preparation for Bias and Academic Adjustment***

Contrary to cultural socialization, the links between preparation for bias messages and academic adjustment are more mixed (Umaña-Taylor and Hill, 2020). For Latinx students maneuvering through White, middle-class and wealthy institutions of higher education, ERS about future discrimination may provide a kind of cultural resource that bolsters their ethnic-racial identities and thereby promotes their academic adjustment (Banerjee et al., 2017; Ceballo, 2004). For example, Latinx youth attending a PWI who reported more cultural socialization also had higher self-esteem, fewer depressive symptoms, as well as reduced physical symptoms (Rivas-Drake, 2011). In addition, among Latina college students, increased preparation for bias messages partially explained the positive link between perceived discrimination and proactive, or solution-based, coping strategies (Sanchez et al., 2018).

However, the majority of the empirical evidence on ERS suggests preparation for bias to be unrelated to youth's adjustment (Umaña-Taylor and Hill, 2020). Additionally, several studies that examine preparation for bias messages considered its relation to psychological well-being,

with few considering academic outcomes (Constantine & Blackmon, 2002; Grindal & Nieri, 2015; Neblett et al., 2006; Tang et al., 2016). Among Black adolescents, preparation for bias messages have been unrelated to school self-esteem, academic curiosity, academic persistence, attitudes about school, or GPA (Constantine & Blackmon, 2002; Neblett et al., 2006; Tang et al., 2016). Similar null associations between preparation for bias and academic performance have been found among Latinx adolescents (Grindal & Nieri, 2015). Among Asian American adolescents, preparation for bias messages were unrelated to social competence and did not buffer psychological distress linked to racial discrimination (Atkin et al., 2019; Tran & Lee, 2010). Similarly, null patterns have been found among African American college students (Banerjee et al., 2017; Brown, 2008). For example, preparation for bias was unrelated to academic engagement among African American students attending a predominantly White university (Banerjee et al., 2017).

Other research suggests negative associations between preparation for bias and academic adjustment among youth. Among African American adolescents, preparation for bias has been linked to lower academic efficacy and reduced academic ability (Banerjee et al., 2018; Cooper & McLoyd, 2011; Hughes et al., 2009). African American college students who received more preparation for bias messages also show reduced academic achievement, greater grade declines, and increased distrust in their university (Banerjee et al., 2017; Mendoza-Denton et al., 2002). Further, they also perceived the college transition to be more challenging (Mendoza-Denton et al., 2002). Among a racially diverse sample of college students, familial preparation for bias was associated with more pessimistic outlooks on the future (Liu & Lau, 2013).

Taken together, further investigation is warranted to elucidate the role of preparation for bias messages in youth's academic adjustment. Of the few studies that have examined ERS in

adulthood, the majority have either examined on the construct in relation to Black youth's college experience or focused on psychological outcomes, with few elucidating the academic adjustment of Latinx college students (see Rivas-Drake, 2011 for one exception). Given the minimal existing empirical evidence, scholars have noted the need to clarify how ERS relates to Latinx early adults' academic adjustment (Ayón et al., 2020; Hughes et al., 2006; Juang & Syed, 2010; Priest et al., 2014; Rivas-Drake, 2011; Umaña-Taylor & Hill, 2020).

### **Socioeconomic Factors and Academic Outcomes**

Objective socioeconomic status (SES) markers such as education levels, income, and occupational prestige have been categorized as traditional forms of social capital (Bourdieu, 1983). Throughout this paper, I refer to SES in terms of relatively objective indicators of prestige, power, and/or access to resources often captured by education level or income (Diemer & Ali, 2009; Diemer et al., 2013). There is a plethora of empirical evidence on the links between such SES indicators and marginalized youth's academic adjustment (Aronson, 2008; Diemer & Li, 2012; Sirin, 2005; Walpole, 2003). Familial SES has implications for youth's academic achievement, in that it is directly related to youth's resources both in and out of the home, parental well-being, social support, as well as school and classroom environments (Crosnoe et al., 2010; Duke, 2000; McLoyd, 1998; Sirin, 2005). Parental income and occupation directly determine whether college is a feasible familial expense (Diemer & Li, 2012); they also have implications for youth's perception of college as affordable, educational expectations, sense of belonging at college, choice of college major, postsecondary persistence, and college completion (Aronson, 2008; Diemer & Li, 2012; Diemer et al., 2020; Leppel et al., 2001; Ma, 2009; Walpole, 2003). Within a sample of socioeconomically diverse college students, students of lower SES background (as measured by parental income, education, and occupational prestige)

reported less involvement in student clubs or groups, reduced studying time, lower GPAs, and lower educational attainment (beyond a bachelor's degree) compared to their more affluent counterparts (Walpole, 2003). Similar academic disparities have been found among Latinx college youth, where financially disadvantaged students show reduced campus engagement and persistence, academic achievement, and lower belonging on campus (Conchas, 2001; Gonzales et al., 2015; Means & Pyne, 2017; Saunders & Serna, 2004; Wei et al., 2011).

We know less about how *subjective social status* (SSS) influences academic outcomes among first-generation Latinx youth. In the present study, I define subjective social status (SSS) as one's "individual subjective perception of his or her place in society" (Diemer et al., 2013, p.104). SSS includes an individual's perception based on their personal capital, such as their income or occupational prestige, as well as their social and cultural capital (Diemer et al., 2013). Examining SSS throughout the college experience is particularly important as it is a time of subjective shifts in one's socioeconomic mobility (Browman et al., 2017; Loeb & Hurd, 2019). Further, SSS may be particularly salient for students of low socioeconomic status, as it may inform their academic persistence as well as their sense of belonging and adjustment to college (Browman et al., 2017; Loeb & Hurd, 2019; Ostrove & Long, 2007). Uncertainty around socioeconomic status among college students from low-income families has also been associated with reduced academic self-efficacy and academic achievement (Castillo-Lavergne & Destin, 2019). In this study, I include both prestige- and resource-based measures of SES as well as SSS to capture various types of socioeconomic resources that may inform Latinx youths' academic adjustment. I specifically captured youth's parental education levels and occupational prestige (SES), as well as youth's current familial financial situation in comparison to that of their neighbor's (SSS) as forms of social capital.

## **ERS and SES May Function Synergistically**

Although ERS, SES, and SSS are distinct types of capital, they are not mutually exclusive and are theorized to function synergistically as contributors to adaptive culture. Indeed, research suggests that these messages are often conveyed in tandem, build upon one another, and have implications for youth adjustment (Brown & Tylka, 2011; Rivas-Drake, 2011; Wang et al. 2020). Post-hoc findings from a meta-analysis suggest that SES moderates the link between ERS and academic achievement, such that higher SES levels strengthen the positive association between ERS and academic achievement (Wang et al., 2020). However, it should also be noted that findings lacked generalizability in that there was no evidence of moderation among low-income samples or samples with mixed SES. Analyses also included a limited number of studies that accounted for SES when examining ERS (Wang et al., 2020).

Other scholarly work shows that within Latinx families, immigrant parents may simultaneously transmit messages of perseverance as well as messages of barriers around ethnic-racial discrimination or economic constraints (Ceballo, 2004; Rivas-Drake, 2011). Importantly, the interaction of social class and ethnicity/race may create unique social positions that shape youth experiences (Brown et al., 2007; Hughes et al., 2006). White-Johnson et al (2010) found that specific SES indicators, as well as emotional and material capital influenced African American parents' racial socialization. Similarly, SES factors such as maternal social class, as well as maternal racial identity and discriminatory work experiences, have been associated with African American youth's cultural socialization and preparation for bias messages (Crouter et al., 2008; Hughes, 2003; Hughes & Chen, 1997). Parental education levels have also been linked to ERS discussions among ethnic-racial minority youth and early adults (Brown et al., 2007; Ontai-Grzebik & Raffaelli, 2004). Among Latinx young adults, parental education levels were

negatively associated with how often they explored their ethnicity (Ontai-Grzebik & Raffaelli, 2004). Taken together, we argue that when examining adaptive culture, it is imperative to consider how cultural and socioeconomic resources function synergistically to inform Latinx youth's academic adjustment.

### **Current Study**

In this study, I explored how cultural and socioeconomic resources intersect to provide different types of adaptive culture, and in turn, inform academic outcomes among Latinx students. Both CS and PFB have been associated with positive outcomes among Latinx college students (e.g., Rivas-Drake, 2011; Wang et al., 2020), but how these messages intersect with socioeconomic status (SES) is not well-understood. Likewise, it is not known how cultural resources may amplify SES support or the extent to which parental ERS compensates for fewer SES resources. I examined how SES and ERS messages contribute to Latinx college students' profiles of adaptive culture, and how these profiles are related to students' academic self-concept and academic engagement (e.g., more positive academic self-concept and increased academic engagement). Due to the exploratory nature of our study, I had no hypotheses regarding the number of adaptive culture profiles I expected to find. However, I hypothesized that students in profiles characterized by greater cultural socialization or both cultural socialization and SES resources would evince better academic adjustment than those characterized by lower cultural socialization or fewer SES resources. Given the mixed findings on the effects of preparation for bias on academic adjustment, I did not develop specific hypotheses for students in profiles with higher levels of this ERS strategy.

### **Method**

#### **Participants**

Data were drawn from a larger study examining neighborhood safety and well-being among Latinx and African American college students. The larger sample ( $n = 1,136$ ) included an ethnically and racially diverse sample (9.2% African American/Black non-Hispanic, 86.2% Latino/Hispanic, and 4.7% Multiracial) of college students attending a four-year, public Hispanic Serving Institution (HSI) in the western region of the U.S. Survey data were drawn from a subset of Latinx undergraduate students ( $n = 979$ ; 73% female; ages 18–25), and data were collected across the span of two years (2016–2017 and 2017–2018). The largest share (47.1%) of students were in their first year of college, and 33% were in their second year. Most students reported having parents of Latino/Hispanic racial or ethnic background (86.4% mother; 84.8% father).

## **Procedure**

Participants were recruited from the introductory psychology subject pool. The inclusion criteria for this study were that individuals had to be between 18–25 years of age and had to identify as either African American or Latinx. Surveys were administered electronically through Qualtrics, with informed consent obtained just prior to survey administration on the first page of the study. Participants were not allowed to continue if they did not agree to consent. Surveys took approximately 30 minutes to complete. Students were compensated with 3 psychology subject pool credits for participating in the study. This study received full board approval by the Institutional Review Board at [masked for review].

## **Measures**

### ***Socioeconomic Indicators***

**Parental Education.** Parental education levels were assessed with two questions “What is your mother’s highest education level?” and “What is your father’s education level?”

Response options ranged from 1 = *Less than high school* to 9 = *Doctoral Degree (Ph.D., MD, JD*

etc.). Average level of parental education was between *some high school* and *high school graduate* for both mothers ( $M = 2.69$ ) and fathers ( $M = 2.38$ ).

**Parent Occupational Prestige.** Students answered open-ended responses to the question “What is your mother’s occupation?” and “What is your father’s occupation?” Descriptions of both mother and father occupation were then reviewed and assigned an occupational prestige score based on the National Opinion Research Center occupational prestige list (NORC; Davis et al., 1991; Nakao & Treas, 1992). Prestige scores ranged from 16.78–74.77 ( $M = 40.87$ ), where higher scores indicated a more prestigious occupation.

**Family Relative Financial Situation** Students self-reported their family’s current financial situation in comparison to that of their neighbors. The question read “How would you compare your family’s financial situation to the financial situation of your neighbors?” and response options were on a 5-point Likert scale (1= *We were much worse off*, 5= *We were much better off*.) Higher scores indicated that the student perceived their family to be financially better off than their neighbors.

### ***Ethnic-Racial Socialization***

Two subscales of Hughes and colleagues’ (2009) parental ethnic-racial socialization measure were employed to assess ERS. The cultural socialization subscale measured the extent to which students received messages from their parents about being proud of their ethnic-racial groups and knowing their history and traditions (4 items;  $\alpha = 0.82$ ; 1 = *never* to 3 = *a lot of times*; e.g., “How many times has your parent told you it is important to know about the important people and events in the history of your racial or ethnic group?”). The preparation for bias subscale assessed how often students received messages that warned them of racial discrimination or prejudice (5 items;  $\alpha = 0.92$ ; 1 = *never* to 3 = *a lot of times*; e.g., “How many

times has your parent told you people of your race or ethnicity are more likely to be treated poorly or unfairly than people of other races or ethnicities?”). Both subscales have been used among Latinx college students (Rivas-Drake, 2011). Higher mean scores on the ERS scales indicate receiving more of such messages.

### ***Academic Adjustment***

**Academic Engagement.** The academic engagement in college scale from the National Survey of Student Engagement (NSSE; Kuh, 2001) measured the extent to which students participated in behaviors that showed engagement in class and in college. The scale included 13 items and asked about participation in class discussions, assignments and campus activities ( $\alpha = 0.87$ ; e.g., “Asked questions in class or contributed to the class discussion”). Response options were on a 4-point Likert scale and ranged from 1 = *Never* to 4 = *Very Often*. Higher scores indicated the student participated in behaviors that showed more academic engagement in college.

**Academic Self-Concept.** The Academic Self-Description Questionnaire (ASDQ II; Marsh, 1990) was used to assess students’ self-perceptions about their academic abilities. The scale included 6 statements that students could respond to on a 5-point Likert scale ranging from 1 = *False* to 5 = *True* ( $\alpha = 0.69$ ; e.g., “I learn things quickly in most school subjects”). Higher scores indicated a more positive perception of their academic abilities.

### ***Demographic Variables***

**Ethnic-Racial Background.** Students self-selected their ethnic-racial background from options including ranging from African American/Black non-Hispanic, Caucasian/White non-Hispanic, Asian American/Asian (including the Indian sub-continent), Latino/Hispanic, Native Hawaiian/Pacific Islander, or Multiracial (having parents of one or more race). Of the full sample

( $N = 1,136$ ), data for this study only included students who self-selected Latino or Hispanic ( $n = 979$ ), as this was our ethnic-racial sample of interest.

### **Analytic Plan**

In the present study, I use latent profile analysis (LPA) to explore and describe adaptive culture variability among a sample of SES diverse Latinx college students. I also investigate how adaptive culture profiles inform Latinx students' academic adjustment, specifically their academic engagement and academic self-concept. To explore and describe adaptive culture variability among our sample, I conducted a three-step latent profile analysis model (LPA) using *Latent Gold 5.1*. A three-step LPA allows for identification of participant profiles or clusters, while also indicating how an outcome of interest differs based on profile membership (Vermunt, 2010). By using participants' responses for each of the indicators, LPA also indicates the probability that a participant belongs to a particular group (Porcu & Giambona, 2017). Whereas prior three-step LPA approaches underestimate parameter estimates of the third step model, recent Latent gold software allows for a bias-adjusted three-step method (Bakk et al., 2014; Bolck et al., 2004; Vermunt 2010). For the purposes of our study, adaptive culture profiles were determined based on three distinct socioeconomic indicators and two distinct ERS messages, as ERS and social class factors are not mutually exclusive and work in tandem to inform Latinx college students' academic self-concept and academic engagement (Yosso, 2005; Rivas-Drake, 2011). Thus, both SES indicators and ERS were used as indicators when establishing adaptive culture profiles.

Following recommendations by Nylund-Gibson & Choi (2018), we examined multiple indices to obtain candidates for the best fitting model. Specifically, we examined the log-likelihood ratio chi-squared statistic ( $L^2$ ), AIC, BIC, BVRs, entropy, and p-value. In the one-

class baseline model, the  $L^2$  indicates the total associations among all 5 indicators used to determine profiles (Neblett et al., 2008). I built upon this baseline model by increasing the number of classes in each alternative model. When comparing the one-class model to an alternative model, I prioritized a small BIC and AIC, as a lower BIC and AIC value reflects a well-fitting and parsimonious model (Vermunt & Magidson, 2002). Additionally, I looked for a greater reduction in  $L^2$  to indicate the total association explained by all indicators (Neblett et al., 2008). Together with a substantial  $L^2$  reduction, the best-fitting model should also have a non-significant  $p$ -value ( $p > .05$ ). Because the  $L^2$  becomes poorly approximated with a high amount of indicators or clusters, I bootstrapped the  $p$ -value of our best fitting model (Collins et al., 1993; Langeheine et al., 1996). Additionally, I accounted for local dependence, or the associations between indicators, by assessing the bivariate residuals (BVRs). Per (Vermunt & Magidson, 2005), a BVR exceeding 3.84 indicates the model falls short of reproducing associations between any two given indicators. Once adaptive culture profiles are established, I conducted ANOVAs to determine whether there were any statistically significant indicator differences across profiles. To distinguish where these differences lie, I conducted post-hoc Bonferroni tests. Lastly, I relied on Wald tests at step 3 of the three-step model to determine whether the class-specific means of our outcomes (academic engagement and academic self-concept) are significantly different based on cluster membership at a  $p$ -value of less than .05.

## **Results**

### **Preliminary Analyses**

On average, participants reported a highest parental education level of “high school graduate” ( $M = 3.12$ ,  $SD = 2.00$ ) (see Table 2.1) Parental occupation prestige scores ranged from 16.78 (e.g. food preparation occupations) to 74.77 (e.g. lawyers). The average parental

occupation score was 40.88 and included occupations such as technicians, equipment operators, and electricians. On average, participants also reported their family's financial situation was about "equal to" their neighbor's financial situation when growing up ( $M = 3.02, SD = .79$ ). Participants also reported receiving frequent ethnic-racial socialization messages. Among our sample, cultural socialization messages ( $M = 2.29, SD = .59$ ) were more prevalent than preparation for bias messages ( $M = 1.80, SD = .63$ ). On average, participants reported participating in behaviors that reflected academic engagement often or very often ( $M = 2.29, SD = .55$ ) and reported positive academic self-concept ( $M = 3.58, SD = .63$ ).

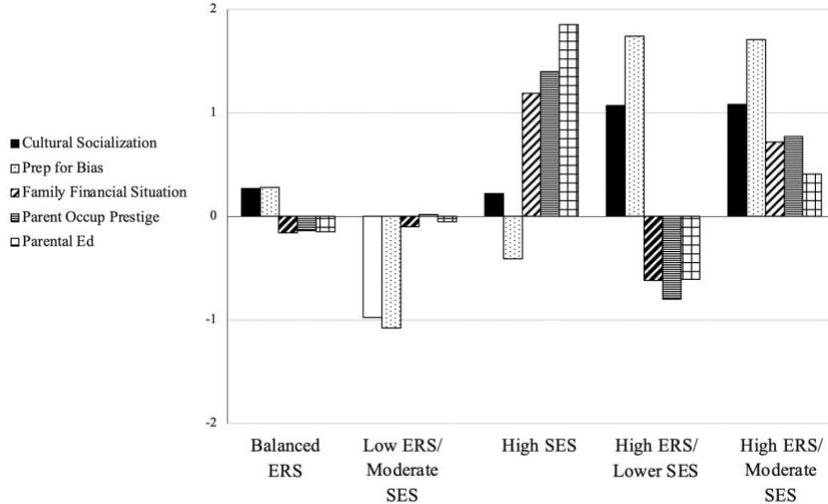
Correlations revealed parental education was positively associated with parent occupational prestige, family financial situation, as well as academic concept (see Table 2). Of particular note, cultural socialization was positively associated with preparation for bias  $r(979) = .52, p < .001$  as well as academic engagement  $r(979) = .08, p < .01$  and academic self-concept  $r(979) = .20, p < .001$ . Preparation for bias was negatively correlated with parental education  $r(979) = -.09, p < .01$  as well as parent occupational prestige  $r(979) = -.07, p < .01$ , and it was significantly and positively correlated with academic self-concept  $r(979) = .16, p < .001$ .

### **Adaptive Culture Profiles**

Latent cluster analyses were conducted using the 5.1 Latent Gold program (Vermunt & Magidson, 2005) to capture the adaptive culture variability in our sample. Adaptive culture clusters were determined based on family/neighbor's financial situation comparison, parent education, and parental occupational prestige, along with cultural socialization and preparation for bias messages received from parents. No data exclusions or transformations were conducted prior to estimating our cluster solution. Using data from three SES measures and two ERS measures, seven latent class models (ranging from 1–7 clusters) were estimated. Summary model

fit statistics for the seven bootstrapped models are displayed in Table 2.2. Of the seven models we estimated, the five-cluster model with a bootstrapped  $p$ -value appeared to best fit the data. The five-cluster solution had a substantial reduction in  $L^2$ , lowest BIC, BVRs less than 3.84 and a non-significant  $p$ -value; however, it did not have the lowest AIC or highest entropy. Nevertheless, this was the one that had the most evidence of fit across the set of indices among the candidate models. Although the 7-cluster bootstrapped model had the greatest reduction in  $L^2$  (11.8%) over the non-bootstrapped baseline model, the 5-cluster bootstrapped model showed the lowest BIC value (16,668.30), a substantial reduction in  $L^2$  over the baseline (10.7%), and a non-significant bootstrapped  $p$ -value ( $p = .24$ ). To assess local dependence, we then inspected the BVRs for each pair of indicators for the 5-cluster bootstrapped model. In doing so, we found that the BVR value for the parental occupation prestige/parental education pair exceeded 3.84 (5.16). This suggested that the association between the two socioeconomic indicators was not properly explained by the latent class model. Thus, to account for local dependence, we then estimated a 5-cluster bootstrapped model with a direct effect between parent occupational prestige and parental education. Accounting for this direct association resulted in a smaller BIC (16,630.45), a greater  $L^2$  reduction (11.6%), and acceptable BVRs ( $\leq 3.84$ ) when compared to the 5-cluster model estimated with no direct effect. Thus, this 5-cluster model was selected as our final cluster solution. Raw and standardized means of each socioeconomic and racial socialization indicator were used to describe and label each of the five clusters (see Table 2.3 for raw means and Figure 2.1 below for standardized means).

**Figure 2.1** Summary of Adaptive Culture Profiles Using Standardized Means



**Cluster Descriptions Relative to the Sample Means.** The first and largest cluster, *Balanced ERS* ( $n = 473$ , 50.1% of the sample), was characterized by students who reported receiving both more cultural socialization and preparation for bias at levels approximately one-quarter of a SD above the sample mean (see Figure 1). They also perceived their families to be slightly less well off than their neighbors, and had parents with parental occupation prestige and education levels slightly below the ERS sample mean. Students in the second largest cluster, *Low ERS/Moderate SES* ( $n = 263$ , 28.8% of the sample), reported lower cultural socialization (almost 1 SD below the sample mean) and preparation for bias levels (1 SD below the sample mean), and they perceived their families to be just slightly worse off than their neighbors. The third cluster, *High SES* ( $n = 56$ , 8.4%), was distinguished by very high socioeconomic resources. Students in this group had the highest level of socioeconomic resources (highest parental education, highest parental occupation prestige, and the lowest relative financial hardship) of the five clusters. With regard to ERS, these students received fewer preparation for bias messages compared to all other clusters with the exception of the *Low ERS/Moderate SES cluster*. The fourth cluster, *High ERS/Lower SES* ( $n = 61$ , 7.2%), was characterized by students receiving substantially more

cultural socialization (more than 1 SD above the mean), the most preparation for bias messages (almost 2 SD above the sample mean), combined with the greatest relative financial hardship, lowest parent occupational prestige, and lowest parental education. The fifth and final cluster, *High ERS/Moderate SES* ( $n = 41, 5.6\%$ ), reported receiving high cultural socialization (more than 1 SD above the sample mean) and preparation for bias levels (almost 2 SD above the sample mean) as well as a more affluent family financial situation combined with higher educational prestige and parental education levels.

