

**Racial Discrimination, Critical Intersectional Awareness,
and Latina/o Students' Academic Outcomes**

BY

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THESIS

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This thesis is dedicated to my parents, Martina and Rosas, my sister, Loretto, my brothers, Pedro, Rosas, Carlos, Sergio, Gerardo, and to my fiancé, Moises.

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TABLE OF CONTENTS

<u>CHAPTER</u>	<u>PAGE</u>
I. OVERVIEW	1
II. CONCEPTUAL FRAMEWORK	6
A. Risk and Resilience Framework	6
B. Latino Critical Race Theory	7
III. LITERATURE REVIEW	12
A. Discrimination and Academic Outcomes	12
B. Beyond Identification: The Role of Critical Consciousness	16
1. Critical Consciousness and Academic Outcomes	17
2. Toward a New Consciousness: Critical Intersectional Awareness	17
IV. PRESENT STUDY	20
V. METHODS	23
A. Participants	23
B. Procedures	23
C. Measures	24
D. Data Analysis Procedures	27
VI. RESULTS	31
A. Descriptive Statistics	31
B. Main Analyses	34
VII. DISCUSSION	39
A. Limitations and Future Directions	43
B. Study Implications	46
VIII. CONCLUSION	48
REFERENCES	49
APPENDICES	59
APPENDIX A	60
APPENDIX B	63
APPENDIX C	67
APPENDIX D	68
APPENDIX E	69
APPENDIX F	70
VITA	75

LIST OF TABLES

<u>TABLE</u>	<u>PAGE</u>
I. DESCRIPTIVE STATISTICS OF SOCIODEMOGRAPHIC CHARACTERISTICS ...	32
II. CORRELATIONS BETWEEN LATINA/O STUDENTS' COVARIATE, PREDICTOR, AND OUTCOME VARIABLES	33
III. MULTIPLE LINEAR REGRESSION MODEL PREDICTING ACADEMIC SKEPTICISM	35
IV. MULTIPLE LINEAR REGRESSION MODEL PREDICTING CURRENT GPA	34

LIST OF FIGURES

<u>FIGURE</u>	<u>PAGE</u>
1. Proposed Aims and Hypotheses.....	21
2. Proposed Results for Aims and Hypotheses.....	22
3. Academic Skepticism as a function of Racial Discrimination and Critical Intersectional Awareness	37

LIST OF ABBREVIATIONS

CRT	Critical Race Theory
HBCU	Historically Black Colleges and Universities
HSI	Hispanic Serving Institution
LatCrit	Latina/o Critical Race Theory
PWI	Predominantly White Institution
TCU	Tribal Colleges and Universities

SUMMARY

Despite Latina/os' growing college enrollment rates, bachelor's degree completion rates for this group continue to lag behind other racial groups. Explanations for racial inequalities in educational outcomes of students of color are often framed from a deficit-lens, where "culture" and individual characteristics are implicated as contributors of underachievement. A major risk-factor contributing to known racial educational inequalities is attributed to the unequal exposure to varying forms of racism experienced by students of color in educational institutions in the U.S., including college campuses. Research on protective factors finds critical consciousness is associated with positive academic outcomes among students of color who face racial discrimination. However, most- if not all- of these studies have measured critical consciousness either from the context of general knowledge of oppression or individualized single social group oppression (i.e., gender, race/ethnicity, or social class alone), but not from an understanding of multiple intersecting identities. Critical intersectional awareness, defined as an *awareness of how multiple social identities* shape's one social location, is discussed and analyzed as a potential protective factor in the current study.

Using an integrated LatCrit and risk and resilience framework this study examines whether experiences of racial discrimination are associated with academic outcomes (i.e., GPA and academic skepticism) and whether critical intersectional awareness moderates the relationship between racial discrimination and academic outcomes among Latina/o students attending a Hispanic Serving Institution. Results show a main effect of racial discrimination for academic skepticism, but not for GPA. Critical intersectional awareness moderated the relationship between racial discrimination and academic skepticism only. This study extends our understanding of critical consciousness from a more complex and intersectional level and provides initial evidence that critical intersectional awareness may be a protective factor in the

face of perceived racial discrimination. Study implications include developing and implementing university courses and programming targeted at fostering critical intersectional awareness among Latina/o students (and for other marginalized groups) as a viable approach to addressing, and, reducing academic race disparities among the fastest-growing segment of the college population in our country.