**Comparisons Across Clusters.** As shown in Table 4, ANOVA and post-hoc analyses revealed that all profiles significantly differed in terms of parental education and parent occupational prestige, with the exception of the *Balanced ERS* and the *Low ERS/Moderate SES* profiles. All profiles also significantly differed in perceived family financial situation, except for the *High SES* profile and the *High ERS/Moderate SES* profiles. The *Balanced ERS* and *High SES* group as well as the *Moderate ERS/Lower SES* and *High ERS/Moderate SES* group were similar in terms of cultural socialization. All other profiles significantly differed in cultural socialization. All profiles significantly differed in preparation for bias, except for the *Moderate ERS/Lower SES* and the *High ERS/Moderate SES* groups.

With regard to ERS messages, the largest cluster (*Balanced ERS*) reported similar amounts of both cultural socialization and preparation for bias. The *Balanced ERS* cluster was significantly different across all three socioeconomic indicators when compared to all profiles except the *Low ERS/Moderate SES profile*. This cluster also reported significantly less cultural socialization and less preparation for bias when compared to the *High ERS/Lower SES* and the *High ERS/Moderate ERS* profile. Students in this profile also reported more of both ERS messages when compared to the *Low ERS/Moderate SES* profile.

With regard to ERS messages, the *Low ERS/Moderate SES* cluster had significantly fewer cultural socialization and preparation for bias messages than all of the other clusters. The *Low ERS/Moderate SES* students had parents who were significantly less educated, with less prestigious occupations, and perceived their family to be less financially well off than the *High SES* and *High ERS/Moderate SES* clusters. Additionally this cluster reported significantly more socioeconomic resources than the *Moderate ERS/Lower SES* cluster.

The third largest cluster, *High SES*, had significantly more educated parents with more prestigious occupations, and perceived their family to be more financially well off compared to all other clusters in this sample. The *High SES* cluster also received fewer preparation for bias messages compared to all other clusters in this sample with the exception of the *Low ERS/Moderate SES* cluster. Relative to all other clusters, the fourth largest cluster *High ERS/Lower SES*, had significantly less highly educated parents with less prestigious occupations and perceived themselves to be less financially well off. This profile also received more cultural socialization and preparation for bias than all other clusters, with the exception of the *High ERS/Moderate SES* group.

The *High ERS/Moderate SES* group had more educated parents with more prestigious occupations and perceived their families to be more financially well off than *Balanced ERS* and *Low ERS/Moderate SES* groups. This profile also received significantly more cultural socialization and preparation for bias messages when compared to all other clusters except the *High ERS/Lower SES* group, which received more preparation for bias messages.

### **Cluster Group Differences in Academic Engagement and Academic Self-Concept**

#### ***Academic Self-Concept***

Significant Wald tests ( $p < .05$ ) indicated that academic self-concept and academic engagement differed based on profile membership (see Table 5). Students in the *Balanced ERS* cluster reported significantly lower academic self-concept than students with significantly fewer ERS messages in the *Low ERS/Moderate SES* group and students with significantly more socioeconomic resources in the *High SES* group. Additionally, the *High SES* students reported significantly higher academic self-concept than students who reported significantly fewer socioeconomic resources but more ERS messages in the *High ERS/Lower SES* group. This pattern of findings suggests socioeconomic resources were more indicative of students' academic self-concept and that, contrary to our hypothesis, ERS messages did not tend to compensate for fewer socioeconomic resources.

### ***Academic Engagement***

Consistent with our hypothesis, students in the *Balanced ERS* cluster reported significantly higher academic engagement than students in the *Low ERS/Moderate SES* cluster. This finding was expected in that despite perceiving more relative financial hardship, students in the *Balanced ERS* cluster received more cultural socialization and preparation for bias than the *Low ERS/Moderate SES* group. Interestingly, students in the *High ERS/Lower SES* group also reported significantly higher academic engagement than those in the *Low ERS/Moderate SES* group, lending support for our expectation that ERS resources would compensate for lower SES resources. Additionally, the *High ERS/Moderate SES* group reported higher academic engagement than the *Low ERS/Moderate SES* group. This finding also aligned with our hypotheses, in that the *Low ERS/Moderate SES* group was less socioeconomically advantaged, reported fewer ERS messages, and also showed less academic engagement in comparison to the *High ERS/Moderate SES* group. We also observed that students in the *High SES* profile reported

significantly higher academic engagement than students in the *Balanced ERS* and *Low ERS/Moderate SES* clusters, illustrating that SES was more indicative of academic engagement among students in these three profiles.

## **Discussion**

ERS messages are salient aspects of adaptive culture for Latinx college students (Rivas-Drake, 2011; Sanchez et al., 2018). Prior research has focused on distinct ERS dimensions in isolation (i.e., cultural socialization, preparation for bias) of each other (Ayón et al., 2020) and of socioeconomic characteristics. Consequently, the ways in which distinct types of ERS messages work in tandem with socioeconomic factors, and how they relate to academic outcomes remains under-examined (Brown et al., 2007; Wang et al., 2020). Via a person-centered approach, I identified Latinx college students' ERS messages and socioeconomic factors as adaptive culture and elucidated how these may promote academic adjustment.

### **Profiles of Adaptive Culture**

Five profiles emerged among this sample of socioeconomically diverse Latinx college students: a) *Balanced ERS*, b) *Low ERS/Moderate SES*, c) *High SES*, d) *High ERS/Lower SES*, and e) *High ERS/Moderate SES*. Characteristics from the largest profile (*Balanced ERS*) align with prior research that suggests cultural socialization and preparation for bias are two of the most salient ERS messages transmitted to Latinx youth (Ayón et al., 2020; Rivas-Drake, 2011). The second largest cluster, the *Low ERS/Moderate SES* group, demonstrated the lowest ERS levels of all the clusters, yet had moderate amounts of socioeconomic resources. It may be that more socioeconomically advantaged families may face fewer instances of ethnic-racial discrimination or perceive fewer economic constraints, and in turn, may de-emphasize ERS messages that prepare youth for ethnic-racial discrimination or emphasize cultural pride as a

response to racial bias. This cluster emphasizes how parental socioeconomic indicators such as education levels have differential implications for ERS messages (Crouter et al., 2008; Ontai-Grzebik & Raffaelli, 2004; White-Johnson et al., 2010).

### **Adaptive Culture Profiles and Academic Adjustment Outcomes**

As expected, findings mirror prior research that illustrates how socioeconomic advantage is linked to academic adjustment (Conchas, 2001; Gonzales et al., 2015; Means & Pyne, 2017; Walpole, 2003). Also parallel to previous studies and as posited by our theoretical frameworks (Coll et al., 1996), we found that both cultural socialization and preparation for bias ERS messages may promote academic engagement among Latinx college students (Anglin & Wade, 2007; Martinez-Fuentes et al., 2020; McDermott et al., 2018). First, students in the *Balanced ERS* cluster who perceived their family to be less affluent, and received more ERS messages, reported higher academic engagement than the more affluent *Low ERS/Moderate SES* group who received fewer ERS messages. Likewise, the less socioeconomically advantaged *Balanced ERS* students received fewer ERS messages in comparison to the *High ERS/Moderate SES* students and also reported less academic engagement. We found similar patterns with the second largest cluster, the *Low ERS/Moderate SES* group. In comparison to the *High SES* and *High ERS/Moderate SES* groups, the *Low ERS/Moderate SES* group was less socioeconomically advantaged, received fewer ERS messages, and reported being less academically engaged. Whereas socioeconomic advantage may bolster Latinx students' academic engagement in college settings, our findings suggest that ERS uniquely contributes to heightened engagement. For example, the *Low ERS/Moderate SES* students were more affluent but received fewer ERS messages and less academically engaged than the less affluent but more socialized *Moderate ERS/Lower SES* students. Notably, the Latinx students in our sample were attending a Hispanic

Serving Institution; thus, it is possible that receiving more messages around cultural pride and racial bias may drive them to seek out co-ethnic peers with similar cultural values and experiences. In turn, with support of co-ethnic peers, they may be more inclined to engage in the classroom and on campus (Chavous, 2000; Chavous et al., 2003). More research is needed to disentangle the role of co-ethnic peers and other potential mediators of the link between ERS and academic engagement among Latinx college students. Our findings suggest that socioeconomic advantage, coupled with ERS messages may promote greater academic engagement among Latinx college students.

Separate findings from this study suggest that socioeconomic disadvantage coupled with preparation for bias messages may differentially relate to academic self-concept among Latinx college students. The less affluent *Balanced ERS* students who received more preparation for bias messages also reported a more negative academic self-concept and reduced academic engagement than the more affluent *High SES* students who received fewer preparation for bias messages. Patterns from this profile illustrate how fewer socioeconomic resources and heightened preparation for bias messages may be associated with a more negative self-concept for Latinx students. Findings also add further nuance to the mixed empirical evidence regarding the association between preparation for bias messages and academic adjustment (Atkin et al., 2018; Banerjee et al., 2017; Tang et al., 2016; Umaña-Taylor & Hill, 2020). As illustrated by these findings and other scholars' work (Banerjee et al., 2018; Liu & Lau 2013; Mendoza-Denton et al., 2002), less affluent parents may possess fewer resources and encounter fewer opportunities to bolster their children's academic self-concept. Future studies should consider other contextual factors, such as neighborhood or school characteristics, when examining the

links between socioeconomic resources, preparation for bias messages, and academic adjustment (Umaña-Taylor & Hill, 2020).

We also found that both types of ERS messages may buffer Latinx college students' negative academic adjustment linked to socioeconomic disadvantage. This partially aligns with our hypothesis that profiles characterized by greater cultural socialization or both cultural socialization and SES resources would evince better academic adjustment than those characterized by lower cultural socialization or fewer SES resources. More specifically, the less affluent *Moderate ERS/Lower SES* students who received more ERS messages showed similar academic engagement and self-concept to the *Balanced ERS students* who were more socioeconomically advantaged but received fewer ERS messages. We similarly observed that the *High SES* students with more educated parents who held more prestigious occupations but received less ethnic-racial socialization showed similar academic adjustment to the *High ERS/Moderate SES* students who were less affluent but received more socialization. The *High SES* students' parents may rely less on cultural pride or anticipatory messages about racial bias as a coping tool when confronted with ethnic-racial discrimination. Indeed, Ceballo (2004) found that low-income immigrant Latinx parents frequently transmitted messages of economic constraints and perseverance in the face of ethnic-racial discrimination. These findings are contrary to prior scholarly work that found that among a racially diverse sample of parents, education levels were positively associated with familial discussion of ethnicity and race (Brown et al., 2007). Most notably, ERS messages promoted academic adjustment among our college student sample, demonstrating that Latinx students who received more cultural socialization and preparation for bias messages in the context of socioeconomic disadvantage were *as well* adjusted academically than their more affluent peers who received less socialization around their

ethnicity or race. Taken together, our findings suggest that ERS messages buffer Latinx college students' negative academic adjustment above and beyond their socioeconomic disadvantage, yet when these messages are missing Latinx students' socioeconomic advantages still benefit with students academically.

### **Limitations and Future Directions**

Our study is not without its limitations. First, our findings are not generalizable, as our sample comprised of Latinx college students attending a Hispanic-serving institution (HSI) in the Western region of the US. The implications of ERS on academic adjustment and well-being vary across youth exposed to diverse ethnic and racial groups (Banerjee et al., 2011; Neblett et al., 2012; Tran & Lee, 2010; McDermott et al., 2018); future studies should consider examine these processes among Latinx students across various college settings. Additionally, although we did not capture ethnic differences in our study, it is important to note that Latinx youth are not a homogenous ethnic-racial group and should not be treated as such. Other factors such as documentation and immigration status, which were outside the scope of our study, may play an important role in the types and frequency of ERS messages transmitted to Latinx youth (e.g., Ayón et al., 2020; Cross et al., 2020) and should be further examined.

When examining socioeconomic factors, we included both objective and subjective indicators of socioeconomic status. Future studies focused on academic adjustment may consider examining other objective (e.g., income) and subjective socioeconomic (e.g., social class identity) indicators, as well as wealth markers such as wealth indexes. Wealth is an important and understudied aspect of familial socioeconomic status that has implications for trajectories of educational success, particularly among minority youth (Diemer et al., 2013, 2019).

Third, the cross-sectional nature of our study did not allow us to determine directionality or causality among our variables. ERS is dynamic, context-dependent, and embedded in reciprocal relationships (Byrd & Ahn, 2020). Thus, future studies should consider the role of context as well as longitudinal methods to elucidate the temporal relations between ERS, socioeconomic factors, and academic outcomes.

Lastly, in our examination of ERS, we only included two types of messages: cultural socialization and preparation for bias. Other types of ERS such as promotion of mistrust are salient and frequently transmitted messages among minority youth (Tran & Lee, 2010). Further, we only considered ERS messages received from parents, and these are not only transmitted by parents or caregivers. Messages about one's ethnic-racial group are also communicated via peer networks (Hughes et al., 2011), educators and in schools (Aldana & Byrd, 2015), and through the media (Towbin et al., 2008). Thus, scholars examining ERS and academic adjustment among Latinx youth should consider the types of messages youth receive, as well as the contexts in which youth receive these messages.

### **Conclusion**

Our study is unique in that it relied on a person-centered approach to examine Latinx college students' ethnic-racial socialization and socioeconomic factors in tandem, as well as their relation with academic adjustment. In acknowledging ERS as a valuable form of adaptive culture, we take on a strengths-based approach by highlighting the capital Latinx students inherently possess when they arrive at college. Our study's findings have implications for college educators and administrators committed to creating culturally informed interventions, classrooms, and campuses that cater to the needs and identities of Latinx youth. When working with Latinx youth, academic counselors should be prepared to discuss the messages youth

receive around their ethnic-racial group, and how they may inform their perceived academic competencies. College educators and administrators should be cognizant of the complex ways in which youth's socioeconomic background, as well as ERS messages that imbue cultural pride and prepare youth for racial bias, shape how Latinx youth navigate college. Importantly, college educators and administrators should challenge their own biases, negative stereotypes, and deficit perspectives that posit Latinx youth as lacking the capital to succeed in institutions of higher education. Future research should continue to explore how objective and subjective socioeconomic factors and ERS, as well as other forms of community cultural wealth, leverage Latinx youth's college experience and academic adjustment.

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**Table 2.1** Sample Characteristics for Full Sample and by Adaptive Culture Profiles

<b>Variable</b>	<b>Overall Sample</b>	<b>Balanced ERS (Class 1)</b>	<b>Low ERS/ Moderate SES (Class 2)</b>	<b>High SES (Class 3)</b>	<b>High ERS/ Lower SES (Class 4)</b>	<b>High ERS/ Moderate SES (Class 5)</b>
Class % ( <i>n</i> )	100% (979)	50.1% (473)	28.8% (263)	8.4% (56)	7.2% (61)	5.6% (41)
Sample Characteristic <i>M (SD)</i>						
Parent education	3.12 (.2)	2.82 (.174)	3.03 (.185)	6.82 (.122)	1.90 (.112)	3.93 (.218)
Parent occupational prestige	40.88 (11.61)	39.24 (10.29)	41.16 (11.21)	57.08 (11.37)	31.54 (5.96)	49.85 (9.91)
Family financial situation	3.02 (.79)	2.89 (.73)	3.10 (.72)	3.96 (.71)	2.53 (.65)	3.59 (.74)
Cultural socialization	2.29 (.59)	2.45 (.44)	1.71 (.48)	2.42 (.46)	2.92 (.12)	2.93 (.11)
Prep for bias	1.80 (.63)	1.98 (.40)	1.12 (.18)	1.54 (.39)	2.90 (.16)	2.88 (.20)
Outcome of Interest <i>M (SD)</i>						
Academic engagement	2.29 (.55)	2.30 (.54)	2.15 (.49)	2.42 (.56)	2.42 (.55)	2.62 (.70)
Academic self-concept	3.58 (.63)	3.55 (.63)	3.65 (.61)	3.66 (.65)	3.63 (.61)	3.66 (.57)

*Note.* Raw means and standard deviations reported. \* $p < .01$ ; \*\* $p < .01$ ; \*\*\* $p < .001$ .

**Table 2.2** Pearson Correlations Among Socioeconomic Indicators, Ethnic-racial Socialization, and Academic Adjustment ( $N = 979$ )

Variable	Socioeconomic Indicators			Ethnic-Racial Socialization		Academic Adjustment	
	1.	2.	3.	4.	5.	6.	7.
1. Parental education <sup>a</sup>		.49***	.14***	-.05	-.09**	.02	.09**
2. Parent occupational prestige <sup>a</sup>			.15***	-.03	-.07*	.12***	.12***
3. Family financial situation <sup>a</sup>				-.01	-.09**	.09**	.06*
4. Cultural socialization <sup>b</sup>					.52***	.08**	.20***
5. Preparation for bias <sup>b</sup>						-.04	.16***
6. Academic engagement <sup>c</sup>							.30***
7. Academic self-concept <sup>c</sup>							

*Note.* <sup>a</sup> Socioeconomic indicators; <sup>b</sup> Ethnic-racial socialization; <sup>c</sup> Academic adjustment; \* $p < .05$ , \*\* $p < .01$ , \*\*\* $p < .001$ .

**Table 2.3** Model Fit Statistics from Latent Class Analyses of Adaptive Culture ( $N = 894$ )

<b>Model</b>	<b>BIC (LL)</b>	<b>L<sup>2</sup></b>	<b>df</b>	<b>Bootstrap p-value</b>	<b>% Reduction in L<sup>2</sup></b>	<b>Maximum BVR</b>
<i>With no direct effects</i>						
One-class	17,028.78	4,875.16	857	.01	.0	264.52
Two-class	16,819.56	4,625.16	851	.09	5.1	214.67
Three-class	16,683.40	4,448.23	845	.23	8.8	22.05
Four-class	16,673.55	4,397.60	839	.22	9.8	9.45
Five-class	16,668.30	4,351.58	833	.24	10.7	5.16
Six-class	16,680.93	4,323.44	827	.10	11.3	1.83
Seven-class	16,696.11	4,297.85	821	.11	11.8	1.51
<i>With direct effects</i>						
Five-class with direct effect between parent occupational prestige and parental education	16,630.45	4,306.94	832	.16	11.6%	.93

*Note.* BIC (LL) = Log-likelihood Bayesian Information Criterion; L<sup>2</sup> = Likelihood Ratio chi-square; BVR = Bivariate Residuals.

**Table 2.4** Adaptive Culture Profile Differences Across Indicators

Indicators	F	Estimated means for LPA profiles					Mean Differences Between Profiles									
		M1	M2	M3	M4	M5	1 2	1 3	1 4	1 5	2 3	2 4	2 5	3 4	3 5	4 5
		Parent education	77.23***	2.82	3.03	6.82	1.90	3.93		-4.0	.92	-1.10	-3.79	1.12	-.90	4.92
Parent occupational prestige	56.93***	39.2 4	41.16	57.0 8	31.5 4	49.8 5		-17.84	7.70	-10.61	-15.93	9.61	-8.70	25.54	7.23	-18.31
Family financial situation	42.19***	2.89	3.10	3.96	2.53	3.59	-.21	-1.08	.36	-.70	-.87	.57	-.49	1.44		-1.07
Cultural socialization	197.84***	2.45	1.71	2.42	2.93	2.93	.75		-.47	-.48	-.71	-1.22	-1.22	-.51	-.51	
Prep for bias	619.52***	1.98	1.12	1.54	2.90	2.88	.86	.44	-.91	-.90	-.42	-1.78	-1.76	-1.35	-1.34	

Note. M1 = *Balanced ERS*; M2 = *Low ERS/Moderate SES*; M3 = *High SES*; M4 = *High ERS/Lower SES*; M5 = *High ERS/Moderate SES*. Only mean differences with  $p < .05$  reported; \* $p < .01$ ; \*\* $p < .01$ ; \*\*\* $p < .001$ .

**Table 2.5** Relationship Between Adaptive Culture Profiles and Academic Adjustment

Outcomes	Wald	Estimated Means for LPA Profiles					Paired Comparisons Between Profiles									
		M1	M2	M3	M4	M5	1 2	1 3	1 4	1 5	2 3	2 4	2 5	3 4	3 5	4 5
Academic self-concept	9.90*	3.55	3.65	3.81	3.50	3.66	5.04	5.05								4.32
Academic engagement	31.70***	2.27	2.13	2.56	2.38	2.68	7.40	7.47	9.39	15.39	7.67	16.60				

Note. M1 = *Balanced ERS*; M2 = *Low ERS/Moderate SES*; M3 = *High SES*; M4 = *High ERS/Lower SES*; M5 = *High ERS/Moderate SES*. Only Wald values with  $p < .05$  reported for paired comparisons; \* $p < .01$ ; \*\* $p < .01$ ; \*\*\* $p < .001$ .

### **Chapter III (Study 2): Intersections of Ethnic-Racial and Social Class Identity Among Latinx College Students**

For Latinx students attending predominantly White institutions (i.e., PWIs), the racial climate and campus culture has implications for how students express their various social identities and perceive their own academic adjustment (Hurtado 1994; Gonzalez, 2002). As noted by Hurtado (1994), “a college’s historical legacy of exclusion of various ethnic groups can continue to influence current practices that determine the prevailing climate...student profiles that depart from traditional notions of the ‘ideal student’ are not always highly valued” (p. 22). Within institutions of higher education, students who hold minoritized identities navigate a very different reality than students who hold identities that align with middle- and upper-class dispositions and the dominant White culture (Stephens et al., 2012; Walpole, 2003). In the context of PWIs, Latinx students often experience a cultural incongruity, or a discrepancy between their social identities and cultural values, and the prevalent values or “identity” of the university (Byrd & Chavous, 2011; Chang, 2002; Gloria & Kurpius, 1996). Such cultural incongruence is one of many factors that contribute to academic disparities among Latinx students. Indeed, cultural discrepancies have been linked to reduced academic persistence and belongingness, heightened perceptions of barriers to educational attainment, and more negative perceptions of campus climate among Latinx college students (Bordes & Arredondo, 2005; Gloria et al., 2005, 2009).

Two social identities pertinent to Latinx students’ academic adjustment are ethnic-racial identity and social class identity. *Ethnic-racial identity* (ERI) speaks to the social and

psychological experiences related to one’s ethnic-racial group identification, or the beliefs, attitudes and processes that one has about their ethnic-racial group membership (Rivas-Drake et al., 2014; Umaña-Taylor et al., 2014), whereas *social class identity* (SCI) refers to how an individual defines and makes meaning of social class (Thomas & Azmitia, 2014; Webb, 2014). Latinx students who arrive at college are often challenged with navigating stigma or exclusion related to their ethnic-racial group membership, such as ethnic-racial discrimination perpetuated by both teachers and peers, the lack of a culturally inclusive curriculum, and ethnic-racial tensions (Ethier & Deaux, 1990, 1994; Hurtado, 1994; Huynh & Fuligni, 2012; González, 2000). Among Chicano students attending a PWI, feeling “out of place” across various campus contexts—such as in their social interactions, as they physically navigated campus, and in their courses that excluded Chicano knowledge, history, and accomplishments—was a common and frequent experience (González, 2000). Indeed, ethnic-racial discrimination has been shown to be a primary factor in Latinx students’ not completing their post-secondary educations (Fry, 2004).

Social class identity also has implications for Latinx youth’s college going experiences (Hurst, 2010; Loeb & Hurd, 2019; Ostrove & Long, 2007; Webb, 2014). In the present study, we employ Mistry and colleagues’ (2021) definition of social class as “a unifying and encompassing term that positions it as a social group and an identity that derives its meaning through everyday experiences and interactions, with related consequences for individuals’ thoughts, affects, motivations, and behaviors” (p. 4). Latinx students who identify as poor or working-class are often at a marginalized social position in institutions of higher education designed to prioritize, embody, and perpetuate middle-class ways of being (Chang, 2002). Students who identify as working-class or of low-socioeconomic backgrounds often make meaning of their social class identities within the context of *classism*, or the deficit-centered practices, and beliefs that assign

distinct values to others according to their socioeconomic class (Bettencourt, 2020; Leondar-Wright & Yeskel, 2007). Conversely, Latinx college students who identify as middle or upper-class may perceive more congruence between their social identities and the culture of a PWI (Veldman et al., 2019). Although particularly relevant in emerging adulthood (Syed & Azmitia, 2010), social class identity remains less well-understood due its fluidity and invisibility (Thomas & Azmitia, 2014). Whereas other social identities such as race or gender are more observable or static, an individual's class is less visible, more ambiguous, and more context-dependent (Thomas & Azmitia, 2014). Furthermore, the race and class-based societal devaluation experienced by Latinx students who are of low-income or working-class backgrounds may be exacerbated by the racial and socioeconomic climate of a PWI (Hurtado et al., 1996; Quintana et al., 1991; Soria et al., 2013). Examining the ways in which both ethnic-racial and social class identities intersect to inform Latinx students' academic adjustment can provide clarity on how educators, administrators and other fellow students can best support Latinx students' college-going experiences.

In the present study, we explored ethnic-racial (ERI) and social class identity (SCI) among a sample of socioeconomically diverse Latinx college students attending various PWIs. More specifically, we consider how unique dimensions of both ERI (i.e., ERI centrality, private regard, and public regard) and SCI (i.e., SCI identification, centrality, pride, and shame and guilt) function synergistically to shape Latinx college students' college-going experiences. Prior research suggests that dimensions of ERI such as ERI private and public regard as well as ERI centrality may bolster students of color's perceived academic abilities and promote academic well-being (Byrd & Chavous, 2009; Chavous et al., 2003, 2008; Hoffman et al., 2019). Similarly, distinct aspects of SCI such as identification, centrality, and both positive (i.e., SCI pride) and

negative affect (i.e., SCI shame and guilt) may uniquely influence how students of color perceive their college experience and campus climate (Loeb & Hurd, 2019; Ostrove & Long, 2007; Zorotovitch et al., 2016). However, much of the past empirical research on ERI and academic adjustment has focused on the social identity in adolescence, despite scholarly work suggesting ERI is relevant to academic well-being in emerging adulthood (Syed & Azmitia, 2014). Furthermore, much of the literature on social class identity has relied on qualitative methods and has focused on the experiences of African American college students with few studies examining both centrality and affect components of SCI and its role in the adjustment of Latinx students (Loeb & Hurd, 2019; Mistry et al., 2023; Pearce et al., 2008; Rogers, 2019). To address the aforementioned shortcomings in the literature, we investigate how ERI and SCI dimensions intersect and inform Latinx students' college experiences, specifically their perceived ethnic fit, campus inferiorization, and college competence.

### **Theoretical Framework**

The present study is grounded in three distinct theoretical frameworks to examine how ERI and SCI relate to Latinx students' experiences at PWIs: a) Webb's (2014) Multidimensional Framework of Social Class Identity, b) Social Identity Theory (Tajfel & Turner, 1986), and c) Intersectionality Theory. Webb's (2014) Multidimensional Framework of Social Class Identity expands upon Social Identity Theory (Tajfel & Turner, 1986), self-categorization theory, (SCT; Turner et al., 1987) and Collective Identity Framework (Ashmore et al., 2004) to posit that a) membership within a collective group informs individuals' thoughts, feelings, and behaviors, and b) collective identity is multidimensional and best examined with various individual level variables. Moreover, the Multidimensional Framework (Webb, 2014) argues that three dimensions of collective identity are particularly relevant when examining social class identity

within the college context: *identification*, *centrality*, and *affect*. *Identification* speaks to the self-categorization aspect of collective identity, where individuals' categorization of themselves and others is contingent upon perceived similarities and differences (Ashmore et al., 2004; Turner et al., 1987). *Centrality* refers to how much an individual considers an identity to be relevant or important to one's self-concept (Tajfel & Turner, 1986). Webb (2014) distinguishes between one's identification and one's centrality in that an individual may identify with a specific social class while simultaneously finding it irrelevant to one's self-concept, or how one perceives themselves. Lastly, the Multidimensional framework also considers affect, or the positive and negative emotions that accompany a particular social identity. More specifically, Webb (2014) considers the emotions pride, shame, and guilt that accompany an individual's social class identity. In the present study, we rely on Webb's (2014) framework and measure of SCI to capture the identification, centrality, and affective dimensions (i.e., pride, shame, and guilt) of social class identity among Latinx college students.

To frame the study of ERI, we draw on Social Identity Theory (SIT; Tajfel & Turner, 1986). SIT posits that membership within a group influences an individual's thoughts, emotions, and behaviors (Tajfel & Turner, 1986). Furthermore, SIT (Tajfel & Turner, 1986) considers the environment in shaping an individual's identity and relations with in- and out-group members, thus making it particularly relevant when examining ERI within the context of a PWI. ERI dimensions such as how important one's ERI is to their self-concept (e.g., centrality), how one perceives their ethnic-racial group (e.g., private regard), and how one believes others perceive their ethnic-racial group (e.g., public regard) are all dependent on the social context (Verkuyten, 2016). Finally, intersectionality theory provides the lens through which we consider ethnic-racial and social class identities in concert (Cole, 2009; Crenshaw, 1994). Ethnic-racial identity and

social class identity are experienced in conjunction with one another and create unique experiences of both oppression and privilege (Castillo-Lavergne & Destin, 2019; Cole, 2009; Rogers, 2019). Additionally, racism impacts one's experience of classism, thus working jointly to create nuanced social categories of both privilege and power (Cole, 2009). Understanding the ways in which both ethnic-racial and social experiences create distinct realities for Latinx college students may provide greater insight into their lived experiences and academic adjustment as they pursue higher education, particularly at PWIs (Castillo-Lavergne & Destin, 2019). Accordingly, it must be noted that this study does not explicitly speak to the dimensions of higher education that perpetuate oppression and inequality (Cole, 2009; Walpole, 2003). Rather, we focus on outcomes that capture Latinx students' subjective experiences of oppression (i.e., campus inferiorization and perceived ethnic fit) within the context of a PWI.

## **Latinx Students' Academic and Social Adjustment in College: The Roles of ERI, SCI and Gender**

### ***ERI Centrality and Academic Adjustment***

ERI centrality, or the belief that one's ethnic-racial identity is important to one's self-concept, has implications for minoritized youth's academic adjustment (Oyserman et al., 2011; Rivas-Drake et al., 2014; Sellers et al., 1998). There are two distinct perspectives regarding ERI centrality and how it functions for minority youth's academic adjustment. One perspective emphasizes the ERI dimension as promotive of academic well-being and in some cases protective for minoritized youth (Chavous, 2000; Chavous et al., 2003; Ethier & Deaux 1990, 1994; Oyserman et al., 2011; Sellers et al., 1998; Smalls et al., 2007). Positive associations between ERI centrality and academic well-being have also been found among emerging adults. College students who felt their Latinx identity was more important to their self-concept reported

higher collective self-esteem and perceived fewer perceived threats to their identity at their PWIs (Ethier & Deaux, 1990). However, the literature on the quantitative associations between ERI centrality and academic outcomes among Latinx college students remains scarce. Findings from other studies suggest that ERI centrality similarly benefits African American college students' academic adjustment. For example, African American college students with high racial centrality were more involved in race-affirming campus organizations, which have been empirically identified as more salient sources of support for college students with higher ERI centrality when compared to their less ethnically identified counterparts (Chavous, 2000; Chavous et al., 2003; Ethier & Deaux, 1994). Higher ERI centrality was also associated with future college attendance and increased perceptions of ethnic fit on campus among African American youth (Chavous et al., 2003). Among a pooled sample of ethnic minority college students, having explored one's ethnic-racial group membership and having committed to one's ethnic-racial group was related to increased self-worth for students with lower school belonging (Gummadam et al., 2016). Moreover, ERI centrality has also been shown to promote academic well-being among minoritized adolescent samples, including increased academic motivation among adolescents of Chinese and Mexican descent (Fuligni et al., 2005), greater perceived academic support among Black American and Latinx adolescents (Hoffman et al., 2019), as well as increased time spent on homework, greater school importance attitudes, and higher academic self-concept among African American adolescents (Byrd & Chavous, 2009; Chavous et al., 2008).

Conversely, a separate view is that ERI centrality may potentially function as a risk factor, in that strong identification with a historically devalued and negatively stereotyped ethnic-racial group may exacerbate one's perceptions of discrimination, hinder one's academic self-concept, and be linked to less optimal academic outcomes (Cokley et al., 2012; Okeke et al.,

2009; Yip, 2018). Latinx college students who had explored their ethnic-racial group membership and were clear about what it meant to them perceived their college campus more negatively, and in turn were less committed to finishing college (Castillo et al., 2006). Among a separate sample of Latinx college students, greater ERI centrality was related to worse college adjustment across various domains, such as social, personal-emotional, and institutional attachment (Schneider & Ward, 2003). Similarly, other scholarly work posits ERI centrality as a potential risk factor among Latinx and African American adolescents. For instance, Latinx adolescents with high ERI centrality who believed their centrality interfered with their navigating American culture reported lower GPAs when compared to their counterparts who showed high ERI centrality and believed they needed to challenge negative stereotypes about their ethnic group (Atschul et al., 2008). Racial centrality has also been linked to lower GPAs among African American adolescents (Cokley et al., 2012), as well as greater endorsement of negative racial academic stereotypes and in turn, hindered academic self-concept (Okeke et al., 2009).

Taken together, in the context of environments that are incongruent with one's ERI, centrality may amplify positive feelings of group connectedness *and* increase one's vulnerability to risk factors such as ethnic-racial discrimination (Byrd & Chavous, 2011; Okeke et al., 2009; Sellers et al., 1998; 2006). In other words, having a strong group affiliation may amplify minoritized students' perceived abilities to excel in college (Chavous et al., 2003; 2000; Hoffman et al., 2009). However, possessing a strong affiliation with a minoritized and historically excluded ethnic-racial group may also hinder minoritized students' perceptions of campus as a welcoming or inclusive learning environment (Byrd & Chavous, 2009; Cokley et al., 2012; Okeke et al., 2009; Yip, 2018).

### ***ERI Private Regard, Public Regard, and Academic Adjustment***

**ERI Private Regard.** Ethnic-racial regard speaks to how a person evaluates their own race and is defined by two dimensions: *private regard* and *public regard* (Sellers et al., 1998). Whereas *private regard* refers to how an individual feels about their own ethnic-racial group, *public regard* refers to an individual's view of how others perceive their ethnic-racial group (Okeke et al., 2009; Sellers et al., 1998). Ample empirical evidence posits that self- and societal perceptions about one's ethnic-racial group play a role in minoritized youth's academic adjustment, including their academic self-concept, academic attitudes, as well as academic achievement and attainment (Chavous et al., 2003; Miller-Coto & Byrnes, 2016; Okeke et al., 2009; Parker & Flowers, 2003; Wong et al., 2003). Meta-analytic findings suggest a positive association between positive ethnic-racial affect (i.e., private regard) and academic achievement (Miller-Coto & Byrnes, 2016). Findings from a separate meta-analysis suggest positive associations between positive ERI private regard and well-being outcomes including: social functioning, self-esteem, as well as academic achievement and attitudes (Rivas-Drake et al., 2014).

ERI private regard has primarily been explored among adolescent samples; however, it may similarly benefit college students of color's academic adjustment and college experience (Ong et al., 2006; Parker & Flower, 2003; Rigali-Oiler & Kurpius, 2013; Rivas-Drake, 2012; Rowley et al., 1998). Although less explored among Latinx young adults, studies suggest ERI private regard is similarly relevant for Latinx emerging adults' well-being and academic success (Ong et al., 2006; Rigali-Oiler & Kurpius, 2013; Rivas-Drake, 2012). For instance, ERI private regard was most strongly related to ethnic-racial minority college students' (including Latinx students) academic persistence at a PWI (Rigali-Oiler & Kurpius, 2013). Latinx college students who engaged in more exploration about their ERI and felt more positively about their ethnic group membership also had higher GPAs (Ong et al., 2006). However, Ong et al. (2006) relied

on a composite ERI measure of exploration and affirmation, rather than a measure that uniquely measured ERI private regard. ERI private regard may also bolster their perceptions of the campus climate as well as their sense of community on campus. For instance, possessing a more positive ERI private and public regard was associated with Latinx college students' perceiving their university more positively (Rigali-Oiler & Kurpius, 2013). Similarly, Latinx college students who had higher or more positive ERI private regard also felt a greater sense of community at a PWI campus, and in turn, fewer depressive symptoms and heightened self-esteem (Rivas-Drake, 2012). Among African American college students, feeling positive about one's racial group has been linked to more campus connectedness (Parker & Flowers, 2003), increased self-esteem (Rowley et al., 1998), and fewer depressive symptoms (Neblett et al., 2013).

**ERI Public Regard.** Public regard, or how an individual perceives others' views of their ethnic-racial group also has implications for academic adjustment and overall college experience (Okeke et al., 2009; Sellers et al., 1998). In contrast to the research surrounding ERI private regard, the findings on the associations between ERI public regard and youth of color's academic adjustment appear more mixed (Chavous et al., 2003; Gonzalez et al., 2013; Hoffman et al., 2021; Rivas-Drake, 2011). ERI public regard has been primarily examined in association with psychological well-being outcomes and among minoritized adolescent samples. Less is known about this facet of ERI and academic adjustment among Latinx college students. Findings from one of the few studies that examined this dimension in emerging adulthood suggests that Latinx college students who receive more parental messages that prepared them for racial bias also reported lower ERI public regard, and in turn, experienced more depressive symptoms (Rivas-Drake, 2011). Where positive associations between ERI public regard and academic adjustment

have been found is mainly among adolescent samples. Among Latinx adolescents, more positive ERI public regard has been linked to greater college-going self-efficacy (Gonzalez et al., 2013), increased social efficacy when interacting with teachers (Hoffman et al., 2021), higher grades (Rivas-Drake, 2011), and other indicators of academic achievement (Miller-Coto & Byrnes, 2016). Findings from a meta-analysis revealed that public regard was significantly related to academic achievement but only among Latinx students (Miller-Coto & Byrnes, 2016). However, these meta-analytic findings included samples of primarily Latinx children and adolescents.

Conversely, other scholarly work suggests that low, or more negative, ERI public regard may protect minoritized youth from the effects of incongruent racial climates in which racial discrimination is prevalent (Byrd & Chavous, 2011; Sellers & Shelton, 2003). Minoritized youth lower in public regard may be better prepared or equipped to navigate a reality in which racial discrimination or harmful stereotypes about their ethnic-racial group is probable (Byrd & Chavous, 2011; Sellers et al., 2006). In turn, youth who are aware of others' negative perceptions of their ethnic-racial group, or have lower public regard, may experience better adjustment when compared to youth who believe others perceive their group positively and are then unexpectedly faced with racial discrimination or harmful racial stereotypes. As posited by Byrd and Chavous (2011), youth with low public regard may have more *person-context congruence*, where the environment (i.e., school racial climate) and their beliefs about others' perceptions of their ethnic-racial group align (i.e., group is devalued) align. This is particularly relevant for minoritized college students attending institutions of higher education in which cultural incongruence and ethnic-racial discrimination may be prevalent. For example, African American college students who had high, or more positive ERI public and private regard, were more vulnerable to negative stereotypes and in turn, performed worse on standardized academic tests

(Sellers & Shelton, 2003). Whereas few scholars have exclusively examined the relation between ERI public regard and academic outcomes among Latinx college students, more studies have focused on Latinx college students' perceptions of cultural fit and well-being (Gloria et al., 2005, 2009). Indeed, cultural congruity has been linked to improved psychological well-being as well as increased academic persistence among Latinx undergraduate students (Gloria et al., 2005, 2009; Gonzalez 2002). Taken together, more research is needed to illuminate the quantitative associations between ERI public regard and Latinx college students' academic adjustment.

### ***SCI Identification and Academic Adjustment***

Whereas objective social class markers (i.e., income, parental education or occupation) have been empirically linked to youth's academic adjustment (Browman et al., 2017; Castillo-Lavergne & Destin, 2019; Loeb & Hurd, 2019; Ostrove & Long, 2007), indicators of subjective social status such as SCI identification may be more relevant to academic and social adjustment in college (Ostrove & Long, 2007; Pearce et al., 2008; Rubin et al., 2016; Zorotovitch et al., 2016). Indeed, subjective indicators of social class were more strongly correlated with sense of belonging, as well as academic and social adjustment to college among a racially and ethnically diverse sample of college students (Ostrove & Long, 2007). Whether a student identifies as working class or upper class has implications for how they perceive the campus ethnic-racial climate (Pearce et al., 2008), navigate campus and social interactions (Rubin et al., 2016), perceive their quality of life in college (Ostrove & Long, 2007; Zorotovitch et al., 2016) and adjust academically (Ostrove & Long, 2007).

Despite the limited research on social class identification and academic adjustment among ethnic-racial minority youth, there is some evidence that SCI identification is particularly relevant to minoritized college students' adjustment (Loeb & Hurd, 2019; Soria et al., 2013;

Ramirez, 2017). Latinx students who self-identified as working-class reported less satisfaction with their educational experience, as well as a lower sense of belonging and satisfaction on campus when compared to their self-identified middle-and upper-class peers (Soria et al., 2013). During their transition from home to the university environment, college students from historically underrepresented racial or ethnic groups attending an elite PWI experienced a decrease in their subjective social status, reported lower perceived academic competence and, in turn, lower GPAs (Loeb & Hurd, 2019). For students of marginalized ethnic-racial and/or social class backgrounds, attending a PWI may be accompanied by daily experiences and social interactions (i.e., ethnic-racial discrimination, peers' displays of wealth, classism) that highlight their less privileged social status (Loeb & Hurd, 2019; Pearce et al., 2008). For instance, doctoral students of color from working-class backgrounds shared various experiences of racism and classism within their departments, such as being perceived as lacking the ability or skills to thrive academically (Ramirez, 2017).

Similar positive links between social class identification and academic adjustment have similarly been found among non-minoritized college student samples. For instance, White students who identified with a more affluent social class group also reported higher belonging in college and in turn, experienced a better quality college experience, as well as greater academic performance when compared to students who self-identified as less affluent (Ostrove & Long, 2007). White students who perceived they and their family had more money, more schooling, and more respected jobs also reported higher happiness and life satisfaction levels (Zorotovitch et al., 2016). When social class identity was made salient before an intelligence diagnostic test, students of low-socioeconomic status felt less confident and performed significantly worse when compared to more affluent counterparts (Spencer & Castano, 2007). Taken together, the

environmental shift involved in attending a PWI may play a role in Latinx students' social class identification as well as their social class identity *centrality*, or how relevant their social class is to their self-concept (Loeb & Hurd, 2019; Ostrove & Long, 2007; Pearce et al., 2008; Zorotovitch et al., 2016).

### ***SCI Centrality and Academic Adjustment***

Given the heightened identity exploration that occurs during college and in emerging adulthood (Arnett, 2000), social class may become more pronounced and pertinent to one's self-concept during this time. Mexican male college students described how salient their social class became upon arriving at college, where wealth disparities became particularly obvious for the students who identified as low or working class (Schwartz et al., 2009). Thomas and Azmitia (2008) found that among an ethnically and socioeconomically diverse sample of college students, social class was more central to students' sense of self when compared to their gender or ethnicity. Interestingly, this was the case for students of all socioeconomic statuses in this sample, indicating that the college context may contribute to variation in social class centrality (Thomas & Azmitia, 2008). Other scholarly work suggests first-generation college students of minoritized ethnic-racial backgrounds similarly perceive social class identity as salient in their daily interactions on campus and central to their self-concept (Orbe, 2004).

Other empirical research on different social identities illustrates the moderating effect of centrality on the link between other identity dimensions and adjustment (Becker & Wagner, 2009; Brittan et al., 2013; Chavous et al., 2008; Syed & Azmitia, 2010; Thomas et al., 2009). For minoritized college students' whose social class identity is more central to their self-concept, SCI might be more strongly associated with their academic adjustment and overall college experience (Webb, 2014; Wilson & Liu, 2003). For example, associations between SCI affect

dimensions (i.e., shame and pride) and academic adjustment outcomes (i.e., academic curiosity, affect and persistence) were only present among White and African American college students with high levels of SCI centrality (Webb, 2014). However, the links between SCI centrality and other SCI dimensions (i.e., SCI identification or affect) have primarily been examined via qualitative methods, with very few scholars considering both constructs among minoritized samples via quantitative methods (i.e., Aries & Seider, 2007; Webb, 2014). Indeed, interviews with a socioeconomically diverse sample of White college students revealed that more affluent students described their social class identity as more central to their self-concept when compared to low-income students (Aries & Seider, 2007). With the exception of Webb (2014), the relations between SCI dimensions (i.e., identification, centrality, and affect) and Latinx college students' academic adjustment has yet to be examined in conjunction.

### ***SCI Affect and Academic Adjustment***

SCI affect is also particularly salient to students' college experiences, particularly among college students that hold one or more minoritized identities (Schwartz et al., 2009). Mexican male college students who identified as working class described feeling frustrated with their affluent peers' displays of privilege, as well as being excluded from campus activities because they had to work to meet their family's financial needs (Schwartz et al., 2009). Among a separate sample, upper- and middle-class college students shared narratives about their guilt and luck regarding their class privilege when engaging in downward comparisons to less affluent peers (Thomas & Azmitia, 2014). Conversely, working class students and some middle-class students engaged in more upward comparisons and felt more anger, but also pride around their social class membership (Thomas & Azmitia, 2014). A middle-class Asian American student expressed both frustration as well as pride when comparing his social class status:

*A lot of my roommates don't work, they don't have anything to earn and sometimes it just makes me angry that everything is provided for them. I mean, I feel proud that I've earned what I have but it also kind of makes me frustrated...My family is not as wealthy as a lot of my friends' families but I don't feel any less proud of my family or anything, and I don't feel like my parents are any less intelligent (Thomas & Azmitia, p. 205).*

SCI affect has similar implications for White college students' college experiences. Aries and Seider (2005) interviewed White college students of low-income backgrounds that were attending either a highly selective liberal arts school and a state college. Low-income students at the elite liberal arts school expressed feeling more inadequate, uncomfortable, excluded, and inadequate at their institution when compared to the low-income state college students (Aries & Seider, 2005). Findings illustrate the unique ways in which distinct social class identifications are accompanied by distinct emotions that can be both positive and negative (Aries & Seider, 2005; Thomas & Azmitia, 2014).