I. OVERVIEW

The rate of higher education enrollment among Latina/os has increased over the last few decades. From 1976 to 2014, the percentage of Latina/o undergraduate students rose from 4 percent to 17 percent, outpacing increases in enrollment for African American and white college students (National Center for Education Statistics, 2016). Despite Latina/os' growing college enrollment rates, bachelor's degree completion rates for this group continue to lag behind other racial groups. For example, national data show that the undergraduate degree completion rate for Latina/o students in 2014-15 was 12% compared to 66.5% for whites (NCES, 2016). Still, more problematic is that the gap between Latina/o and white undergraduate completion rate widened, from a 20% difference in 1995 to a 27% difference in 2015 (NCES, 2016). More research needs to examine the factors that influence Latina/o college students' degree completion to understand better how to eliminate current racial academic inequalities among this vital segment of the college population.

In the social sciences, including the field of psychology, explanations for racial inequalities in the educational experiences of students of color (primarily that of Latino and African American students) are framed from a deficit-lens, which imply "culture" and individual characteristics (e.g., lack of motivation, acculturation) as contributors of underachievement (Schwartz, Zamboanga, & Jarvis, 2007; Crisp, Taggart, & Nora, 2015). A major source contributing to known racial educational inequalities is associated to the unequal exposure to structural and personally-mediated forms of racism experienced by students of color in educational institutions in the U.S., including college campuses (Gonzales, 2002; Robertson, Bravo, & Chaney, 2014). For example, structural racism places limitations on resources and capital available to people of color through differential access to the goods, services, and opportunities of society based on a socially constructed race stratification (Bonilla-Silva, 1997;

Bonilla-Silva, 2002). Studies show that compared to whites, people of color are more likely to experience structural vulnerabilities across the life-course, including higher instances of being born into poverty, are overrepresented in lower-tier K-12 schools and taught by lower-paid teachers with substandard qualifications (Farkas, 2003; Fry, 2004), all of which can negatively impact educational outcomes. Among Latina/o students, previous work finds that access to rigorous curriculum prior to college leads to third year success while in college (Crisp & Nora, 2010). Personally-mediated racism (i.e., interpersonal discrimination)—intentional or unintentional discriminatory acts against people of color—corresponds to wider structures that reproduce and sustain societal power inequalities (Essed, 1991; Jones, 2000). For example, students of color experience interpersonal discrimination because of lower expectations from professors and peers, being ignored by staff when seeking services, professors' and peers' assumptions regarding admittance of students of color because of affirmative action, or asked to speak "English only" (Jones, 2000; Gonzalez, 2002). These racist incidents are often ambiguous, "subtle" and chronic, and have been shown to have deleterious consequences for people of color, at times manifesting as disempowerment and internalized racism (cf. Jones, 2000). Internalized racism, defined as the acceptance of negative messages about one's own abilities and intrinsic worth (Jones, 2000), in a student of color, might cause self- and/or group-devaluation and resignation (e.g., dropping out of school). For example, among an African American college sample, greater internalized racial oppression correlated with lower valuing of higher education and a strong belief that academic success or failure results from external factors out of ones' control (i.e., fate, injustices) (Brown, Rosnick, & Segrist, 2017). It is therefore not surprising that prior research finds exposure to interpersonal discrimination is associated with lower grade point average (Benner & Graham, 2011), less academic persistence (Witkow, Huynh, & Fuligni,

2015), and decreased motivation (Reynolds, Sneva, & Beehler, 2010) among students of color, all of which may put them at increased risk of dropping out of college.

A growing body of psychological research seeks to examine factors that may lessen or mitigate the deleterious effects of racial discrimination on academic outcomes. Prior studies find endorsing a strong racial identity is associated with cultural pride (Cerezo & Chang, 2013) and preparation for bias (Brown & Tylka, 2011) for people of color, as it may help counteract the insidious effects of racial discrimination, including its internalization (Neblett, Rivas-Drake, & Umaña-Taylor, 2012). However, while there is considerable research on racial identity—as an individual difference factor—less attention has been given to the role of critical consciousness—the process by which oppressed and marginalized people learn to critically analyze their social conditions, question their cultural hegemony, use history to understand the existing structures of inequality and act to change them (Freire, 1990; Watts, Diemer, & Voight, 2011; Hopper, 1999)—in structuring the impact of racial discrimination on the academic outcomes of students of color. Prior research shows that a heightened critical consciousness may help people of color to identify discriminatory experiences and recognize when they “trigger internalized oppression and to label it so it can be externalized, examined, and transformed” (Walters et al., 2016). Thus, a developed critical consciousness may protect against the injury of racial discrimination via a structural understanding of one’s place in the social hierarchy that allows cultivation of resistance against oppression (Ward, 1996). Together, this may increase the likelihood that positive rather than negative educational outcomes will cause the context of racial discrimination. Thus, a focus on critical consciousness aims to understand identity as connected to the social-structural level (cf. Pratto et al., 2000) and as a potential resource to collective struggle rather than examining a person’s identity at the psychological level.