The positive and negative SCI affect dimensions have unique implications for youth's academic adjustment (Crumb et al., 2020; Hurst, 2010; Webb, 2014). There is empirical evidence that suggests that positive emotions (e.g., pride) are uniquely related to more optimal academic well-being, whereas negative emotions (e.g., anger or shame) may hinder academic adjustment (Crumb et al., 2020; Hurst, 2010; Webb, 2014). For instance, Mexican male college students who felt excluded due to their social background described frustration as well as lower school belonging (Schwartz et al., 2009). In that same vein, college students who were proud of their working-class background also reported higher levels of academic motivation as well as achievement (Hurst, 2010). Webb (2014) found that for White and African American college students who self-identified as poor or lower-middle class, shame around their social class status hindered their perceived environmental mastery at a PWI, or how competent they felt in managing their environment. Additionally, shame around one's social class identification was

linked to less academic curiosity, less positive academic affect, and lower academic satisfaction among students (Webb, 2014). Interestingly, social class guilt was positively related to GPA (Webb, 2014). It may be the case that class-related guilt may propel students to persist academically to challenge classism or negative racial stereotypes that frame working-class students as lazy or incapable of thriving in academic settings (Browman et al., 2019; Crumb et al., 2020). Additionally, students of socioeconomically under-resourced backgrounds who feel negatively about their social class may also hold the belief that educational attainment is one pathway to upward mobility, thus motivating them to persist academically (Browman et al., 2019). Keeles (2020) found similar associations among Black college students, such that students who reported heightened levels of shame and guilt reported worse psychological adjustment within the context of PWIs.

### **ERI and SCI as Intersecting Identities**

Although ERI and SCI have differential implications for Latinx youth's academic adjustment, aspects of both social identities may function synergistically to shape youth's academic experiences and adjustment (Chavous et al., 2003; Loeb & Hurd, 2019; Ostrove & Long, 2007; Rubin et al., 2016). For Latinx college students, their ethnic-racial group membership situates them at a marginalized social position that may inhibit their academic attainment and hinder their college experience due to racism and xenophobia (Azmitia & Syed, 2008; Brittian et al., 2013; Castillo-Lavergne & Destin, 2019; Syed & Azmitia, 2010). Furthermore, Latinx college students from low or working-class backgrounds may also be faced with classism at PWIs that are curated for and by the middle and upper class (Walpole, 2003; Yosso, 2005). Thus, both marginalized social identities may interact and cumulatively contribute to their academic adjustment and college-going experience.

More specifically, aspects of ERI may also interact with dimensions of SCI to shape academic adjustment and well-being (Castillo-Lavergne & Destin, 2019). Castillo-Lavergne and Destin (2019) examined how intersections of ERI resolution, or the extent to which individuals have made sense of what it means to be a part of their ethnic-racial group, and status uncertainty as an SCI dimension relate to psychological well-being among working-class Latinx college women. Feelings of uncertainty around one's socioeconomic status was associated with reduced psychological well-being (Castillo-Lavergne & Destin, 2019). Additionally, ERI resolution moderated the link, such that students with higher ERI resolution who perceived socioeconomic status uncertainty experienced larger decreases in psychological well-being (Castillo-Lavergne & Destin, 2019). Other qualitative work similarly shows the ways in which social identities such as ERI and SCI jointly function to shape youth's college-going experience (Orbe, 2004). First-generation student status was more salient when it interacted with other marginalized identities, particularly ERI, age, gender, and socioeconomic identities (Orbe, 2004). To my knowledge and with the exception of Castillo-Lavergne & Destin (2019), no studies have examined the ways in which dimensions of both SCI and ERI intersect to shape Latinx college students' college experience.

### **Gender as a Potential Moderator**

The ways in which ERI and SCI interact influence academic adjustment may also differ by gender, although findings are mixed. Prior work suggests that males show poorer academic adjustment than females, including lower high school graduation, college entry, and college completion rates (Buchman et al., 2008). Within the context of a PWI, Latinx male students may be more susceptible to hindered academic adjustment linked to cultural incongruence and ethnic-racial discrimination as they are already more vulnerable in academic settings (Umaña-Taylor et

al., 2012). For example, Mexican-origin male adolescents showed greater discrimination-related decreases in academic adjustment when compared to female adolescents. Other work by Alfaro and colleagues (2009) showed that perceived discrimination was negatively associated with academic motivation only for Latinx male adolescents. Distinct dimensions ERI may differentially protect males and females students attending a PWI from hindered academic adjustment. Whereas feeling positively about one's group (e.g., high ERI private regard) may bolster academic adjustment, feeling ones ethnic-racial identification is highly relevant to one's self-concept (e.g., high ERI centrality) may be a source of stress in a PWI environment. For Mexican-American women college students, a more achieved ethnic identity exacerbated depression related to low levels of acculturative stress. Contrastingly, a positive ERI (e.g., high ERI public and private regard) buffered males from externalizing behaviors associated with ethnic-racial discrimination (Umaña-Taylor et al., 2012). Similarly, male Latinx adolescents who felt strongly and positively about their ethnic-racial group and experienced racial discrimination also found their education to be of more economic value than females (Mroczkowski & Sanchez, 2015).

The ways in which Latinx males and females are socialized may also play a role in the ways they engage with co-ethnics on campus, how they perceive their ethnic-groups, and in turn, their academic adjustment. From an early age, females are also socialized to engage in more familial and community-oriented endeavors, whereas males are encouraged to explore more individualistic undertakings outside the home and family ecosystem (Alfaro et al., 2009; Umaña-Taylor et al., 2012). For instance, among a sample of first-year college students, women were more likely to seek out help and community on campus (Holt, 2014). Barajas & Pierce (2001) found that Latina college students believed their support from co-ethnics in regard to navigating

college and sustaining a positive sense of ethnic identity contributed to their success. Similarly, when compared to males, African American female college students who engaged with the African American community on campus also reported more college satisfaction as well as better academic and social experiences. Thus, Latinx males' potential lack of community-seeking, ethnic-affirming behaviors may hinder their ethnic identity and academic adjustment.

Although there is less work on SCI and gender, less favorable feelings regarding one's social class identification may be more detrimental to Latinx males. Gender norms for Latinx males perpetuate notions of males as the dominant bread-winner and the financial decision-maker whereas females are often encouraged to prioritize domestic and familial duties (Richman et al., 2015). Thus, males who identify with a lower social class and feel negatively about their social class identification at PWI, where middle and upper class ways of being are prioritized, may experience worse academic and psychological adjustment when compared to females. Neblett and colleagues (2016) found that among a sample of African American college students at a PWI, male students from lower SES backgrounds reported poorer mental health associated with racial discrimination. Additionally, females may view their gender identity as more salient when compared to other social identities; therefore, social class identity may be less strongly linked to females' academic adjustment. Graham-Bailey et al (2019) conducted a latent class cluster analysis to detect patterns of centrality across various social identities (e.g., socioeconomic, gender, and race/ethnicity) of college students attending PWIs. Results showed that there were more female college students who believed their gender was more central to their self-concept than their socioeconomic status (Graham-Bailey et al 2019). A separate study found that men's monetary contributions to their community contributed more to their sense of mattering, whereas women's interpersonal relationships were more relevant to their social

matter (Bonhag, et al., 2021). As suggested by prior work, in this study it was expected that a less positive ERI and SCI would be more strongly related to poorer academic adjustment for Latinx males than for females. Furthermore, it was expected that the compensatory nature of a positive ERI on academic adjustment would be stronger for Latinx males who identified with and felt negatively about their lower social class.

### **Research Aims and Hypotheses**

In this study, I explored how dimensions of ethnic-racial identity (i.e., ERI centrality, private regard, and public regard) and social class identity (i.e., SCI identification, centrality, pride, shame, and guilt) intersected to shape Latinx college students' college experiences. Dimensions of ERI and SCI uniquely relate to minoritized students' academic adjustment and well-being; yet how dimensions of both social identities work synergistically is less clear. Additionally, the ways in which ERI private or public regard may compensate for negative SCI affect (i.e., SCI shame or guilt) among Latinx college students has yet to be empirically examined. More specifically, I examined how dimensions of ERI and SCI were related to feelings of campus inferiorization, perceived ethnic fit, and college competence among Latinx college students attending PWIs.

In regards to SCI, I hypothesized that Latinx students who self-identify as poor or working class and whose SCI is highly central to their sense of self would also experience lower college competence, heightened campus inferiorization, as well as lower perceived ethnic fit at a culturally incongruent PWI. Additionally, I expected that Latinx college students who self-identified as middle- or upper-class and had high SCI centrality would show greater college competence, less campus inferiorization, as well as greater perceived ethnic fit due to greater cultural congruence. Given the empirical evidence on the associations between positive social

class affect and academic adjustment (i.e., Crumb et al., 2020; Hurst, 2010; Webb, 2014), I expected that SCI pride (i.e., more positive affect) would be associated with higher college competence, lower campus inferiorization, and greater perceived ethnic fit. In contrast, I hypothesized that SCI shame and guilt (i.e., more negative affect) would be related to lower levels of college competence, greater levels of campus inferiorization, and lower levels of perceived ethnic fit among Latinx college students.

In regards to ERI, given the mixed findings on the links between ERI centrality and academic adjustment, I expected that ERI centrality would be positively related to greater campus inferiorization, lower perceived ethnic fit, and greater college competence for Latinx students attending a PWI. Additionally, I hypothesized that a higher or more positive ERI private and public regard would be associated with lower campus inferiorization, increased perceived ethnic fit, and heightened college competence. Lastly, I expected that ERI dimensions (i.e., ERI private and public regard) would interact with SCI dimensions (i.e., SCI pride, shame and guilt) in unique ways. More specifically, I hypothesized that higher or more positive ERI private and public regard would act in a compensatory manner in profiles with heightened SCI shame and guilt or lower SCI pride.

Given previous work, it was hypothesized that male Latinx college students with higher ERI centrality, and less positive ERI private and public regard would report worse academic adjustment (e.g., lower college competence, heightened campus inferiorization, and lower perceived ethnic fit) when compared to female Latinx college students. Additionally, male Latinx college students with a lower social class identification and more negative affect regarding their identification (e.g., less SCI pride, more SCI shame and SCI guilt) would report worse academic adjustment than female Latinx college students (e.g., lower college competence,

heightened campus inferiorization, and lower perceived ethnic fit). Furthermore, it was expected that the buffering effect of a positive ERI on worse academic adjustment linked to a negative SCI would be stronger for Latinx males.

## **Method**

### **Participants**

Data were drawn from the College Academic and Social Identities Study (CASIS), a longitudinal study (PI: Dr. Tabbye Chavous; IRB#: HUM00040632) examining the experiences of ethnic-racial minority students (Black, Latino/a, Asian/Asian American) attending five predominantly White institutions (PWIs). The larger study sample ( $n = 2,074$ ) included an ethnically and racially diverse sample of college students attending five PWIs in the midwestern region of the U.S. Survey data were drawn from a subset of Latinx undergraduate students ( $n = 313$ ; 64.5% female;  $M_{\text{age}} = 18.45$  years) throughout data collected within the span of six years (2012-2016). About 12% of the students were foreign-born and the rest of the students were born in the U.S. The analytic sample for this study included students from all 3 cohorts who self-identified as Latino/a in fall of their first year, and their subsequent spring survey response.

### **Institutions**

There were 5 distinct institutions located in the Midwest region of the U.S. where data were drawn from. With regard to ethnic-racial makeup, the student population at all five of the institutions were predominantly White (between 80-90%) and Hispanic/Latinx students were in the minority (between 2–12%). With regard to socioeconomic status of students attending the five institutions, three of the institutions were more affluent, with one institution admitting some of the most affluent students in the country. More specifically, at this affluent university, approximately 55% of in-state undergraduate students' and 78% of students' family income

exceeded \$150,000 and only 18% of the undergraduate population being Pell Grant recipients. At the other affluent institution, only 26% of students were low-income as indicated by their recipient of the Federal Pell Grant Aid. The remaining three institutions were less affluents (between 50-90% of the undergraduate population received financial aid through grants or loans.

## **Design**

The present study involved secondary data analysis. CASIS relied on a cross-sequential design with three distinct cohorts, each of which completed surveys at the fall semester of their first year at a four-year university. More specifically, students first entered the study as either undergraduate freshman or as first-year transfer students. Participants also completed a second survey in the Spring semester of the same academic year, and were then contacted every spring semester thereafter for follow-up survey responses. Cohort 1 included students' survey responses from fall of their first year and four subsequent spring surveys, or five waves of data. Cohort 2 included students' survey responses from fall of their first year and three subsequent spring surveys, or four waves of data. Cohort 3 included students' survey responses from fall of their first year and two subsequent spring surveys, or three waves of data.

## **Procedure**

Participants were recruited through a multi-university initiative focused on underrepresented minority retention in STEM areas. An electronic mailing list was also used to recruit through the registrar. More specifically, the complete student populations of African American/Black, Latinx/Hispanic as well as students who identified as 2 or more races were sent a recruitment email. Eligibility requirements included that the respondent must be African American/Black or Latinx/Hispanic, and a freshman or first-year transfer student currently enrolled at any of the 5 institutions surveyed. After providing informed consent, participants self-

administered a 30–45-minute web-based survey. At the end of each spring semester, participants were then contacted via email and asked to complete follow-up surveys. Compensation for participants included a \$25 Visa e-card for the fall survey and a \$30 Visa e-card for the subsequent spring survey. This study received full board approval by the Institutional Review Board at [masked for review].

## **Measures**

### ***Gender Identity***

Gender was measured by one question: “What is your gender identity?” Students had 3 response items: 1 = *Male*, 2 = *Female*, 3 = *Specify the term that best applies to you*. All students responded either male or female. This measure was recoded where 0 = *Male* and 1 = *Female*.

### ***Ethnic-Racial Identity***

The Multidimensional Inventory of Black Identity (MIBI; Sellers et al., 1997) and three of its subscales were used to assess students’ ERI centrality, ERI private regard and ERI public regard. All of the MIBI subscales included the following preamble: “People may think about their racial or ethnic identity in different ways. Please respond how much you agree or disagree with the following statements.” The centrality subscale of the MIBI was used to assess students’ centrality, or how important their ethnic-racial identity is to their self-concept. The centrality subscale included 3 statements that students could respond to on a 7-point Likert scale ranging from 1 = *Strongly disagree* to 7 = *Strongly agree* ( $\alpha = .87$ ; e.g., “Being a member of my racial/ethnic group is an important reflection of who I am.”) The private regard subscale assessed how positively or negatively students feel toward their own ethnic group and included 3 items ( $\alpha = .86$ ; e.g., “I have a lot of pride in my racial/ethnic group and its accomplishments.”) The public regard subscale included 4 items and assessed how students believed others perceived their

ethnic-racial group ( $\alpha = .84$ ; e.g., “Society views my racial/ethnic group as an asset.”) Higher scores indicated greater ERI centrality, private regard, and public regard, respectively.

### ***Social Class Identity***

**Subjective Social Class Identification.** Subjective social class identification was measured using a single item that asked students to choose the social class category that best described their social class background. Response options included (1) poor, (2) working class, (3) lower- middle class, (4) middle class, (5) upper-middle class, and (6) upper class.

**Social Class Identity.** The Social Class Identity Questionnaire (Webb, 2014) and its four subscales were used to assess students’ SCI centrality, SCI pride, SCI shame and SCI guilt. All social identity subscales included the stem statement: “Please consider your social class background. Read each statement carefully, and select the response that best describes your agreement or disagreement with each statement. There are no right or wrong answers.” The questionnaire included 13 items that were on a 7-point Likert scale that ranged from 1 = *Strongly disagree* to 7 = *Strongly agree* ( $\alpha = .72$ ; “Coming from my social class background is important to my sense of what kind of person I am.”) The SCI centrality subscale included 5 items, the pride and guilt subscales included 2 items, and the shame subscale included 4 items. Higher scores on the SCI centrality subscale indicated a greater emphasis on one’s social class identity when thinking of who one is. Greater pride, shame or guilt were indicated by higher scores on the SCI pride, shame and guilt subscales.

### ***Academic Adjustment***

**Campus Inferiorization.** The campus inferiorization scale (Gomez et al., 1999) was used to measure students’ perceptions that their intelligence, academic engagement, and achievements on campus were not taken seriously by others. Students were first prompted to

think about their classes, particularly those related to their major or intended major. The scale included 4 items on a 5-point Likert scale that ranged from 1 = *Almost Never* to 5 = *Very often* ( $\alpha = .27$ , “In your classes how often: did people act as if they respect your intelligence and contribution (for example, your opinion is listened to and given careful consideration”). Higher scores indicated feelings of campus inferiority were a more frequent occurrence.

**Perceived Ethnic Fit.** The Perceived Ethnic Fit Scale (PEFS) measured the extent to which students felt threatened in expressing their ethnic identity within a college setting. The measure also captured perceived compatibility between one’s ethnic identity and the college environment (Chavous, 2000; Ethier & Deaux, 1990). Students were prompted to respond how true the following statements were of how they generally felt in their college settings. Six items were included in the scale, each on a 7-point Likert scale that ranged from 1 = *Not True of Me* at All to 7 = *Very true of me* ( $\alpha = .89$ ; “I feel that I have to change myself to fit in at school.”) Higher scores reflected students felt more threatened when expressing their ethnic identity at school, or a lower perceived ethnic fit.

**College Competence.** The college competence scale (Kuperminc, 1994) assessed how good students felt they were at their coursework and social interactions on campus. Students were asked to rate how well they felt they did each of the following things compared to other college students at their institution. 15 items were included in the scale, with each item on a 5-point Likert scale that ranged from 1 = *Bottom 10%* to 5 = *Top 10%* ( $\alpha = .83$ ; Be liked by others just for being myself.”) Higher scores reflected more perceived college competence.

### **Analysis Plan**

I employed latent profile analysis (LPA) to explore and describe adaptive culture variability among a sample of SES diverse Latinx college students. I also investigated how

adaptive culture profiles informed Latinx students' academic adjustment, specifically their perceptions of campus inferiorization, perceived ethnic fit, and college competence. To explore and describe ERI and SCI variability among our sample, I conducted a latent profile analysis model (LPA) using *Latent Gold 5.1*. By using participants' responses for each of the indicators, LPA also indicates the probability that a participant belongs to a particular group (Porcu & Giambona, 2017). For the purposes of our study, ERI and SCI profiles were determined based on four distinct SCI indicators (e.g., SCI identification, SCI centrality, SCI pride, SCI shame, and SCI guilt) and three distinct ERI indicators (e.g., ERI centrality, ERI private regard, and ERI public regard) as SCI and ERI are not mutually exclusive and work in tandem to inform Latinx college students' academic adjustment (Yosso, 2005; Rivas-Drake, 2011). Thus, both SES indicators and ERS were used as indicators when establishing ERI and SCI profiles.

Following recommendations by Nylund-Gibson and Choi (2018), I examined multiple indices to obtain candidates for the best fitting model. Specifically, I examined the log-likelihood ratio chi-squared statistic ( $L^2$ ), AIC, BIC, BVRs, entropy, and p-value. In the one-class baseline model, the  $L^2$  indicates the total associations among all 5 indicators used to determine profiles (Neblett et al., 2008). I built upon this baseline model by increasing the number of classes in each alternative model. When comparing the one-class model to an alternative model, I prioritized the lowest BIC and a lowest AIC, as a lower BIC and AIC value reflects a well-fitting and parsimonious model (Vermunt & Magidson, 2002). Additionally, I looked for a greater reduction in  $L^2$  to indicate the total association explained by all indicators (Neblett et al., 2008). Together with a substantial  $L^2$  reduction, I looked for a non-significant p-value ( $p > .05$ ). Because the  $L^2$  becomes poorly approximated with a high amount of indicators or clusters, I bootstrapped the p-value of my best fitting model (Collins et al., 1993; Langeheine et al., 1996).

Additionally, I accounted for local dependence, or the associations between indicators, by assessing the bivariate residuals (BVRs). Per (Vermunt & Magidson, 2005), a BVR exceeding 3.84 indicates the model falls short of reproducing associations between any two given indicators. Once ERI and SCI profiles are established, I conducted ANOVAs to determine whether there were any statistically significant indicator differences across profiles. To distinguish where these differences lie, I conducted post-hoc Bonferroni tests. Lastly, to examine how each of the clusters relate to academic adjustment and test whether gender moderates the associations between the cluster profiles and our academic outcomes of interest, I conducted three hierarchical regressions in SPSS, where each regression corresponded with each of the academic adjustment outcomes (e.g., campus inferiorization, perceived ethnic fit, and college competence). At Step 1 of the regression, I included the cluster and gender variable and at Step 2 of the regression I included the interaction of the two variables. If the interaction of the two was significant at  $p < .05$ , I conducted a simple slopes analysis to probe the interaction and examine how gender moderated the link between cluster membership and the academic adjustment outcome of interest.

## **Results**

### **Preliminary Analyses**

Of the total sample ( $n = 313$ ), 3.5% ( $n = 11$ ) of students identified as poor, 20.8% ( $n = 65$ ) of students identified as working class, and 14.4% ( $n = 45$ ) identified as lower middle class, 36.4% ( $n = 114$ ) identified as middle class, 22% ( $n = 69$ ) identified as upper middle class, and 2.9% ( $n = 9$ ) identified as upper class (see Table 3.1). When asked about how important their ERI was to their self-concept, or their ERI centrality, students on average reported between “neutral” and “somewhat agree” ( $M = 4.71$ ,  $SD = 1.48$ ). Students reported their ERI private

regard, or how positively they perceived their own ethnic-racial group, was on average between “somewhat agree” and “agree” ( $M = 5.47, SD = 1.18$ ). On average, students’ reported their ERI public regard, or how positively they believed others perceived their ethnic-racial group, as “neutral” ( $M = 4.00, SD = 1.18$ ).

In regards to SCI, when students were asked about their SCI centrality, or how central to their self-concept their SCI was, students on average reported between “neutral” and “somewhat agree” ( $M = 4.24, SD = 1.11$ ). When asked about how proud they were about their social class, or their SCI pride, students on average reported between “neutral” and “somewhat agree” ( $M = 4.64, SD = 1.07$ ). For SCI shame or how shameful they felt about their social class, students reported on average between “somewhat disagree” and “neutral” ( $M = 3.47, SD = 1.22$ ). On average, students reported “neutral” when asked about their SCI guilt, or how guilty they felt about social class identification ( $M = 4.02, SD = 1.21$ ).