About 64 percent of all Latina/o students attending college enrolled in Hispanic-Serving Institutions (HSIs) (HACU, 2016), yet most of the research on this population is conducted primarily at Predominantly White Institutions (PWIs). The present study will focus on students at a HSI, where Latino students comprise at least 25% of the undergraduate student population (Laden, 2004). Whereas PWIs have a historical context of segregated education, HSIs, Historically Black Colleges and Universities (HBCUs), and Tribal Colleges and Universities (TCUs) are Minority-Serving Institutions (MSIs). However, TCUs and HBCUs differ from HSIs in that TCUs and HBCUs were created under federal law and with a historical purpose of advancing specific marginalized populations (Hubbard & Stage, 2009). This is not the case for HSIs, as they address the demographic changes and geographic locations of Latina/os in the U.S. and do not have an institutional mission to serve Latina/o students (Contreras, Malcolm, & Bensimon, 2008). Latina/os who attend HSIs report greater racial/ethnic student, faculty, and staff diversity, positive campus environments, and greater access to spaces in which they can learn about Latinos and other cultures (Santiago, 2007; Dayton, Gonzalez-Vasquez, Martinez, & Plum, 2004), all of which may influence the development or strengthen critical consciousness among Latina/o students. It is possible that a more homogenous student body, as is the case in many HSIs, may be associated with lower levels of critical consciousness. For example, studies find that students perceive higher levels of discrimination when they attend schools with more diverse student bodies (Umaña-Taylor, 2004), and perceived racial discrimination is theorized to increase group identity (Sellers & Shelton, 2003). It is possible to reason that Latina/o students attending HSIs may perceive less racial discrimination than those at PWIs, given that recent studies show that staff and faculty of color report racial discrimination on campus (Garcia, 2016 Ek, Cerecer, Alanís, & Rodríguez, 2010). Thus, given the overrepresentation of Latina/o students

at HSIs, it is important to understand their experiences of racial discrimination and levels of critical consciousness, and examine their relation to academic outcomes.

Given today's sociopolitical context, including ever-growing anti-Latina/o sentiments, in tandem with the rapid growth of Latina/o college enrollment, there is no doubt about the importance and societal benefits of research that seeks to understand racial academic inequalities by investigating the role of personally-mediated racism and critical consciousness in the lives of Latina/o college students. In the present study, I use quantitative methodology to: (1) determine whether experiences of racial discrimination are cross-sectionally associated with academic outcomes (i.e., GPA, academic skepticism), and (2) whether critical intersectional awareness moderates the relation between racial discrimination and academic outcomes in a sample of Latina/os students enrolled at an HSI.

II. CONCEPTUAL FRAMEWORK

The risk and resilience framework is widely used to understand psychosocial processes that may account for adaptive outcomes despite adverse circumstances (Masten, 2001). In its most basic form, a risk and resilience framework states resilience factors have the potential to mitigate or lessen the adverse effects of a risk factor on an observed outcome (e.g., grade point average). Psychological research informed by strengths-based frameworks can lend greater understanding to the resources to which people of color may turn—as individuals or as a group—when faced with social adversity. A burgeoning body of psychological research on people of color has now turned to using a risk and resilience framework to address and explain the adaptive functioning and academic success of students of color despite racial discrimination and race-related stress (Armenta & Hunt, 2009; Berkel et al., 2010; Umaña-Taylor & Updegraff, 2007). The risk and resilience framework provides an alternative to deficit-based models by drawing attention to students’ capabilities for success. The emphasis is on the resources and processes that individuals use to overcome struggles. However, the risk and resilience framework, just like most psychological theories, were not developed with the experiences of people of color at the center of their theoretical formulations (Garcia-Coll et al., 1996; Huber, 2010). This framework fails to capture racism as a central risk factor in the lives of people of color or on resilience factors tied to structural rather than individual-level processes. This study integrates Critical Race Theory (CRT), specifically a Latino Critical Race Theory (LatCrit) lens to the risk and resilience framework to better understand academic outcomes among Latina/o students as embedded within a larger social structure wherein exposure to and resistance against racism are central drivers.