Students on average reported between “sometimes” and “fairly often” ( $M = 3.48, SD = .60$ ) when asked how inferior they were made to feel on campus, or their perceptions of campus inferiorization. In terms of perceived ethnic fit, or how little they felt they fit on campus due to their ethnic-racial group, students reported an average of 2.51 ( $SD = 1.42$ ) on a likert scale where 1 = *Not true of me at all* and 7 = *Very true of me*. When asked about their college competence, or how socially and academically competent they felt at college when compared to other students, students reported between “about the same” and “top 25%” ( $M = 3.55, SD = .52$ ).

Correlations revealed that ERI centrality was only positively correlated with one of the outcomes, college competence  $r(313) = .22, p < .001$  (see Table 3.2). ERI private regard was positively correlated with campus inferiorization  $r(313) = .16, p < .01$ , negatively correlated with perceived ethnic fit  $r(313) = -.17, p < .01$ , and positively correlated with college competence  $r$

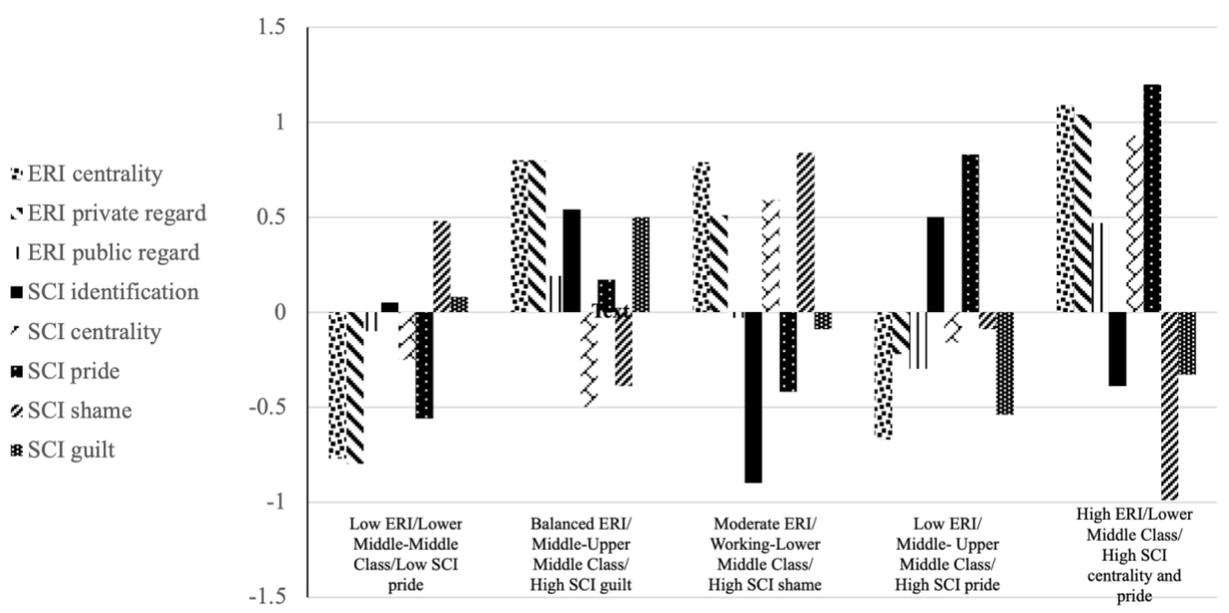
(313) = .19  $p < .01$ . ERI public regard was only positively correlated with campus inferiorization  $r(313) = .12$   $p < .05$ . In regards to SCI, SCI identification was only negatively correlated with perceived ethnic fit  $r(313) = -.16$   $p < .01$ . SCI centrality  $r(313) = .27$   $p < .001$ , SCI shame  $r(313) = .29$   $p < .001$ , and SCI guilt  $r(313) = .13$   $p < .05$  were positively correlated with perceived ethnic fit. Lastly, campus inferiorization was negatively correlated with perceived ethnic fit  $r(313) = -.13$   $p < .05$  and positively correlated with college competence  $r(313) = .28$   $p < .001$ .

## Profiles

Latent cluster analyses were conducted using the 5.1 Latent Gold program (Vermunt & Magidson, 2005) to capture ERI and SCI variability in our sample. ERI and SCI clusters were determined based on ERI centrality, ERI private regard, ERI public regard, SCI identification, SCI centrality, SCI pride, SCI shame, and SCI guilt. No data exclusions or transformations were conducted prior to estimating our cluster solution. Using data from three ERI measures and five SCI measures, seven latent class models (ranging from 1–7 clusters) were estimated. Summary model fit statistics for the seven bootstrapped models are displayed in Table 3.3. Of the seven models we estimated, the five-cluster model with a bootstrapped  $p$ -value appeared to best fit the data. The five-cluster solution had a substantial reduction in  $L^2$  over the baseline one-class model (5.0%), lowest BIC and lowest AIC, as well as relatively high entropy; however, it did not have BVRs below 3.84 or non-significant bootstrapped value. Nevertheless, this was the one that had the most evidence of fit across the set of indices among the candidate models. Thus, this 5-cluster model was selected as our final cluster solution. Raw and standardized means of each of the ERI and SCI indicators were used to describe and label each of the five clusters (see Table 3.4 for raw means and Figure 1 for standardized means).

**Cluster Descriptions Relative to the Sample Means.** The first and largest cluster, *Low ERI/Lower Middle-Middle Class/Low SCI Pride* ( $n = 127$ , 39% of the sample), was characterized by students who reported the lowest ERI centrality levels and ERI private regard levels at approximately three-quarters of a SD above the sample mean (see Figure 3.1 below). They also reported having a lower ERI public regard slightly below the sample means. In regard to their SCI, the *Low ERI/Lower Middle-Middle Class/Low SCI Pride* students identified with a social class similar to the sample means and a SCI centrality approximately one-quarter of a SD below the sample mean. Whereas the *Low ERI/Lower Middle-Middle Class/Low SCI Pride* group reported the lowest SCI pride levels (about half a SD below the sample mean), this group reported SCI shame levels at half a SD above the sample means, and SCI guilt levels near the sample mean.

**Figure 3.1** Summary of ERI x SCI Profiles Using Standardized Means



Students in the second largest cluster, *Balanced ERI/Middle-Upper Middle Class/High SCI Guilt* ( $n = 56$ , 17.3% of the sample), reported similar levels of ERI centrality and ERI private regard levels (about three-quarters of a SD above the sample mean). This group also reported

ERI public regard levels about one quarter of a SD above the sample mean. In terms of their SCI, the *Balanced ERI/Middle-Upper Middle Class/High SCI Guilt* students identified with the highest social class group at about half a SD above the sample mean; however, these students also reported the lowest SCI centrality levels (half a SD below the sample mean). *Balanced ERI/Middle-Upper Middle Class/High SCI Guilt* students had SCI pride levels less than a quarter above the sample mean, low SCI shame levels (about half a SD below the mean), and the highest SCI guilt levels (half a SD above the mean).

In the third cluster, *Moderate ERI/Working-Lower Middle Class/High SCI Shame* ( $n = 47, 14.7\%$ ), was distinguished by students who reported ERI centrality levels three-quarters of a SD above the sample mean, ERI private regard levels half a SD above the sample mean, and ERI public regard levels slightly below the sample mean. Also, the *Moderate ERI/ Working-Lower Middle Class/High SCI Shame* group reported identifying with the lowest social class (almost 1 SD below the sample mean) and had SCI centrality levels at half a SD above the sample mean. This cluster had SCI pride levels at about half a SD below the sample mean, the highest levels of SCI shame out of all the clusters, and SCI guilt levels slightly below the mean.

Students in the fourth cluster, *Low ERI/Middle-Upper Middle Class/High SCI Pride* ( $n = 43, 12.4\%$ ), reported ERI centrality levels slightly more than one-half of a SD below the sample mean, ERI private regard about a quarter of a SD below the sample mean, and the lowest levels of ERI public regard.-This cluster also identified with a social class a half a SD above the sample mean, had SCI centrality levels slightly below the sample mean, and SCI pride levels about three-quarters of a SD above the sample mean. Whereas students in this cluster had SCI shame levels at about the sample mean, they also reported the lowest levels of guilt when compared to other clusters.

Lastly, the fifth cluster *High ERI/Lower Middle Class/High SCI Centrality and Pride* was the smallest group of students ( $n = 40$ , 12.1%), and was characterized by the highest ERI centrality, ERI private regard, and ERI public regard levels of all the clusters. This group also had a lower SCI identification, as well as the highest SCI centrality, and SCI pride of all the groups as well as the lowest levels of SCI shame (1 SD below sample mean).

**Comparisons Across Clusters.** As shown in Table 3.5, ANOVA and post-hoc analyses revealed that most of the profiles significantly differed in terms of ERI centrality. All profiles significantly differed in terms of ERI private regard, except for the *Balanced ERI/Middle-Upper Middle Class/High SCI Guilt* group and the *Moderate ERI/Working-Lower Middle Class/High SCI Shame* group, as well as the *Balanced ERI/Middle-Upper Middle Class/High SCI guilt* group and the *High ERI/Lower Middle Class/High SCI Centrality and Pride* group. In regards to SCI identification, all groups significantly differed with the exception of the *Balanced ERI/Middle-Upper Middle Class/High SCI Guilt* group and *Low ERI/Middle-Upper Middle Class/High SCI Pride* group, as well as the *Moderate ERI/Working-Lower Middle Class/High SCI Shame* group and the *High ERI/Lower Middle Class/High SCI Centrality and Pride* group. For SCI pride, except for the *Low ERI/Lower Middle-Middle Class/Low SCI Pride* and the *Moderate ERI/Working-Lower Middle Class/High SCI Shame* group, as well as the *Low ERI/Middle-Upper-Middle Class/High SCI Pride* group and the *High ERI/Lower Middle Class/High SCI Centrality and Pride* group, all groups significantly differed. With the exception of the *Low ERI/Middle-Upper-Middle Class/High SCI Pride* and the *High ERI/Lower Middle Class/High SCI Centrality and Pride* group, all clusters significantly differed in terms of SCI shame.

The first and largest profile (*Low ERI/Lower Middle-Middle Class/Low SCI Pride*) reported significantly lower ERI centrality when compared to all other groups, except for the

*Low ERI/Middle-Upper-Middle Class/High SCI Pride* group. Additionally, this profile also had significantly lower ERI private regard when compared to all other profiles, but was similar to all other groups in terms of ERI public regard with the exception of the *High ERI/Lower Middle Class/High SCI Centrality and Pride* group. In regards to SCI identification, students in this cluster identified with a significantly higher social class than the *Moderate ERI/Working-Lower Middle Class/High SCI Shame* group and *High ERI/Lower Middle Class/High SCI Centrality and Pride*, but a significantly lower social class than *Balanced ERI/Middle-Upper Middle Class/High SCI Guilt* group and *Low ERI/Middle-Upper-Middle Class/High SCI Pride* group. In terms of SCI pride, the *Low ERI/Low-Middle Class/Low SCI Pride* cluster had significantly less SCI pride than all other clusters but was similar in pride to the *Moderate ERI/Working-Lower Middle Class/High SCI Shame* group. This group had significantly more SCI shame than all other groups, with the exception of the *Moderate ERI/Working-Lower Middle Class/High SCI Shame* group. Additionally, this cluster was similar in SCI guilt to two of the four other groups, was significantly lower than the *Balanced ERI/Middle-Upper Middle Class/High SCI Guilt* group, but significantly higher than the *Low ERI/Middle-Upper-Middle Class/High SCI Pride* group.

The second largest cluster (*Balanced ERI/Middle-Upper Middle Class/High SCI Guilt*) reported significantly higher ERI centrality levels than the *Low ERI/Low-Middle Class/Low SCI Pride* group and the *Low ERI/Middle-Upper Middle Class/High SCI Pride* group, but lower ERI centrality levels than the *Low ERI/Middle-Upper Middle Class/High SCI Pride* cluster. With regard to ERI private regard, this group was only significantly higher than the *Low ERI/Middle-Upper Middle Class/High SCI Pride* and the *Low ERI/Lower Middle- Middle class & Low SCI Pride* group. The *Balanced ERI/Middle-Upper Middle Class/High SCI Guilt* group was also

similar in ERI public regard when compared to other groups. With regard to SCI identification, this cluster also reported identifying with a significantly higher social class than all other groups, with the exception of the *Low ERI/Middle-Upper-Middle Class/High SCI Pride* cluster. Additionally, this cluster also had significantly lower social class pride than the *Low ERI/Middle-Upper-Middle Class/High SCI Pride* group and the *High ERI/Lower Middle Class/High SCI Centrality and Pride* group, but more SCI pride than the *Low ERI/Lower-Middle-Middle Class/Low SCI Pride* group and *Moderate ERI/Working-Lower Middle Class/High SCI Shame* group. This group had more SCI shame than the *Low ERI/Middle-Upper Middle Class/High SCI Pride* group and the *High ERI/Lower Middle Class/High SCI Centrality and Pride* group, but less SCI shame than *Low ERI/Lower Middle-Middle Class/Low SCI Pride* group and *Moderate ERI/Working-Lower Middle Class/High SCI Shame* group. Lastly, this cluster had significantly more SCI guilt than all of the other clusters.

The third profile, *Moderate ERI/Working-Lower middle class/High SCI Shame*, reported significantly higher ERI centrality levels than the *Low ERI/Lower Middle-Middle Class/Low SCI Pride* group and the *Low ERI/Middle-Upper-Middle Class/High SCI Pride* group. With regard to ERI private regard, this cluster had significantly higher levels than the *Low ERI/Lower-Middle-Middle Class/Low SCI Pride* cluster, the *Low ERI/Middle-Upper-Middle Class/High SCI Pride* cluster, and significantly lower levels than *High ERI/Lower Middle Class/High SCI Centrality and Pride* cluster. This cluster showed similar ERI public regard to other clusters. Compared to all other groups, the *Moderate ERI/Working-Lower Middle Class/High SCI Shame* group also identified with the lowest social class. In regard to SCI centrality, this cluster had higher levels than all other clusters with the exception of the *High ERI/Lower Middle Class/High SCI Centrality and Pride* cluster. The *Moderate ERI/Working-Lower Middle Class/High SCI Shame*

group also had lower SCI pride levels than all other groups, except for the *Low ERI/Low-Middle Class/Low SCI Pride* group. Additionally, this group had significantly higher SCI shame levels when compared to all other clusters. With regard to SCI guilt, this group had only significantly lower SCI guilt levels than the *Balanced ERI/Middle-Upper Middle Class/High SCI Guilt*.

The fourth cluster, *Low ERI/Middle-Upper–Middle Class/High SCI Pride*, reported significantly lower ERI centrality and ERI private regard levels than all other clusters, with the exception of the *Low ERI/Lower-Middle–Middle Class/Low SCI Pride* cluster. This cluster was similar in ERI public regard levels to other clusters but had significantly lower levels than the *High ERI/Lower Middle Class/High SCI Centrality and Pride* cluster. Additionally, this group also identified with a higher social class than all other clusters except for the *Balanced ERI/Middle-Upper Middle Class/High SCI guilt* group.-The *Low ERI/Middle-Upper Middle Class/High SCI Pride* cluster had significantly lower SCI centrality levels than the *Moderate ERI/Working-Lower Middle Class/High SCI Shame* group and the *High ERI/Lower Middle Class/High SCI Centrality and Pride* group. This group also had significantly higher SCI pride and lower SCI shame levels than all other groups except for the the *High ERI/Lower Middle Class/High SCI Centrality and Pride* group. This group also had the lowest SCI guilt levels and was significantly lower than the *Low ERI/Lower-Middle–Middle Class/Low SCI Pride* group and *Balanced ERI/Middle-Upper Middle Class/High SCI Guilt* group.

The fifth cluster, *High ERI/Lower Middle Class/High SCI Centrality and Pride*, reported significantly higher ERI centrality levels than all other clusters except for the *Moderate ERI/Working-Lower Middle Class/High SCI Shame* cluster. This group also had higher ERI private regard levels than all other groups with the exception of the *Balanced ERI/Middle-Upper Middle Class/High SCI Guilt* group. With regard to ERI public regard, the *High ERI/Lower*

*Middle Class/High SCI Centrality and Pride* cluster had significantly higher levels than the *Low ERI/Low-Middle Class/Low SCI pride* cluster and the *Low ERI/Middle-Upper Middle Class/High SCI Pride* cluster. This group also identified with a significantly lower social class than all other groups except for the *Moderate ERI/Working-Lower Middle Class/High SCI Shame* group. For SCI centrality, this group had significantly higher levels than all other groups except for the *Moderate ERI/Working-Lower Middle Class/High SCI Shame* group. Additionally, the *High ERI/Lower Middle Class/High SCI Centrality and Pride* cluster had significantly higher SCI pride and lower SCI shame levels than all other clusters, except for the *Moderate ERI/Working-Lower Middle Class/High SCI Shame* cluster. Lastly, this cluster had significantly lower SCI guilt levels than the *Balanced ERI/Middle-Upper Middle High SCI Guilt* cluster.

### **Link between Classes, Gender, and Academic Adjustment**

#### ***Perceived Ethnic Fit***

To examine the links between classes, gender, and academic adjustment, the *Low ERI/Lower-Middle-Middle Class/Low SCI Pride* group was selected as the reference group, as it was the largest group and was meaningful in terms of my hypotheses. All other dummy coded groups and gender were entered at the first step of the hierarchical regression and perceived ethnic fit was examined as the first academic adjustment outcome (see Table 3.6). There was a statistically significant difference such that students in the *Balanced ERI/Middle-Upper Middle Class/High SCI Guilt* group reported lower perceived ethnic fit (felt less threatened when expressing their ethnicity) than the *Low ERI/Lower-Middle – Middle Class/Low SCI Pride* group. Students in the *Moderate ERI/Working-Lower Middle Class/High SCI Shame* cluster also reported less perceived ethnic fit (felt more threatened when expressing their ethnicity) than students in the *Low ERI/Lower-Middle - Middle Class/Low SCI Pride* cluster. *Low ERI/Middle-*

*Upper Middle Class/High SCI Pride* students showed lower perceived ethnic fit than the *Low ERI/Lower-Middle-Middle Class/Low SCI Pride* students. Students in the *High ERI/Lower Middle Class/High SCI Centrality and Pride* cluster showed less of perceived ethnic fit, or felt less threatened when expressing their ethnicity, than students in the *Low ERI/Lower-Middle-Middle Class/Low SCI Pride* cluster. Gender identity appeared to be unrelated to perceived ethnic fit at Step 1 of the regression. At Step 2, we then entered interactions of each of the dummy coded groups and gender. When examining perceived ethnic fit as the academic adjustment outcome, none of the interactions of class by gender were significant. This suggested that, when the *Low ERI/Lower-Middle-Middle Class/Low SCI pride* cluster was the reference group, gender did not moderate the relation between class and perceived ethnic fit among this sample of Latinx college students.

### ***College Competence***

When college competence was examined as the academic adjustment, a significant difference was found between Latinx college students in the *Low ERI/Lower-Middle-Middle Class/Low SCI Pride* group and the *Balanced ERI/Middle-Upper Middle Class/High SCI Guilt* group, such that students in the *Balanced ERI/Middle-Upper- Middle Class/High SCI Guilt* group reported more college competence. Students in the *Moderate ERI/Working-Lower Middle Class/High SCI Shame* group also reported more college competence than students in the *Low ERI/Lower-Middle Class-Middle Class/Low SCI pride* group. Students in the *High ERI/Lower Middle Class/High SCI Centrality and Pride* group also reported more college competence. Gender was also non-significant when entered as a predictor at Step 1 of the regression, and it was not a significant moderator.

### ***Campus Inferiorization***

When the *Low ERI/Lower-Middle-Middle Class/Low SCI Pride* group was used as the reference group and campus inferiorization was examined as the academic adjustment outcome, the regression was not significant (see Table 3.6). This suggested that there were no significant cluster differences in regard to campus inferiorization when the *Low ERI/Lower-Middle-Class/Low SCI Pride* group was used as the reference group.

## **Discussion**

ERI and SCI have been identified as salient types of identity for Latinx emerging adults, particularly those attending PWIs (Loeb & Hurd, 2019; Ostrove & Long, 2007; Rigali-Oiler & Kurpius, 2013). Furthermore, both types of identities have been linked to academic adjustment outcomes among Latinx youth, including higher GPAs, academic persistence, and greater college-going efficacy (Gonzalez et al., 2013; Ong et al., 2006; Rigali-Oiler & Kurpius, 2013). Prior research has focused on ERI, SCI, and gender in isolation of each other; thus, the ways in which dimensions of ERI, SCI, and gender intersect in unique ways to inform academic outcomes remains understudied (Aries & Seider, 2007; Hurst, 2010; Lopez, 2014). Relying on a person-centered approach, Latinx college students' gender as well as their ERI and SCI were examined as examples of adaptive culture to illustrate how these may contribute to academic adjustment.

### **Profiles of ERI and SCI**

Five profiles emerged among this sample of Latinx college students: a) *Low ERI/Lower Middle-Middle Class/Low SCI Pride*, b) *Balanced ERI/Middle-Upper Middle Class/High SCI Guilt*, c) *Moderate ERI/Working-Lower Middle Class/High SCI Shame* d) *Low ERI/Middle-Upper Middle Class/High SCI Pride*, and e) *High ERI/Lower Middle Class/High SCI Centrality and Pride*. Characteristics from the largest profile (*Low ERI/Lower Middle-Middle class/Low*

*SCI Pride*) such as their below average levels of ERI centrality, ERI private and public regard suggest that the majority of this sample of Latinx college students may endorse negative perceptions of their ethnic-racial group that are often perpetuated within the context of PWIs (Yosso, 2005). Furthermore, these students' less strong and more negative ERIs may have also been exacerbated at these institutions, where the Latinx undergraduate population ranged between 2-12%. For all clusters, ERI public regard was the lowest of the ERI dimensions, further supporting the notion that Latinx college students attending PWIs are well-aware of the negative stigmas and others' discriminating perceptions of their ethnic-racial group. The third largest cluster identified with the lowest social class and also had the greatest shame regarding their social class identification. It may be that in a PWI environment, where middle-class values and ways of being are prioritized, social class discrepancies may be more salient to Latinx college students who identify with a less socioeconomically advantaged group. Indeed, Soria et al (2013) found that Latinx students who self-identified as working class often compared themselves to their peers who identified as middle- and upper-class, and thus reported lower sense of belonging and satisfaction on campus.

### **ERI x SCI profiles and Academic Adjustment**

Findings mirror prior research that elucidates how dimensions of both ERI and SCI relate to academic adjustment among Latinx college students (Castillo-Lavergne & Destin, 2019). When compared to the *Balanced ERI/Middle-Upper Middle Class/High SCI Guilt* group, the *Low ERI/Lower-Middle- Middle Class/Low SCI Pride* group felt their ERI was less central to their self-concept, and perceived their ethnic-racial group more negatively. This group also identified with a lower social class, was less proud, more ashamed, less guilty about their social class, and felt more threatened when expressing their ethnic-racial identity at their university.