Below, I summarize the risk and resilience framework and its prior research use for explaining academic racial inequalities, and an overview of the LatCrit lens in higher education research. This section ends with a discussion on specific elements for consideration that LatCrit adds to the risk and resilience framework as it relates to this study.

A. Risk and Resilience Framework

A risk factor is any factor that increases the likelihood for negative consequences on an observed outcome. Racial discrimination, a risk factor, is associated with poor academic outcomes. For example, Latina/o college students who perceive higher levels of interpersonal discrimination are more likely to drop classes or leave campus compared to students who reported lower levels or no racial discrimination (Minikel-Lacocque, 2013; Yosso, Smith, Ceja, & Solórzano, 2009). Racial discrimination is conceptualized as a chronic stressor due to the additional burden it places on individuals' lives (Garzenky, 1985). Therefore, racial discrimination is associated with a host of psychological difficulties, such as increased anxiety (Alamilla, Kim, & Lam, 2010) and depression (Lee & Ahn, 2011); and poor mental health associates with poor academic outcomes (Einstein et al., 2009). In the current study perceived racial discrimination is conceptualized as a chronic stressor and operationalized as a risk factor for academic outcomes.

Research on resilience identifies the processes or mechanisms that individuals may use as a means for positive adaption in the face of risk factors. This research provides evidence for protective factors (i.e., aspects of the individual or the environment related to positive outcomes) to explain competent adaptation. Research on academic racial inequalities has examined various protective factors from people in the individual's proximity. For example, parental involvement (Martinez, DeGarmo, & Eddy, 2004; Gutman, Sameroff, & Eccles, 2002), familial support

(Perez, Espinoza, Ramos, Coronado, & Cortes, 2009; Gutman & Midgely, 2000), and social support (i.e. from peers, teachers), (Alfaro, Umaña-Taylor & Bámaca, 2006) are factors that protect youth's academic outcomes (i.e. grades, academic aspiration and motivation, absences,) by easing or nullify the adverse effects of the risk factor in question. Individual factors, such as racial and ethnic identity, are also protective factors against risk factors such as racial discrimination (Umaña-Taylor et al, 2014; Sellers & Shelton, 2003; Alfaro, Umaña- Taylor, Gonzales-Backen, Bámaca, & Zeiders, 2009). However, there are mixed findings on an individuals' strong sense of in-group affiliation and its association to academic outcomes. Some research shows that higher levels of racial/ethnic identity may guard against the pernicious effects of perceived discrimination, aiding in maintaining better academic outcomes (Museus, Nichols, & Lambert, 2008). In contexts involving high levels of stereotype threat (i.e., the vulnerability of internalizing negative stereotypes about one's own group in a situation) such as STEM fields, strong in-group association for the stereotyped groups (i.e., minorities, females) is inversely related to retention in higher education (Beasley & Fischer, 2012). Most of these studies have examined in-group identity among African Americans and adolescents. These mixed empirical results suggest that in-group identity (i.e., racial/ethnic identity) may not be the appropriate factor to examine that may protect against perceived racial discrimination. While resilience research is important, it is also important to move beyond protective factors tied only to individual-level psychological process (i.e., racial/ethnic identity).

B. Latino Critical Race Theory

In explaining academic inequalities, many scientific models and frameworks fail to account for systems of oppression, but still make them central units of analysis. Critical Race Theory (CRT) exposes and provides a tool to interrogate racism's varying manifestations within

and outside social institutions, including academia, as an approach for empowering communities of color and achieving social justice (Solórzano & Yosso, 2001; Huber, 2010). Latino Critical Race Theory (LatCrit) is a theoretical branch extending from CRT, centered on Latina/os in the United States and focused on issues such as race, ethnicity, gender, language, immigration, culture, phenotype, and sexuality (Solórzano & Yosso, 2001; Matsuda, Lawrence, Delgado & Crenshaw, 1993). There are five defining tenets that form the perspective of CRT and LatCrit (Solórzano & Yosso, 2002):