This finding aligns with prior research that suggests that more negative affect regarding one's ethnic-racial group (e.g., lower ERI private regard) and one's social class (e.g., less SCI pride and more SCI shame) is affiliated with less perceived ethnic fit among minoritized students (Ethier & Deaux, 1990; Schwartz et al., 2009; Webb, 2014). The *Low ERI/Lower-Middle-Middle Class/Low SCI Pride* group also felt less competent at college when compared to the *Balanced ERI/Middle-Upper-Middle Class/High SCI Guilt* group. In agreement with my hypothesis and prior findings, their less strong and less favorable views of their ethnic-racial group, as well as their identification and less positive views of their lower social class identification may have contributed to their reported lack of competency at a PWI.

Additionally, students in the *Low ERI/Lower-Middle-Middle Class/Low SCI Pride* cluster felt their ERI was less central to their self-concept and perceived their ethnic-racial group more unfavorably than students in the *Moderate ERI/Working-Lower Middle Class/High SCI Shame* cluster. *Low ERI/Lower-Middle-Middle Class/Low SCI Pride* students also identified with a higher social class, felt their SCI was less central to their self-concept, were less ashamed about their social class identification, and felt less threatened when expressing their ethnicity on campus, yet showed less college competence. This partly aligned with the hypotheses that Latinx students with lower ERI centrality, more negative ERI private regard and a higher social class identification coupled with a more positive social class affect would be linked to better academic adjustment. One possible explanation is that students whose ethnic-racial group was less relevant to who they are and perceived their ethnic-racial group more negatively might notice fewer instances of marginalization. Students with a lower ERI centrality and ERI private regard may be thinking less about their ethnic-group affiliation group and may be less sensitive to moments in which their ethnicity was not welcome on their PWI campus. Indeed, youth with low ERI private

regard may have more person-context congruence, such that a PWI environment and their beliefs about their group as devalued align (Byrd & Chavous, 2011). Thus, greater person-context congruence may result in fewer threats to one's expression of their ethnicity when on campus.

With regard to college competence, the *Low ERI/Lower-Middle- Class/Low SCI Pride* students perceived themselves as less academically and socially competent at college than the *Moderate ERI/Working-Lower Middle Class/High SCI Shame* group. Their hindered college competence may be associated with their lower ERI centrality coupled with their negative views of their ethnic-racial group, lending support to the positive links between ERI centrality, favorable views of one's ethnic-racial group, and academic adjustment (Chavous et al., 2003; Rivas-Drake et al., 2014). Interestingly, Latinx students in this group felt less ashamed about their more advantaged socioeconomic status, yet still felt less competent. It is possible that despite this advantage, this group of students' minoritized status as Latinx coupled with their less positive views of their ethnic-racial group (e.g., lower private regard) would hinder their beliefs around their academic and social abilities. In a PWI environment, this group of students may also be engaging in social comparison and viewing the dominant group (e.g. White, middle and upper class peers) as the benchmark for social ways of being and succeeding academically.

When the *Low ERI/Lower-Middle-Middle Class/Low SCI Pride* students were compared to the *Low ERI/Middle-Upper Middle Class/High SCI Pride* students, those in the *Low ERI/Lower-Middle-Middle Class/Low SCI Pride* group thought more negatively about their ethnic-racial group and identified with a lower social class. This group also expressed more negative affect about their social class, as they felt less proud, more ashamed, and more guilty about their social class identification. *Low ERI/Lower-Middle-Middle Class/Low SCI Pride* students also reported they felt their ethnicity was less welcome at their university. These

findings mirror prior research and support the hypotheses that viewing one's own ethnic-racial group as less favorable and feeling more negatively about one's less socioeconomically advantaged affiliation would decrease feelings of ethnic fit in the context of a PWI (Rigali-Oiler & Kurpius, 2013; Webb, 2014).

Compared to *High ERI/Lower Middle Class/High SCI Centrality and Pride* students, *Low ERI/Lower-Middle-Middle Class/Low SCI Pride* students had lower ERI centrality, perceived their ethnic-group more negatively, and believed others also thought less positively about their ethnic-racial group. The *Low ERI/Lower-Middle-Middle Class/Low SCI Pride* group also identified with a higher social class, believed their SCI to be less central to their self-concept, were less proud as well as more ashamed about their social class identification. This group also felt more threatened when they expressed their ethnicity within the context of their PWI and reported lower college competence. As expected, when low ERI centrality, negative perceptions of one's ethnic-racial group, and negative affect around one's social class identification interacted, this group of Latinx students felt less competent and less ethnic fit at their PWIs. It is possible Latinx students' experience of achieving upward mobility via higher education may create a gap between their socioeconomic status and that of their families or co-ethnic peers, thus generating feelings of shame and guilt (Covarrubias et al., 2020; Sterk, 2022). Furthermore, whereas this affiliation with socioeconomic advantage may be associated with a greater cultural congruence to middle- and upper-class ways of being valued at PWIs, their less favorable identification with their ethnic group could hinder how well they fit in when expressing their ethnicity. Findings lend support to prior research that illustrates minoritized students who feel good about both their ethnic-racial group and social class also believe themselves to thrive within institutions of higher education (Crumb et al., 2020; Ong et al., 2006). Lastly, when campus

inferiorization was examined as the outcome, findings suggested that there were no significant differences in regard to campus inferiorization when groups were compared to the *Low ERI/Lower Middle-Middle Class/Low SCI pride* group.

### **Role of Context**

Although not directly examined in my analyses, the role of context may be particularly relevant to students' academic adjustment. More specifically, the ethnic-racial and socioeconomic makeup of the post-secondary institutions students were attending during data collection may have informed their ERI and SCI. With regard to ethnic-racial makeup, all five of the institutions were Predominantly White institutions, with the White undergraduate population ranging from 50-72%. This may have implications for Latinx college students' ERI centrality, as well as their ERI private and public regard (Gonzales, 2002). Indeed, a plurality of our sample (39%) fell into the *Low ERI/Lower Middle-Middle Class/Low SCI pride* cluster, which was characterized by students who reported the lowest ERI centrality levels and ERI private regard levels. Being a numerical minority within these institutions that privilege White ways of being (Latinx undergraduate populations ranged from 2-12%), Latinx students may de-emphasize how central their ethnic-racial group is to their self-concept as a means of seeking cultural congruence within the context of PWIs (Chavous, 2000; Oyserman et al., 2011). Furthermore, these students' negative opinions about their ethnic-racial group, beliefs that others perceived their group more negatively, and their reduced college competence (when compared to most other profiles) may have been exacerbated due to being a numerical minority and holding a marginalized ethnic-racial identity at their institutions.

With regard to the socioeconomic makeup of the institutions, two of the five institutions had undergraduate populations that were less affluent. More specifically, between 50-90% of the

undergraduate population at these two institutions were Pell Grant recipients. The other three institutions had students with more socioeconomically advantaged backgrounds, with Pell grant recipients making up only 18-26% of the undergraduate population. Students at the highly selective institution are some of the most affluent students in the country, with approximately 55% of in-state undergraduate students' and 78% of out-of-state students' family income exceeding \$150,000, and only 18% of the undergraduate population being Pell Grant recipients. It is important to note that the majority of our Latinx student sample were enrolled at this highly selective, affluent PWI institution. Furthermore, students in the largest profile (*Low ERI/Lower Middle-Middle Class/Low SCI pride*) had the least amount of SCI pride and had lower social class identification as well as heightened shame about their social class when compared to most other profiles. Attending an institution that admits and caters to some of the most affluent students in the U.S., may have amplified these less advantaged students' lack of pride and shame around their socioeconomic background. Furthermore, the majority of students in our sample were in the cluster that showed lower college competence when compared to most other profiles. Thus, the class-based societal devaluation experienced by Latinx students who are of low-income or working-class backgrounds (the majority of students in this sample) may be exacerbated by the racial and socioeconomic climate of a PWI (Soria et al., 2013).

### **Limitations and Future Directions**

This study is not without its limitations. First, findings are not generalizable, as this sample comprised of Latinx college students attending a Predominantly White Institution (PWI) in the Mid-Western region of the US. The implications of ERI and SCI on academic adjustment and well-being vary across youth exposed to diverse ethnic and racial groups (Schwartz et al., 2009; Rigali-Oiler & Kurpius, 2013; Webb, 2014); future studies should consider these processes

among Latinx students across other college settings such as at Hispanic-serving institutions. Additionally, Latinx youth are not a homogenous ethnic-racial group, yet ethnic differences were not captured in our study. Documentation and immigration status, which were outside the scope of our study, may also play an important role in Latinx youth's ERI and SCI, and how it may impact their academic experiences at PWIs (Brown, 2012; Cooper et al., 2015). Moreover, the study being cross-sectional did not allow for claims of directionality or causality among our variables. Social identities such as ERI and SCI and their saliency may vary across time, contexts, and are continuously developing (Maramba & Velasquez, 2012; Pearce et al 2008; Torres, 2003). Thus, future studies should consider the role of context as well as longitudinal methods to elucidate the temporal associations between ERI, SCI, gender, and academic adjustment among Latinx college students. Lastly, our measure of gender identity only captured the social identity as a binary construct, which excludes the experiences of non-binary or non-gender conforming Latinx youth who have distinct lived experiences. Thus, scholars examining various social identities should consider relying on an intersectional framework to further elucidate how various social identities work together to create unique experiences of both privilege and oppression (Castillo-Lavergne & Destin, 2019; Cole, 2009).

### **Conclusion**

This study is unique in that it relied on a person-centered approach to examine Latinx college students' ethnic-racial identity, social class identity, and gender in conjunction, as well as their associations with academic adjustment. In acknowledging ERI as a valuable form of adaptive culture, this strengths-based approach highlights the capital Latinx students inherently possess when they arrive at university. Findings have implications for college educators and administrators committed to curating classrooms and campuses that are inclusive of Latinx

youth's identities and experiences of Latinx youth, particularly at culturally incongruent PWIs. College educators and administrators should be cognizant of the complex ways in which Latinx youth's identities around their ethnic group, social class, and gender work in tandem to shape their campus perceptions. Furthermore, college educators and administrators should challenge their own biases, negative stereotypes, and deficit perspectives that posit Latinx youth as lacking the tools and resources to thrive in higher education environments. Future research should continue to examine how distinct dimensions of ERI and SCI can hinder and promote Latinx youth's academic adjustment and overall college experience.

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**Table 3.1** Sample Characteristics for Social Class Groups

<b>Variable</b>	<b>Overall Sample</b>	<b>Poor</b>	<b>Working Class</b>	<b>Lower Middle Class</b>	<b>Middle Class</b>	<b>Upper Middle Class</b>	<b>Upper Class</b>
Sample % ( <i>n</i> )	100% (313)	3.5% (11)	20.8% (65)	14.4% (45)	36.4% (114)	22% (69)	2.9% (9)
Ethnic-Racial Identity <i>M (SD)</i>							
ERI centrality	4.71 (1.48)	5.42 (1.48)	5.26 (1.37)	4.72 (1.37)	4.55 (1.49)	4.39 (1.53)	4.33 (1.35)
ERI private regard	5.47 (1.18)	5.88 (1.17)	5.55 (1.11)	5.38 (1.11)	5.58 (1.21)	5.21 (1.24)	5.33 (1.11)
ERI public regard	4.00 (1.18)	3.95 (1.56)	4.02 (1.18)	4.06 (1.10)	3.97 (1.16)	3.98 (1.25)	4.36 (.71)
Social Class Identity <i>M (SD)</i>							
SCI centrality	4.24 (1.11)	4.66 (1.00)	4.69 (1.03)	4.21 (1.05)	4.20 (1.12)	3.86 (1.08)	4.02 (1.31)
SCI pride	4.64 (1.07)	3.88 (.92)	4.63 (1.19)	4.25 (.99)	4.77 (1.05)	4.75 (.99)	5.04 (1.07)
SCI shame	3.47 (1.22)	4.52 (1.27)	3.70 (1.30)	3.81 (1.01)	3.21 (1.27)	3.28 (1.03)	3.67 (1.18)
SCI guilt	4.02 (1.21)	3.81 (1.87)	3.70 (1.06)	3.66 (.97)	3.98 (1.23)	4.54 (1.22)	5.04 (1.47)
Academic Adjustment <i>M (SD)</i>							
Campus Inferiorization	3.48 (.60)	3.45 (.69)	3.43 (.72)	3.46 (.43)	3.52 (.62)	3.49 (.54)	3.53 (.44)
Perceived Ethnic Fit	2.51 (1.42)	3.56 (1.78)	2.74 (1.45)	2.54 (1.45)	2.40 (1.43)	2.30 (1.29)	2.28 (.78)
College Competence	3.55 (.52)	3.72 (.36)	3.50 (.56)	3.51 (.52)	3.53 (.50)	3.60 (.56)	3.66 (.33)

*Note.* Raw means and standard deviations reported; \* $p < .01$ ; \*\* $p < .01$ ; \*\*\* $p < .001$ .

**Table 3.2** Pearson Correlations Among Ethnic-Racial Identity, Social Class Identity, and Academic Adjustment ( $N = 313$ )

	Ethnic-Racial Identity			Social Class Identity				Academic Adjustment			
	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.
1. ERI centrality											
2. ERI private regard <sup>a</sup>	.71***										
3. ERI public regard <sup>a</sup>	.24***	.21***									
4. SCI identification <sup>b</sup>	-.22***	-.09	.01								
5. SCI centrality <sup>b</sup>	.23***	.14*	.06	.24***							
6. SCI pride <sup>b</sup>	.25***	.31***	.08	.15*	.36***						
7. SCI shame <sup>b</sup>	-.18**	-.27***	-.07	-.19***	.08	-.58***					
8. SCI guilt <sup>b</sup>	.03	.08	-.18**	.27***	.06	.03	.13*				
9. Campus inferiorization <sup>c</sup>	.11	.16**	.12*	.05	.03	.09	-.05	-.02			
10. Perceived ethnic fit <sup>c</sup>	.03	-.17**	-.10	-.16**	.27***	-.14*	.29***	.13*	-.13*		
11. College competence <sup>c</sup>	.22***	.19**	.04	.05	.16**	.12*	-.03	.04	.28***	-.11	

Note. <sup>a</sup> Ethnic-racial identity; <sup>b</sup> Social class identity; <sup>c</sup> Academic adjustment; \*  $p < .05$ , \*\*  $p < .01$ , \*\*\*  $p < .001$ .

**Table 3.3** Model Fit Statistics from Latent Class Analyses of ERI and SCI ( $N = 313$ )

<b>Bootstrapped Model</b>	<b>BIC (LL)</b>	<b>AIC (LL)</b>	<b>L<sup>2</sup></b>	<b>% Reduction in L<sup>2</sup></b>	<b>Entropy (R<sup>2</sup>)</b>
One-class	13,274.76	12,693.80	9,001.80	.0	1.00
Two-class	13,073.66	12,459.39	8,749.39	2.8	0.84
Three-class	13,056.29	12,408.71	8,680.71	3.6	0.79
Four-class	13,037.59	12,356.71	8,610.71	4.3	0.79
<b>Five-class</b>	<b>13,030.57</b>	<b>12,316.39</b>	<b>8,552.39</b>	<b>5.0</b>	<b>0.83</b>
Six-class	13,036.18	12,388.69	8,506.69	5.5	0.82
Seven-class	13,033.98	12,353.19	8,453.18	6.1	0.84

*Note.* BIC (LL) = Log-likelihood Bayesian Information Criterion; AIC = Akaike Information Criterion; L<sup>2</sup> = Likelihood Ratio chi-square.

**Table 3.4** Sample Characteristics for Latent Classes

<b>Variable</b>	<b>Overall Sample</b>	<b>Class 1</b>	<b>Class 2</b>	<b>Class 3</b>	<b>Class 4</b>	<b>Class 5</b>
Sample % ( <i>n</i> )	100% (313)	39% (127)	17.3% (56)	14.7% (47)	12.4% (43)	12.1% (40)
Ethnic-Racial Identity <i>M</i> (SD)						
ERI centrality	4.71 (1.48)	3.57 (1.48)	5.86 (1.37)	5.88 (1.37)	3.72 (1.49)	6.33 (1.53)
ERI private regard	5.47 (1.18)	4.53 (1.17)	6.39 (1.11)	6.07 (1.11)	5.21 (1.21)	6.70 (1.24)
ERI public regard	4.00 (1.18)	3.88 (1.56)	4.23 (1.18)	3.96 (1.10)	3.65 (1.16)	4.56 (1.25)
Social Class Identity <i>M</i> (SD)						
SCI identification	3.62 (1.22)	3.68 (1.20)	4.28 (.92)	2.56 (1.02)	4.24 (.73)	3.14 (1.16)
SCI centrality	4.24 (1.11)	3.96 (1.00)	3.69 (1.03)	4.89 (1.05)	4.06 (1.12)	5.27 (1.08)
SCI pride	4.64 (1.07)	4.04 (.92)	4.82 (1.19)	4.19 (.99)	5.53 (1.05)	5.92 (.99)
SCI shame	3.47 (1.22)	4.05 (1.27)	2.99 (1.30)	4.50 (1.01)	2.39 (1.27)	2.26 (1.03)
SCI guilt	4.02 (1.21)	4.10 (1.87)	4.63 (1.06)	3.91 (.97)	3.37 (1.23)	3.62 (1.22)
Academic Adjustment <i>M</i> (SD)						
Campus Inferiorization	3.48 (.60)	3.39 (.60)	3.60 (.57)	3.52 (.73)	3.49 (.50)	3.58 (.52)
Perceived Ethnic Fit	2.51 (1.42)	2.73 (1.27)	2.09 (1.29)	3.32 (1.86)	1.91 (1.17)	2.10 (1.10)
College Competence	3.55 (.52)	3.43 (.50)	3.61 (.56)	3.63 (.64)	3.58 (.42)	3.71 (.43)

*Note.* Class 1 = Low ERI/Lower Middle-Middle class/Low SCI pride; Class 2 = Balanced ERI/Middle-Upper Middle Class/High SCI guilt; Class 3 = Moderate ERI/Working-Lower Middle Class/High SCI shame; Class 4 = Low ERI/Middle -Upper Middle Class/High SCI pride; Class 5 =High ERI/Lower Middle Class/High SCI centrality and pride. Raw means and standard deviations reported; \* $p < .05$ ; \*\* $p < .01$ ; \*\*\* $p < .001$ .

**Table 3.5** ERI and SCI Profile Differences Across Indicators

Indicator	F	Estimated Means for LPA Profiles					Mean Differences									
		M1	M2	M3	M4	M5	1 2	1 3	1 4	1 5	2 3	2 4	2 5	3 4	3 5	4 5
ERI centrality	161.73***	3.57	5.86	5.88	3.72	6.33	-2.33	-2.35		-2.82		2.16	-.49	2.18		-2.65
ERI private regard	103.32***	4.53	6.39	6.07	5.21	6.70	-1.93	-1.57	-.71	-2.21		1.22		.86	-.64	-1.50
ERI public regard	4.02**	3.88	4.23	3.96	3.65	4.56				-.66						-.84
SCI identification	24.37***	3.68	4.28	2.56	4.24	3.14	-.58	1.17	-.57	.61	1.80		1.19	-1.75		-1.18
SCI centrality	26.68***	3.96	3.69	4.89	4.06	5.27		-1.00		-1.32	-1.35		-1.65	.92		-1.23
SCI pride	65.43***	4.04	4.82	4.19	5.53	5.92	-.71		-1.57	-1.94	.63	-.86	-1.22	-1.48	-1.85	
SCI shame	75.72***	4.05	2.99	4.50	2.39	2.26	1.08	-.53	1.76	1.83	-1.62	.67	.74	2.29	2.36	
SCI guilt	10.91***	4.10	4.63	3.91	3.37	3.62	-.61		.83		.82	1.44	1.09			

*Note.* M1 = Low ERI/Lower Middle-Middle class/Low SCI pride; M2 = Balanced ERI/Middle-Upper Middle Class/High SCI guilt; M3 = Moderate ERI/Working-Lower Middle Class/High SCI shame; M4 = Low ERI/Middle -Upper Middle Class/High SCI pride; M5 =High ERI/Lower Middle Class/High SCI centrality and pride. Only mean differences with  $p < .05$  reported; \* $p < .05$ ; \*\* $p < .01$ ; \*\*\* $p < .001$ .

**Table 3.6** Hierarchical Multiple Regression Predicting Academic Adjustment from ERI x SCI Classes and Gender ( $N = 313$ )

	Perceived Ethnic Fit				College Competence				Campus Inferiorization			
	B	$\beta$	SE	<i>t</i>	B	$\beta$	SE	<i>t</i>	B	$\beta$	SE	<i>t</i>
Step 1												
(Constant)	2.89		.29	10.06***	3.47		0.11	31.49***	3.43		0.13	26.89***
Balanced ERI/Middle-Upper Middle Class/High SCI guilt	-0.64	-0.17	0.22	-2.90**	0.16	0.12	0.08	1.96*	0.20	0.13	0.10	2.10*
Moderate ERI/Working-Lower Middle Class/High SCI shame	0.53	0.13	0.23	2.28*	0.19	0.13	0.09	2.13*	0.12	0.07	0.10	1.16
Low ERI/Middle- Upper Middle Class/High SCI pride	-0.80	0.04	0.24	-2.20**	0.15	.10	0.09	1.65	0.11	0.06	0.11	1.00
High ERI/Lower middle class/High SCI centrality and pride	-0.62	-0.15	0.24	-2.54*	.28	.18	0.09	3.00**	0.20	0.11	0.11	1.81
Gender	-0.10	-0.03	0.16	-0.62	-0.02	-0.02	0.06	-0.36	-0.03	-0.02	0.07	-0.34
<i>F</i>			7.03***				2.42*				1.25	
<i>R</i> <sup>2</sup>			0.10				0.04				0.02	
Step 2												
Balanced ERI/Middle-Upper Middle Class/High SCI guilt x Gender	-0.39	-0.19	0.46	-0.85	0.27	0.35	0.17	1.55	-0.03	-0.03	0.20	-0.13
Moderate ERI/Working-Lower Middle Class/High SCI shame x Gender	0.22	0.10	0.49	0.46	-0.36	-0.43	0.18	-1.97	-0.35	-0.37	0.22	-1.65
Low ERI/Middle- Upper Middle Class/High SCI pride x Gender	0.26	0.11	0.52	0.49	0.08	0.09	0.20	0.39	-0.15	-0.15	0.23	-0.63
High ERI/Lower middle class/High SCI centrality and pride x Gender	-0.37	-0.15	0.51	-0.74	-0.25	-0.27	0.19	-1.30	-0.16	-0.15	0.22	-0.69
<i>F</i>			4.13***				2.58**				1.03	
<i>R</i> <sup>2</sup>			0.11				0.07				0.03	
$\Delta R^2$			0.01				0.03				0.01	

*Note.* Low ERI/Lower Middle-Middle class/Low SCI pride group was used as the reference group. Higher levels of perceived ethnic fit indicated students felt more threatened when expressing ethnic identity on campus.