- **Centrality of race and racism-** CRT distinguishes and centers the social construction of race and the role of racism and power as tools of subordination that reproduce and sustain racial inequalities.
- **The challenge of dominant ideology-** CRT challenges the master narrative on deficit theories and research on students of color and their academic outcomes.
- **A commitment to social justice and praxis-** CRT aims to examine power imbalances in all forms and be a tool in the elimination of oppression (i.e. race, class, and gender).
- **A centrality of experiential knowledge-** The knowledge and skills students of color develop while in potentially harmful academic settings are legitimate forms of assets worth investigating.
- **An historical content and transdisciplinary perspective-** CRT borrows from women's studies, sociology, ethnic studies, and other fields to argue for a more holistic analysis of race and racism in education.

These defining elements form a framework that makes it possible to analyze academic outcomes through a race-conscious lens. Thus, LatCrit scholars have revealed how educational institutions can be traumatizing and oppressive while emancipating and empowering for Latina/o

college students (Solárzano & Bernal, 2001).

LatCrit research shows that Latina/o students on college settings respond to racism via multiple forms of resistance. For example, Latina/o students maintain positive academic outcomes despite hostile campus climates, given that for Latina/o students, their identities *as Latina/os* “nourish and empower their personal and academic success in college” (Villalpando, 2004, pg. 24). Previous research (Guardia & Evan, 2008; Maestras, Vaquera, & Zehr, 2007; Castellanos, 2016) finds that Latina/os in PWIs felt the support they received from fellow Latina/o peers in fraternities/sororities or Chicana/o campus groups helped them cope with racial discrimination by learning about their ethnic groups’ history and by discussing current issues Latina/os faced. Early studies on Latina/o students at PWIs find that Latina/o students keep their Latina/o identities and achieve academic success by having a “proving them wrong” mentality (Sanders 1997; Yosso et al., 2009). Some of the students expressed an understanding of the discrimination they faced as stemming from larger structural forces and racial oppression. For example, Solórzano and Bernal (2001) theorized that students aware of structural racism can be critical of social oppression and motivated by an interest in social justice. LatCrit provides a framework for using critical consciousness instead of group identity as the tool Latina/o students use to resist racial oppression in academic settings and can help them develop appropriate strategies to resist internalizing oppression (e.g., social group devaluation) and create social change. Therefore, incorporating LatCrit theory to a risk and resilience framework allows for considering critical consciousness as a source of *resistance*—a defense—that can help Latina/o students develop resilience in the face of discrimination to positively impact their academics.

Last, given that individual-level resources may not always be sufficient for positive outcomes to take place, critical consciousness offers the ability for Latina/o students to understand that

they may need to work collectively with others to impact their own outcomes as well the outcomes of other marginalized groups. Therefore, while resilience deals with individual-level positive outcomes, resistance offers collective social change.

III. LITERATURE REVIEW

A. Discrimination and Academic Outcomes

Much of the research that examines perceived discrimination among Latina/o students has been conducted at PWIs (Robertson, et al., 2016). These studies show that Latina/o students contend with different social exclusion and marginalization. For example, these students report experiencing overt and covert interpersonal discrimination (e.g., racially charged jokes, alienation from peers) (Torres, Yznaga, & Moore, 2011); institutional discrimination (e.g., re-segregation of higher education and end of race-based affirmative action) (Solórzano & Yosso, 2000; Solórzano, Allen, & Carroll, 2002); racial microaggressions (e.g., stereotypical assumptions or indirect racially charged statements such as, “You speak English so well”) (Yosso, et al., 2009; Minikel-Lacocque, 2013); and a negative campus climate (e.g., hostile behavior from peers and lack of cultural groups on campus) (Hurtado & Ponjuan, 2005; Hurtado, 1994). The discrimination that Latina/o students report come from different sources, including fellow students, faculty members, campus police, teaching assistants, administrators, and staff (Castellanos, 1996; Suarez-Balcazar et al., 2003). Unequal exposure to discrimination may be a reason Latina/o students (and Black students) report lower GPAs than White or Asian students (Brown & Lee, 2005).