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

## Chapter IV: Discussion

This dissertation explored the ways in which ethnic-racial and social class experiences work in tandem to shape academic adjustment among Latinx college students attending an HSI and various PWIs. In Study 1, I examined how Latinx college students' ethnic-racial socialization messages and socioeconomic indicators relate to academic engagement and academic self-concept. In Study 2, I explored how ethnic-racial identity, social class identity, and gender were linked to perceived ethnic fit, college competence, and campus inferiorization among Latinx college students. Across both studies, four main takeaways emerged: a) ERS and ERI manifested as adaptive culture and bolstered Latinx college students' academic adjustment, b) identification with a higher social class or socioeconomic advantage, coupled with positive feelings about one's social class identification promotes academic adjustment, c) socioeconomic disadvantage or negative feelings about one's social class coupled with bias-focused ERS messages or negative affect about one's ERI hinders academic adjustment, and d) ERS messages may bolster academic engagement among Latinx college students with fewer socioeconomic resources attending a PWI.

### **Research Question 1: What is the Variability of Aspects of Adaptive Culture Among a Sample of Socioeconomically Diverse Latinx Students?**

In both studies, I looked at distinct examples of *adaptive culture*, within the integrative model, or the attitudes, values, and goals that differ from those of the dominant culture, and how adaptive culture informs academic adjustment among Latinx college students. In this dissertation, I looked at ethnic-racial socialization (ERS) and ethnic-racial identity (ERI) as

forms of adaptive culture. In regard to Study 1, I examined the variability of aspects of adaptive culture among a sample of socioeconomically diverse Latinx students attending an HSI. More specifically, I explored how ethnic-racial socialization (ERS) messages and socioeconomic factors work in tandem to provide distinct types of adaptive culture. Two types of ERS messages (cultural socialization and preparation for bias) and three SES indicators were used as indicators when establishing adaptive culture profiles. Among this sample of socioeconomically diverse Latinx students attending an HSI, five profiles of adaptive culture emerged a) *Balanced ERS*, b) *Low ERS/Moderate SES*, c) *High SES*, d) *High ERS/Lower SES*, and e) *High ERS/Moderate SES*. With the exception of the two largest groups (*Balanced ERS* and *Low ERS/Moderate SES*), all of the profiles significantly differed in terms of parental education and parental occupation prestige. All profiles also significantly differed in perceived family financial situation, except for the *High SES* profile and the *High ERS/Moderate SES* profiles. Cultural socialization levels significantly varied across all five profiles, and preparation for bias messages significantly differed, with the exception of the *Moderate ERS/Lower SES* and the *High ERS/Moderate SES* groups.

The largest cluster (*Balanced ERS*) included approximately half of the sample and reported similar amounts of both types of ERS messages and more ERS messages than the average student in this sample. This characteristic of most students in this sample lends support to prior research that suggests cultural socialization and preparation for bias are two of the most frequent and salient ERS messages transmitted to Latinx youth (Ayón et al., 2020; Rivas-Drake, 2011). When compared to all profiles except for the *Low ERS/Moderate SES* profile, this cluster significantly differed across the three socioeconomic indicators. The *Balanced ERS* group (the majority of students in this sample) reported their parents had less prestigious jobs, were less

well off when compared to their neighbors, and were less educated than the average student in this sample. Of note, the majority of students attending this HSI in the western region of the U.S were first-generation and Latinx. First-generation Latinx students in the U.S. often reside in under-resourced communities, come from low socioeconomic backgrounds, and are faced with various institutional and societal barriers, including culturally incongruent college environments, ethnic-racial discrimination, classism, lack of affordability as well as access to higher education (Brittian et al., 2013; Camacho & Echelbarger, 2022 ). To navigate these contextual stressors and challenges, parents of first-generation Latinx students transmit positive messages about one's culture (cultural socialization) as well as precautionary messages of discrimination (prep for bias) (Ayon et al., 2020), as evidenced by the largest group's (*Balanced ERS*) below average socioeconomic indicators and similar amounts of both types of ERS messages. With regard to adaptive culture variability, ERS manifested as one type of adaptive culture in the *Balanced ERS* group, where parents conveyed similar amounts of both types of ERS messages to provide students with cultural tools to maneuver higher education environments.

The *Low ERS/Moderate SES* group included about 29% of the sample and was the second largest cluster. This cluster had significantly less cultural socialization and preparation for bias messages than the other four clusters. When compared to the *High SES* and *High ERS/Moderate SES* cluster, this group had less educated parents with less prestigious occupations and they perceived their family to be less financially well off. Overall, the *Low ERS/Moderate SES* cluster was characterized by the lowest levels of ERS messages coupled with a moderate amount of SES resources.

The third largest group (*High SES*) included 8.4% of students in the sample and had significantly above average socioeconomic indicators; that is, students perceived their family to

be more financially well-off, and perceived their parents to be significantly more educated with less prestigious occupations compared to all other groups in this sample. With the exception of the *Low ERS/Moderate SES* cluster, the *High SES* students reported fewer preparation for bias messages. One possibility is that these socioeconomically advantaged families have been presented with fewer experiences of ethnic-racial discrimination or fewer economic constraints attributed to ethnicity or race (White-Johnson et al., 2010). Thus, these families may engage in fewer familial conversations that prepare youth for ethnic-racial discrimination or convey cultural pride as a response to racial bias. The *Low ERS/Moderate SES* cluster illustrates how distinct types of ERS messages function as unique aspects of adaptive culture, and underscores how parental objective as well as subjective socioeconomic indicators have differential implications for ERS messages (Crouter et al., 2008; Ontai-Grzebik & Raffaelli, 2004; White-Johnson et al., 2010).

The *High ERS/Lower SES* group (7.2%) was characterized by students whose parents transmitted significantly more cultural socialization and preparation for bias messages than all other groups, with the exception of the *High ERS/Moderate SES* group. Moreover, students in this cluster showed the fewest socioeconomic resources such that their families experienced the greatest relative financial hardship, and their parents had the least amount of education as well as the least prestigious jobs. As evidenced by the *High ERS/Lower SES* group, both socioeconomic factors and ERS messages functioned in tandem to foster adaptive culture among the least socioeconomically resourced students in this sample. Although this group only included approximately 7% of students in this sample, it illustrates a nuanced snapshot of adaptive culture among less-resourced Latinx college students. Less socioeconomically advantaged Latinx

families may rely on more culture-centered dialogue that highlights culture as a source of social capital, particularly when other forms of social capital (e.g., SES resources) are scarce.

The *High ERS/Moderate SES* cluster (5.6%) received significantly more cultural socialization and preparation for bias messages when compared to all other clusters except the *High ERS/Lower SES* group, which received more preparation for bias messages. With regard to socioeconomic resources, this group perceived their families to be more financially advantaged and had more educated parents who held more prestigious occupations when compared to the *Balanced ERS* and *Low ERS/Moderate SES* groups. The *High ERS/Moderate SES* cluster was the only group to have above average ERS and SES indicators. With regard to adaptive culture variability, these students were in the minority among this sample, which may be related to the student demographics at this HSI, as most students at this HSI are first-generation and Latinx. Although the socioeconomic status of students at this institution is currently unavailable, approximately 60% of students are traditionally underserved and nearly half of the student population receive Pell grants. As such, that the smallest group of students is characterized by their above average socioeconomic indicators mirrors the campus demographics. Furthermore, there is evidence that parents of color who are more socioeconomically advantaged transmit more ERS messages that are specific to their race-related experiences (Caughy et al., 2002; Hughes & Chen, 1997).

**Research Question 2: How do Various Aspects of Adaptive Culture Inform Latinx Students' Academic Adjustment, Specifically their Academic Engagement and Academic Self-Concept?**

***Academic Engagement***

In support of prior research and as postulated by my theoretical framework (Coll et al., 1996), Latinx college students' academic engagement may be bolstered by cultural socialization and preparation for bias ERS messages (Martinez-Fuentes et al., 2020; McDermott et al., 2018). Also as hypothesized, findings from this study parallel research that elucidates how socioeconomic resources relate to academic adjustment (Gonzales et al., 2015; Means & Pyne, 2017; Walpole, 2003). Students who perceived their family to have fewer socioeconomic resources and received multiple types of ERS messages (*Balanced ERS* group) had greater academic engagement when compared to the more affluent group who received fewer ERS messages (*Low ERS/Moderate SES* group). In that same vein, the *Balanced ERS* students (largest group) who were more socioeconomically advantaged and received fewer ERS messages when compared to *High ERS/Moderate SES* students, were less academically engaged. That is, the less affluent and socialized were less academically engaged when compared to the more affluent and more socialized students.

Findings from this study exhibit socioeconomic advantage as contributing to academic engagement among this sample of Latinx students (Gonzales et al., 2015). Furthermore, I found evidence that ERS uniquely promotes academic engagement among these Latinx students. For instance, the more affluent but less socialized group (*Low ERS/Moderate SES*) were less academically engaged than the *Moderate ERS/Lower SES* group, who were less affluent but received more ERS messages. It is worth noting contextual factors such that this sample of Latinx students were attending a Hispanic Serving Institution (HSI). One possibility is that in being transmitted more messages about cultural pride as well as racial bias, *Moderate ERS/Lower SES* students may be motivated to reach out to co-ethnic peers who share cultural values and experiences. Thus, support from co-ethnic peers may encourage students to engage

socially on campus and academically in the classroom (Chavous, 2000; Chavous et al., 2003). Future research should aim to investigate the role of co-ethnic peer support and other possible mediators between ERS and academic engagement among Latinx college students.

### *Academic Self-Concept*

Interestingly, Latinx students in this sample who had socioeconomic disadvantage and whose parents transmitted more preparation for bias messages were characterized by more negative academic self-concept. More specifically, *Balanced ERS* students, who were less affluent and received more preparation for bias messages than students in other profiles, had a less favorable academic self-concept as well as lower academic engagement in comparison to the more well-off *High SES* students, who also received fewer preparation for bias messages. Fewer socioeconomic resources coupled with more preparation for bias messages may be detrimental to Latinx students' academic self-concept and thus, contribute to the mixed literature concerning associations between distinct ERS messages and academic adjustment (Atkin et al., 2018; Banerjee et al., 2017; Umaña-Taylor & Hill, 2020). Akin to these and past findings, less socioeconomically advantaged parents may have limited resources and be presented with fewer opportunities to reinforce their children's academic self-concept (Banerjee et al., 2017; Liu & Lau 2013). Future research that elucidates the patterns between socioeconomic factors, preparation for bias messages, and academic adjustment should examine contextual influences such as schools or neighborhoods as other environments in which youth may receive ERS messages (Umaña-Taylor & Hill, 2020).

Among this sample, there was evidence that the presence of *both* types of ERS messages may protect Latinx college students from hindered academic adjustment linked to socioeconomic disadvantage. For example, the *Moderate ERS/Lower SES* students who were less affluent and

received more of both types of ERS messages reported similar academic self-concept and engagement to the more affluent but less socialized *Balanced ERS* students. Similarly, students who had more educated parents with more prestigious occupations but received less ethnic-racial socialization (*High SES* group) evinced similar academic adjustment to the less advantaged but more socialized students (*High ERS/Moderate SES* group). It is possible that, when confronted with ethnic-racial discrimination, parents of *High SES* students may look less to anticipatory messages or cultural pride as a coping mechanism. Indeed, messages of determination were often transmitted by Latinx immigrant parents when faced with economic constraints and/or ethnic-racial discrimination (Ceballo, 2004). In contrast, work by Brown et al. (2007) showed positive associations between education levels and familial discussions centered around race and ethnicity. In Study 1, Latinx students who received heightened amounts of cultural socialization and preparation for bias messages in circumstances of socioeconomic disadvantage had similar academic adjustment to their less socialized but more well-off peers. Collectively, my findings suggest that even when Latinx students lack socioeconomic resources, the transmission of both types of ERS messages bolsters their academic well-being.

**Research Question 3: How do Dimensions of Social Class Identity (SCI) Intersect with Dimensions of Ethnic-Racial Identity (ERI) to Shape Latinx College Students' Academic Adjustment at PWIs, Specifically their Feelings of Campus Inferiorization, Perceived Ethnic Fit, and College Competence?**

***Profile Variability***

In study 2, profiles of dimensions of ERI and SCI were examined among a sample of Latinx college students attending PWIs in the Midwest. How ERI and SCI dimensions intersect to inform students' academic adjustment, more specifically their feelings of campus

inferiorization, perceived ethnic fit, and college competence was also investigated. A total of five distinct profiles emerged from this sample of Latinx college students.

The largest of the five clusters was the *Low ERI/Lower Middle-Middle Class/Low SCI pride* group ( $n = 127$ , 39% of the sample). This group of students was characterized by students who reported the lowest ERI centrality and private regard levels of all the groups. Characteristics from this profile such as their below average levels of ERI centrality, ERI private, public regard, and low SCI pride suggest that the majority of this sample of Latinx college students may buy into the negative perceptions of their ethnic-racial group and social class that are often perpetuated within the context of PWIs (Yosso, 2005).

The *Balanced ERI/Middle-Upper Middle Class/High SCI guilt* group ( $n = 56$ , 17.3% of the sample) was the second largest cluster and was characterized by similar levels of both ERI centrality and private regard. With the exception of the *Low ERI/Middle-Upper Middle Class/High SCI pride* cluster, these students identified with the highest social class. The third cluster was the *Moderate ERI/Working-Lower Middle Class/High SCI shame* profile ( $n = 47$ , 14.7% of sample) who reported significantly higher ERI centrality levels than 2 of the 5 groups. With regard to SCI, the *Moderate ERI/Working-Lower Middle Class/High SCI shame* students identified with the lowest social class out of all the profiles, felt their SCI was more central to their self-concept, and felt the greatest shame as well as the least amount of SCI pride when compared to most other groups.

The *Low ERI/Middle-Upper Middle Class/High SCI pride* group was the second smallest group ( $n = 43$ , 14% of sample). This profile reported their ERI was less central to their self-concept and they perceived their ethnic-racial group less positively than most all other profiles. These students also identified with a higher social class, were more proud, less ashamed, and less

guilty about their SCI than the two of the four other clusters characterized by less SCI pride, heightened SCI shame as well as SCI guilt. Lastly, the smallest of the profiles was the *High ERI/Lower Middle Class/High SCI centrality and pride* profile ( $n = 40$ , 12.1%) which was characterized by significantly higher ERI centrality, private, and public regard than most all other clusters. These students also identified with the lowest social class when compared to most other groups, and had higher SCI centrality and felt more positively about their SCI when compared to all other clusters.

### ***Academic Adjustment***

**Perceived Ethnic Fit.** The *Low ERI/Lower Middle-Middle Class/Low SCI pride* group was used as the reference group when examining the links between profile membership, gender, and academic adjustment. Compared to the *Balanced ERI/Middle-Upper Middle Class/High SCI guilt* group, the *Low ERI/Lower Middle-Middle Class/Low SCI pride* group felt their ERI was less central to their self-concept, and perceived their ethnic-racial group more negatively. This group also identified with a lower social class, was less proud, more ashamed, less guilty about their social class, and felt more threatened when expressing their ethnic-racial identity at their predominantly White university. This parallels prior research that shows more negative affect regarding one's ethnic-racial group (e.g., lower ERI private regard) and one's social class (e.g., less SCI pride and more SCI shame) is affiliated with less perceived ethnic fit among minoritized students (Schwartz et al., 2009; Webb, 2014).

With regard to ERI and SCI, students in the *Moderate ERI/Working-Lower Middle Class/High SCI shame* group felt their ERI was less central to their self-concept, perceived their ethnic-racial group more negatively, identified with a lower social class, felt their SCI was more central to their self concept, and were more ashamed of their social class than the *Low*

*ERI/Lower Middle- Middle Class/Low SCI pride* group. This group also felt more threatened when expressing their ethnicity on campus than the *Low ERI/Lower Middle- Middle Class/Low SCI pride*. This partly aligned with the hypotheses that Latinx students with lower ERI centrality, more negative ERI private regard and a higher social class identification coupled with a less ashamed view of their SCI would be linked to worse academic adjustment (e.g., less perceived ethnic fit). Students with a lower ERI centrality and more negative ERI private regard may be thinking less about their ethnic group affiliation group, and may be less sensitive to moments in which people of their ethnicity are not welcomed on their PWI campus. Indeed, youth with low ERI private regard may have more person-context congruence, such that a PWI environment and their beliefs about their group as devalued align (Byrd & Chavous, 2011). Moreover, students who identify with a higher social class group may also experience more person-context congruence, and as such, perceive fewer threats to their expression of their ethnicity when on campus.

**College Competence.** The *Balanced ERI/Middle-Upper Middle Class/High SCI guilt* students felt more competent at college when compared to the reference group students, who had significantly lower ERI centrality, identified with a higher social class, and felt guiltier about their social class identification. In support of my hypothesis and prior findings, the *Low ERI/Lower Middle-Middle Class/Low SCI pride* group's less strong view of their ethnic-racial group, as well as their less positive views of their lower social class identification may have contributed to their reported lack of competency at a PWI. Feeling one's ethnic-racial identity is less central to their self-concept, coupled with a negative affect towards their social class identification, has been linked to poorer academic adjustment among Latinx college students at PWIs (Gummadam et al., 2016; Schwartz et al., 2009).

With regard to SCI, students in the *Moderate ERI/Working-Lower Middle Class/High SCI shame* group identified with a lower social class, felt their SCI was more central to their self concept, were more ashamed of their social class, yet showed more college competence than the *Low ERI/Lower Middle- Middle Class/Low SCI pride*. It may be that in a PWI environment, where middle-class values and ways of being are prioritized, social class discrepancies may be more salient to Latinx college students who identify with a less socioeconomically advantaged group. Indeed, Soria et al (2013) found that Latinx students who self-identified as working class often compared themselves to their peers who identified as middle- and upper-class, and thus reported lower sense of belonging and satisfaction on campus.

Interestingly, despite the *Moderate ERI/Working-Lower Middle Class/High SCI shame* group feeling more threatened when expressing their ethnicity on campus, these students also felt more competent at college when compared to the reference group. Feeling one's ERI is more central to who they are coupled with more positive perceptions of one's ethnic-racial group may amplify Latinx students' hypervigilance regarding when and where they can express their ethnicity, thus heightening how threatened they feel at a PWI. However, this group's identification with a lower social class, their higher SCI centrality, and their increased shame about their SCI may contribute to these students' confidence around their social and academic abilities. By the time Latinx first-generation college students are admitted to prestigious PWIs, they have overcome various institutional and social barriers that could contribute to heightened self-awareness regarding their social and academic ability to succeed, despite these obstacles (Gonzalez et al., 2015; Yosso, 2005). Their perseverance, despite being continuously underserved, underrepresented, and perceived as ill-equipped to thrive in higher institutions, could increase Latinx students' perceived college competence within a PWI environment.

**Campus Inferiorization.** When the *Low ERI/Lower Middle-Middle Class/Low SCI pride* group was used as the reference group, no profiles were related to campus inferiorization. One possibility is that feelings of inferiority on campus may have been captured by the other two academic adjustment measures (e.g., perceived ethnic fit and college competence). Whereas the perceived ethnic fit measure assessed lack of fit or compatibility with others on campus due to one's race or ethnicity, the college competence captured the extent to which students perceived themselves academically and socially proficient on campus. However, the campus inferiorization measure captured whether the student felt respected and taken seriously on campus; yet it did not specify whether the inferiorization was race or ethnicity-related. Thus, if this sample of Latinx college students felt disrespected or underestimated by their peers or professors at a PWI due to their ethnicity, they may have reported these perceptions via the perceived ethnic fit survey items. Latinx students may link microaggressions such as a professor underestimating them, or a peer dismissing their class contributions, to their being Latinx, particularly within the context of a PWI, in which they are both the numerical minority and a minoritized, historically excluded ethnic-racial group. Indeed, a strong and positive affiliation with a minoritized ethnic-racial group has been associated with student perceptions' of campus as a less welcoming and inclusive learning environment (Byrd & Chavous, 2009; Yip, 2018).

**Research Question 4: How are the Relations of SCI and ERI with Academic Outcomes Moderated by Gender Among Latinx College Students Attending PWIs?**

I also examined how the relations of SCI and ERI with academic adjustment outcomes are moderated by gender among Latinx college students attending PWIs. Findings suggest that gender did not moderate any of the associations between the ERI x SCI profiles and academic adjustment outcomes. This is contrary to my two hypotheses regarding potential

gender differences in academic adjustment. First, I expected that male Latinx college students who identified with a lower social class and felt more negatively about their social class would experience worse academic adjustment (e.g., lower college competence, less perceived ethnic fit, and heightened campus inferiorization) when compared to female Latinx college students. I also posited that the protective nature of a positive ERI on academic adjustment would be stronger for Latinx males who identified with and felt more negatively about their lower social class. It is possible that due to the multiple ERI x SCI profiles that were accounted for in the regression, gender differences were not captured above and beyond the five ethnic-racial and social identities clusters. Thus, other significant associations between profile memberships and academic adjustment outcomes may have been captured had other profiles been used as the reference group. Furthermore, within the context of a PWI, ethnic-racial and social class identity may be more salient for Latinx college students, whereas gender identity may be less salient. PWIs embody and privilege White, middle-class identities and ways of being, often leaving students of racially minoritized identities siloed, underrepresented, and underserved on campus (Chavous et al., 2013; Loeb & Hurd, 2019; Gonzales et al., 2015). Thus, Latinx college students may prioritize finding community amongst their co-ethnic peers rather than finding community amongst others who share their same gender identity. It is also worth noting that the gender identity measure used in study 2 a) was binary and does not capture the full spectrum of gender identities, and b) did not capture students' affect around their gender identity. To create more inclusive and holistic social identity measures for gender, future studies that examine multiple social identities should consider measuring both the affect component and non-binary nature of these social identities (e.g., single-item, open-ended questions) (Cameron & Stinson, 2019).

## **Integrative Discussion: How do Ethnic-Racial Experiences and Socioeconomic Experiences Interact to Influence Academic Adjustment Among Latinx College Students?**

This dissertation explores how ethnic-racial and social class experiences shape Latinx college students' distinct realities and provides greater insight into their lived experiences and academic adjustment as they navigate higher education. Importantly, findings from both studies illustrate the ways in which ethnic-racial socialization and ethnic-racial identity manifest as adaptive culture to bolster Latinx college students' academic adjustment, within the context of both an HSI and at PWIs. The socioeconomic component of both studies (objective and subjective indicators of social class in Study 1, and social class identity in Study 2) also adds nuance to our understanding of adaptive culture, as it considers the ways in which social class experiences work in tandem with ethnic-racial experiences as adaptive culture.

Parallel to prior research and my hypotheses, ethnic-racial socialization and ethnic-racial identity functioned as manifestations of adaptive culture in that dimensions of ERS and ERI a) emphasize the attitudes, values, and goals that differ from those of the dominant culture, and b) promoted academic adjustment among these samples of Latinx college students. In Study 1, 4 profile comparisons illustrated the promotive nature of ethnic-racial socialization messages. The *Balanced ERS* students who perceived greater financial hardship and received more ERS messages were more academically engaged than the more affluent, but less socialized *Low ERS/Moderate SES* students. In that same vein, the less socialized *Balanced ERS* students were less academically engaged when compared to the *High ERS/Moderate SES* students. I observed a similar pattern such that the *Low ERS/Moderate SES* group—which was less socioeconomically advantaged and received fewer ERS messages—were less academically engaged at their HSI.

Likewise, the more well-off yet less socialized *Low ERS/Moderate SES* students were more academically engaged than the *Moderate ERS/Lower SES* students.

Study 2 findings similarly illustrate how a stronger, more positive ethnic-racial identity can promote academic adjustment for Latinx college students attending PWIs. When compared to the *Balanced ERI/Middle-Upper Middle Class/High SCI Guilt* students, the *Low ERI/Lower-Middle- Middle Class/Low SCI Pride* students—who felt their ERI was less central to their self-concept and perceived their ethnic-racial group more negatively—felt less competent at college. Latinx college students who had lower SCI centrality and had negative views of their ethnic-racial group also felt less competent on their PWI campuses (*Low ERI/Lower Middle-Middle Class/Low SCI pride*) than the *Moderate ERI/Working-Lower Middle Class/High SCI shame* students.

In line with my hypotheses, findings from both studies underscore how identification with a higher social class or socioeconomic advantage, coupled with positive feelings about one's social class identification, can bolster academic adjustment among Latinx college students. For the students attending the HSI in Study 1, socioeconomic resources were more relevant to their academic self-concept. The more affluent *High SES* students who were less racially socialized, had a more positive academic self-concept when compared to the more socialized but less affluent *High ERS/Lower SES* students. In Study 2, the *Low ERI/Lower Middle-Middle Class/Low SCI pride* students identified with a lower social class, were less proud and more ashamed of their social class, and felt less comfortable expressing their ethnicity at their respective PWI when compared to the *Balanced ERS* students. Taken together, socioeconomic resources (as measured in Study 1 by objective and subjective indicators) and positive affect about one's social class identification (as measured in Study 2 by SCI) can imbue a more

positive academic self-concept and a better ethnic fit for Latinx college students across two distinct higher education contexts (an HSI in Study 1 and various PWIs in Study 2).

As expected, separate findings from both studies illuminate how socioeconomic disadvantage or negative feelings about one's social class as well as bias-focused ERS messages or negative affect about one's ERI may hinder Latinx college students' academic adjustment. For instance, in Study 1 the less affluent *Balanced ERS* students who received more preparation for bias messages had a more negative academic self-concept and were less academically engaged than the *High SES* students who were more well off, yet received fewer preparation for bias messages.

Study 2 findings similarly suggest that lower social class identification, negative SCI affect, coupled with more negative perceptions of one's own ethnic-racial group, may hinder academic adjustment among Latinx college students attending PWIs. For instance, the *Low ERI/Lower Middle-Middle Class/Low SCI pride* thought more negatively about their ethnic-racial group, had a lower a social class, expressed more negative affect about their social class (e.g., less proud, more shame, and more guilt), and had lower perceived ethnic fit than the *Low ERI/Middle-Upper Middle Class/High SCI pride* students. A separate profile comparison revealed that *Low ERI/Lower Middle-Middle Class/Low SCI pride* students had less strong and less favorable views of their ethnic-racial group and social class, and felt less competent at college when compared to the *Balanced ERI/Middle-Upper Middle Class/High SCI guilt* group. In that same vein, the *Low ERI/Lower Middle-Middle Class/Low SCI pride* had lower ERI centrality, more negative ERI private and public regard, identified with a higher social class, had lower SCI centrality, and felt worse about their SCI (less proud, more ashamed). In turn, these students also felt threatened when they expressed their ERI on campus and reported lower

college competence. Within a PWI environment, Latinx college students may feel guilt about their pursuing upward mobility through higher education. They may also experience discrepancies between their family's or co-ethnic peers' socioeconomic status and may feel guilty or ashamed of their own pursuits of upward mobility via higher education (Covarrubias et al., 2020; Sterk, 2022). Although Latinx students who identify with a higher social class may feel more cultural congruence with the middle- and upper-class values embodied and privileged by PWIs, their more negative perceptions of their ethnic group could exacerbate their lack of ethnic fit.

In that same vein, the *Low ERI/Lower Middle-Middle Class/Low SCI pride* group had lower ERI centrality, more negative ERI private regard, identified with a higher social class, yet had a lower SCI centrality, and felt less competent at college but more comfortable expressing their ethnicity on campus when compared to the *Moderate ERI/Working-Lower Middle Class/High SCI shame* students. This pattern of findings was interesting and only partially aligned with my hypothesis, in that a less strong and less positive ERI would be linked to worse academic adjustment (less college competence) and a higher social class identification would be related to better academic adjustment (more perceived ethnic fit). It is possible that students with lower ERI centrality who hold negative perceptions of their ethnic-racial group are less sensitive to instances of racial bias on their PWI campus. Moreover, they may be experiencing more person-context congruence such that their devaluation of their ethnic-racial group and their marginalization within a PWI context are in alignment (Byrd & Chavous, 2011). Accordingly, Latinx students with a higher social class identification and a more negative ERI private regard may perceive more person-context congruence and in turn, may feel less threatened when expressing their ethnicity on a PWI campus.

Within the context of an HSI, four profile comparisons in Study 1 showed that ERS messages can bolster academic engagement among Latinx college students with fewer socioeconomic resources. *Balanced ERS* students who perceived more financial hardship yet were more racially socialized were more academically engaged than the *Low ERS/Moderate SES* students. I found a similar compensatory pattern of ERS when I compared the *High ERS/Lower SES* students and the *Low ERS/Moderate SES* students, such that the students with parents who had less education and less prestigious jobs, but received more ERS messages (*High ERS/Lower SES* students) were more academically engaged than the less socialized, but more socioeconomically advantaged *Low ERS/Moderate SES* students. Other profile comparisons suggested that students who received more ERS messages (*Moderate ERS/Lower SES* students and *High SES* students) but were more socioeconomically disadvantaged showed similar academic engagement and self-concept than less socialized but more socioeconomically advantaged students (*Balanced ERS* students and *High ERS/Moderate SES* students). Interestingly and in contrast to Study 1 findings, I did not find that ERI was compensatory in the presence of socioeconomic disadvantage or negative SCI affect across profile comparisons in Study 2. Future studies should explore the ways in which a positive ERI coupled with a lower and more negative SCI may influence academic adjustment among Latinx college students attending PWIs.

### **Limitations and Future Directions**

Both studies in this dissertation helped to elucidate developmental science's current understanding of the ways in which ethnic-racial experiences and socioeconomic experiences synergistically shape academic well-being among Latinx college students attending an HSI and

PWIs. Nonetheless, future research would benefit from addressing this study's limitations as discussed below.

Due to the specificity of Study 1's sample, findings from this study are not generalizable across Latinx college students samples. The unique nature of our population speaks to the distinct experiences of Latinx college students at both HSIs and in the Western region of the U.S. Thus, the implications of ERS and socioeconomic factors on academic well-being may vary across youth of distinct ethnic and racial groups. Future research should consider exploring these processes among Latinx college students of distinct ethnic-racial backgrounds, across various college settings, and in different geographical regions of the U.S. (Banerjee et al., 2011; Neblett et al., 2012; McDermott et al., 2018; Tran & Lee, 2010). In that same vein, scholars should acknowledge that Latinx youth are not a homogenous panethnic group and should not be treated as such. Factors like phenotype, immigration, and documentation status that were not within the scope of this dissertation are relevant to the type of ERS messages Latinx youth receive from family members and should be considered by scholars (Ayón et al., 2020; Cross et al., 2020) and should be further examined, as they likely inform how youth come to understand ethnic-racial marginalization.

The cross-sectional nature of Study 1 did not allow me to determine directionality or causality among our variables. ERS messages are dynamic, context-dependent, and embedded in reciprocal relationships (Byrd & Ahn, 2020). Thus, future studies should consider the role of context as well as longitudinal methods to elucidate the temporal relations between ERS, socioeconomic factors, and academic outcomes. Whereas I examined both objective and subjective SES indicators, future research would benefit from including other objective and subjective SES indicators, as well as wealth markers (e.g., wealth indexes). Wealth remains an

understudied yet important aspect of familial socioeconomic status that has implications for trajectories of educational success and academic adjustment, particularly among minoritized youth (Diemer et al., 2013).

Moreover, I only examined two types of ERS messages (cultural socialization and preparation for bias), and I did not include other types of ERS messages including promotion of mistrust, which are also frequently transmitted, salient messages among families of minoritized ethnic-racial backgrounds (Tran & Lee, 2010). Other types of ERS messages such as promotion of mistrust and egalitarianism that speak to perceptions of intergroup relations have been shown to have implications for Latinx youth's academic adjustment (Ayon et al., 2019). Latinx college students who receive promotion of mistrust messages that emphasize wariness and caution with other ethnic-racial groups may self-isolate or only seek out co-ethnic peers at HSIs as a means of navigating higher education institutions. Moreover, Latinx students who are transmitted ERS messages that emphasize egalitarianism, or the valuing of individual qualities over ethnic or racial group membership, may de-emphasize their own and others' ERI. As such, transmission of ERS messages that promote mistrust and encourage egalitarianism may inform how and who Latinx college students are engaging with on campus. Future studies should also account for the ERS messages that are transmitted by type of parent, other caregivers, peers, educators, in schools, in neighborhoods, and via media (Aldana & Byrd, 2015; Hughes et al., 2011; Towbin et al., 2008), because ERS messages are not siloed with the home. Youth are continuously receiving positive and negative as well as explicit and implicit messages about their ethnic-racial group outside of the home. Moreover, ERS messages transmitted by parents may work in tandem with messages transmitted by others and their interactive nature should be considered by scholars looking to capture the multifaceted, dynamic, and context-driven phenomenon that is ERS.

Study 2 also has several limitations. Similar to study 1, these findings are not generalizable and only speak to the experiences of Latinx college students at particularly well-resourced Predominantly White Institutions (PWIs) in the Midwest. Also, the associations between ERI, SCI, and academic well-being are not similar across youth of diverse ethnic and racial backgrounds (Schwartz et al., 2009; Rigali-Oiler & Kurpius, 2013; Webb, 2014). Thus, scholars should consider these processes among Latinx students across other college settings in other U.S. regions. Moreover, the ethnic background as well as documentation and immigration statuses of youth should be factored into studies interested in capturing the variability of Latinx youth's lived experiences (Cooper et al., 2015). Moreover, the study being cross-sectional did not allow for claims of directionality among our variables or the role of context. As such, longitudinal methods should be relied on to elucidate the temporal, context-dependent and dynamic links between ERI, SCI, gender, and academic adjustment among Latinx college students (Spears, 2011). Lastly, the gender identity measured only captured this social identity as a binary construct, which excludes non-binary or non-gender conforming Latinx youth's distinct lived experiences. Developmental scientists who focus on various social identities should consider relying on non-binary, open-ended gender identity measures as well as an intersectional framework to further elucidate how various social identities work together to create unique experiences of both privilege and oppression (Cameron & Stinson, 2019; Castillo-Lavergne & Destin, 2019; Cole, 2009).

### **Implications for Practice and Policy**

Findings from this dissertation can be used by universities committed to a) supporting Latinx students in fulfilling their career and academic pursuits, and b) curating inclusive, equitable campuses and classrooms that acknowledge Latinx students' cultural assets as well as

their social identities. As such, educators and administrators interested in cultivating anti-racist pedagogy that acknowledges and portrays students' social identities as assets should consider how a stronger more positive ERI, ERS messages, and socioeconomic advantage coupled with positive feelings about one's SCI can promote academic adjustment among Latinx college students at both HSIs and PWIs (Ohito & LaGarry, 2023). Universities could look to these findings to design and implement interventions, programs, and policies that promote campus belonging, fit, and feelings of academic and social competence (Jayakumar & Museus, 2012). Intervention findings illustrate that inclusive programming does not need to be all-consuming or intensive for university staff and faculty (Walton & Cohen, 2011), and programming can successfully benefit a host of academic outcomes among college students (Hausmann et al., 2007; Gummadam et al., 2016; Museus et al., 2018). Although contextual influences such as peer networks and involvement in campus organizations were not captured in this dissertation, there is evidence that peers and student organization involvement and interactions with co-ethnic peers can influence the types of ethnic-racial messages youth receive, their social identities and in turn, college students' academic adjustment well-being (Camacho, 2017; Chavous et al., 2003; Gurin et al., 2013).

### **Conclusion**

This dissertation makes several contributions to developmental science. Firstly, whereas prior research has honed in exclusively on the ethnic-racial experiences of Latinx youth, the majority of this research has excluded socioeconomic factors and gender identity, instead, including socioeconomic indicators and gender identity as mere controls. To my knowledge, these studies are two of few that rely on person-centered analyses to explore both ethnic-racial and social class experiences as lived experiences that coincide and function synergistically to

shape academic adjustment among Latinx college students. Furthermore, my examination of both ERS and ERI as important, albeit understudied ethnic-racial experiences and manifestations of adaptive culture has implications for policy-makers, administrators, and educators interested in bettering Latinx students' academic well-being. Additionally, I included multiple objective (e.g., familial income, perceived financial hardship) and subjective SES factors (e.g., social class and SCI affect) whereas much of past research has exclusively focused on one type of socioeconomic indicator. These studies also capture two distinct aspects of Latinx college students' academic adjustment in 2 higher education contexts (e.g., HSI and PWI); academic success (e.g., academic engagement and self-concept) and the college experience, whereas other research has shed light on these dimensions individually. Lastly, in contrast to past research that has relied on deficit perspectives, this dissertation takes a strengths-based approach to underscore both promotive and protective nature of ethnic-racial and social class experiences in tandem, and how they shape academic adjustment among Latinx college students.

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## **Appendices**

## Appendix A: Study 1 Measures

### **Socioeconomic Indicators**

#### ***Parental Education***

Two items on the following 10-point Likert scale:

- |                           |                                      |
|---------------------------|--------------------------------------|
| 1 = Less than high school | 6 = Some college                     |
| 2 = Some high school      | 7 = Junior college degree (AA, AS)   |
| 3 = High school graduate  | 8 = College graduate (BA, BS)        |
| 4 = GED                   | 9 = Master's degree                  |
| 5 = Some technical school | 10 = Doctoral degree (Ph.D., MD, JD) |

#### ***Parent Occupational Prestige***

Open-ended responses to the following two questions:

- 1) What is your mother's occupation?
- 2) What is your father's occupation?

#### ***Family Relative Financial Hardship***

One item on the following 5-point Likert scale:

- 1 = We were much better off
- 2 = We were somewhat better off
- 3 = We were about equal to
- 4 = We were somewhat worse off
- 5 = We were much worse off

- 1) How would you compare your family's financial situation to the financial situation of your neighbors?

### **Ethnic-Racial Socialization**

Two subscales based the following 3-point Likert scale:

- 1 = Never
- 2 = A few times
- 3 = A lot of times

#### ***Cultural Socialization Sub-Scale*** (4 items)

- 1) How many times have you said to your child you should be proud to be the race or ethnicity you are?
- 2) How many times have you said to your child it is important to know about the important people and events in the history of your racial/ethnic group?

- 3) How many times have you said to your child it is important to follow the traditions of your racial/ethnic group (like eating ethnic foods and keeping ethnic values)?
- 4) How many times have you said to your child you should feel good about being part of your ethnic or racial group?

***Prep for Bias Sub-Scale*** (5 items)

- 1) How many times have you said to your child you may have hard times being accepted in this society because of your race or ethnicity?
- 2) How many times have you said to your child people of your race or ethnicity are more likely to be treated poorly or unfairly than people of other races or ethnicities?
- 3) How many times have you said to your child people of your race or ethnicity are more likely to be treated poorly or unfairly than people of other races or ethnicities?
- 4) How many times have you said to your child some people may exclude you from activities because of your race or ethnicity?
- 5) How many times have you said to your child you may experience discrimination and prejudice because of your race or ethnicity?

**Academic Adjustment**

***Academic Engagement***

Thirteen items on the following 4-point Likert scale:

- 1 = Never
- 2 = Sometimes
- 3 = Often
- 4 = Very Often

- 1) Asked questions in class or contributed to class discussions.
- 2) Made a class presentation.
- 3) Prepared two or more drafts of a paper or assignment before turning it in.
- 4) Worked on a paper or project that required integrating ideas or information from various sources.
- 5) Come to class without completing readings or assignments.
- 6) Worked with other students on projects during class.
- 7) Worked with classmates outside of class to prepare class assignments.
- 8) Put together ideas or concepts from different courses when completing assignments or during class discussions.
- 9) Participated in a community-based project (e.g., service learning) as part of a regular course.
- 10) Discussed ideas from your readings or classes with faculty members outside of class.
- 11) Worked harder than you thought you could to meet an instructor's standards or expectations.
- 12) Worked with faculty members on activities other than coursework (committees, orientation, student life activities).
- 13) Discussed ideas from your readings or classes with others outside of class (students, family members, co-workers).

### ***Academic Self-Concept***

Six items on the following 5-point Likert scale:

- 1 = False
- 2 = Mostly False
- 3 = More False than True
- 4 = Mostly True
- 5 = True

- 1) Compared to others my age, I am good at most school subjects.
- 2) I get good grades in most school subjects.
- 3) Work in most school subjects is easy for me.
- 4) I'm hopeless when it comes to most school subjects.
- 5) I learn things quickly in most school subjects.
- 6) I have always done well in most school subjects.

### **Demographic Variables**

#### ***Ethnic-Racial Background***

Students self-selected their ethnic-racial background from the following 6 options:

- African American/Black non-Hispanic
- Caucasian/White non-Hispanic
- Asian American/ Asian (including the Indian sub-continent)
- Latino/Hispanic
- Native Hawaiian/Pacific Islander
- Multiracial (having parents of one or more race)

## Appendix B: Study 2 Measures

### **Ethnic-Racial Identity**

Three subscales based the following 7-point Likert scale:

- |                       |                    |
|-----------------------|--------------------|
| 1 = Strongly disagree | 5 = Somewhat agree |
| 2 = Disagree          | 6 = Agree          |
| 3 = Somewhat disagree | 7 = Strongly agree |
| 4 = Neutral           |                    |

Participants were asked: *People may think about **their racial or ethnic identity** in different ways. Please respond how much you agree or disagree with the following statements.*

#### ***ERI Centrality Subscale*** (3 items)

- 1) Being a member of my racial group is an important reflection of who I am.
- 2) I have a strong attachment to other people from my racial group.
- 3) I have a strong sense of belonging with other people in my racial group.

#### ***ERI Private Regard Subscale*** (3 items)

- 1) I am happy that I am a member of my racial/ethnic group.
- 2) I have a lot of pride in my racial/ethnic group and its accomplishments.
- 3) I feel good about my racial background.

#### ***ERI Public Regard Subscale*** (4 items)

- 1) Overall, my racial group is considered good by others.
- 2) In general, others respect people from my racial group.
- 3) Society views my racial group as an asset.
- 4) In general, other groups view my racial group in a positive manner.

### **Gender Identity**

- 1) Man
- 2) Woman
- 3) Preferred term not listed (please specify): \_\_\_\_\_

### **Social Class Identity**

#### ***Subjective Social Class Identification***

One item on the following 6-point Likert scale:

*If you had to describe your social class or socioeconomic background, you would describe it as:*

- poor (1)
- working class (2)
- lower middle class (3)
- middle class (4)
- upper middle class (5)
- upper class (6)

***Social Class Identity***

Four subscales based the following 7-point Likert scale:

- |                       |                    |
|-----------------------|--------------------|
| 1 = Strongly disagree | 5 = Somewhat agree |
| 2 = Disagree          | 6 = Agree          |
| 3 = Somewhat disagree | 7 = Strongly agree |
| 4 = Neutral           |                    |

*Please consider your social class background. Read each statement carefully and select the response that best describes your agreement or disagreement with each statement. There are no right or wrong answers.*

***SCI Centrality*** (5 items)

1. I have a lot in common with other students who share my social class background.
2. Coming from my social class background is important to my sense of what kind of person I am.
3. Whenever possible, I prefer to hang out with other students from my social class background.
4. If I were to describe myself to someone, I would probably mention my social class background.
5. In general, coming from my social class background is an important part of my self-image.

***SCI Pride*** (2 items)

1. I feel a sense of pride because of my social class background.
2. I feel good about my social class group background.

***SCI Shame*** (4 items)

1. At times, I try to hide the fact that I am from my social class background.
2. I wish I was from a different social class background.
3. I sometimes feel embarrassed that I come from the social class background that I do.
4. I am not ashamed of my social class background.

***SCI Guilt*** (2 items)

1. Sometimes, I feel guilty that others have not been as fortunate as I have been.
2. I fear that others may perceive me as “thinking I am better.”

## **Academic Adjustment**

### ***Campus Inferiorization***

Four items based on the following 5-point Likert scale:

- |                    |                  |
|--------------------|------------------|
| 1 = Almost never   | 4 = Fairly often |
| 2 = Not very often | 5 = Very often   |
| 3 = Sometimes      |                  |

*In your classes how often:*

1. did people act as if they respect your intelligence and contribution (for example, your opinion is listened to and given careful consideration)?
2. was your achievement (performing well, for example) treated as if it is expected of you?
3. did you feel that your judgments or opinions are trusted and respected in class discussions or activities?
4. did you feel that if you make mistakes you would be judged more harshly than other students?

### ***Perceived Ethnic Fit***

For the following statements, please respond how true the following statements are of how you generally feel in your college settings.

- |                                    |                     |
|------------------------------------|---------------------|
| 1 = Not true of me at all          | 5 = N/A             |
| 2 = N/A                            | 6 = N/A             |
| 3 = N/A                            | 7 = Very true of me |
| 4 = Neither true or not true of me |                     |

1. I feel that I have to change myself to fit in at my school.
2. I cannot talk to my family about my friends at school or what I am learning at school.
3. I feel like a chameleon at school, having to change my “colors” according to the race or ethnicity of the person I am with.
4. I feel as though I cannot be myself because of my ethnicity.
5. I feel that my ethnicity is incompatible with the new people I am meeting and the new things that I am learning.
6. I do not feel comfortable talking about my culture in class discussions.

### ***College Competence***

Below are a list of statements describing activities, goals, and abilities. Using the scale provided, please rate how well you feel that you do each of the following things compared to other college students at [PIPED TEXT from University Selection choice].

- 1 = *much less* than the average college student (bottom 10%)
- 2 = *somewhat less* than the average college student (bottom 25%)
- 3 = *about the same* as the average college student
- 4 = *somewhat more* than the average college student (top 25%)
- 5 = *much more* than the average college student (top 10%)

*Compared to the average college student at my school, I am able to:*

1. do my homework quickly and efficiently
2. get to know other students
3. write good papers for my courses
4. set and achieve personal goals
5. listen to and understand others
6. do well in advanced math and science
7. take on leadership responsibilities
8. logical, analytical thinking
9. develop new skills and abilities
10. make my own decisions
11. do very well at my coursework
12. stand up for my rights
13. get dates with people i'm attracted to
14. be liked by others just for being myself
15. be creative