Previous research indicates that experiences of racial discrimination may be directly or indirectly related with academic costs for Latina/o students’ achievement and their beliefs about barriers to academic success. For example, in a study using nationally representative data from the Beginning Postsecondary Students Survey (Museus et al., 2008), perceiving a negative racial climate was associated with lower involvement and degree completion among students of color (including Latina/os). And although focused on an adolescent sample of Latina/os (and not

college students), another study (Umaña-Taylor, Wong, Gonzalez, & Dumka, 2012) found that perceiving more racial discrimination was concurrently and prospectively associated with a lower GPA. Academic achievement may also be impacted indirectly through interference with seeking academic support and lower persistence. Several studies find that after experiencing a racist interaction with a white faculty, Latino students are more likely to never return to office hours after their first visit or never attend the professors' office hours prior to graduating (Anaya & Cole, 2001; Gloria & Castellanos, 2003). Racial discrimination is associated with lower academic persistence among Latina/o students (Fischer, 2007; Museus et al., 2008; Witkow, 2015). For example, in one study, derogatory remarks about a student's race and their perceptions on unfair grading were negatively correlated with persistence among a national sample of first-year Latina/o students (Fisher, 2007). In another study, Latino college student's perception of campus climate at year one was negatively associated with a decreased rate of college completion at year six (Museus et al., 2008). Together, these results suggest that racial discrimination, in its many manifestations, may negatively impact academic outcomes in Latina/o students.

Racial discrimination leads to lower academic performance among Latina/o student's GPA (Alfaro, Umaña-Taylor, Gonzales-Backen, Bámaca, & Zeiders, 2009; Umaña-Taylor, Wong, Gonzalez, & Dumka, 2012). Among a sample of Mexican-American adolescents, Umaña-Taylor and colleagues (2012) found evidence for a direct negative relationship between perceived discrimination and lower GPA. Other research studies suggested a link between young Latino boys' academic outcomes, such as lower academic motivation, GPA, and perceived discrimination (Alfaro et al., 2009). These studies suggest that disparities in academic outcomes may be perpetuated due to the experiences of discrimination faced by Latina/o students.

However, more research is needed that examines this relationship among Latina/o college students as they too face similar experiences of discrimination.

Racial discrimination may also impact Latina/o students' expectancies for academic success. It is plausible that chronic exposure to discriminatory incidents leads students to become doubtful that their academic performance will help them in their future, given they may relate their experiences of discrimination to those they may face in the future, including in the workplace (Rivas-Drake & Mooney, 2008). For example, Reynolds and colleagues (2010) found that racism-related stress due to knowledge of institutional racism was associated with lower levels of extrinsic motivation (i.e., individuals' performance or behavior for some external reward or outcome) and higher levels of academic amotivation (i.e., an individual lacks any sense of internal locus of control or motivation) among African American and Latina/o college students, although the effect for the latter finding was stronger for African Americans. Further, according to Reynolds and colleagues (2010), students who endorsed amotivation items indicated that they were not sure why they were in college and if college would be useful in the future. These findings suggest that experiences of discrimination and the stress associated with it may be internalized and disrupt students' expectancies regarding their future, especially their beliefs about having control over their future or that they can use their education to achieve success. For example, in a sample of African American college students, greater internalized racial oppression correlated with a lower valuing of higher education and a more external academic locus of control (Brown et al., 2017). Indeed, academic skepticism, defined as achievement-related beliefs about the relevance that doing well in school has little to no relevance for one's future success (Midgley et al., 2000), was negatively associated with academic motivation, aspirations, and expectations in a sample of Latina/o adolescents (Piña-

Watson et al., 2015). These studies indicate that students who perceive more racial discrimination may be more likely to doubt how their current academic achievement or overall education can impact their futures.

Several recent studies have examined Latina/o students' experiences with racial discrimination at HSIs. In a qualitative study by Arbelo-Marrero and Milacci (2015), Latina/o undergraduate students described their experiences at HSIs as enabling them to engage in an environment that cultivated their academic endeavors and where they are comfortable being themselves. This allowed them to culturally connect with peers and mentors with minimal experiences of discrimination, allowing them to form foundational bonds in schools. Participants referenced their relationships and experiences with Latina/o faculty and administrators as instrumental in their motivation to persist in their academic degree program. On the other hand, Garcia (2016) found that Latina/o students still contend with everyday discrimination at HSIs. Their study revealed that despite a very racially and ethnically diverse student body in this setting, Latina/o students still reported experiences of discrimination and bias. Although it is argued that HSIs could theoretically be places wherein Latina/o students experience a positive climate, including institutional support (Garcia, 2016), these institutions are also part of a larger social structure where power relations abide and thus, where Latina/o students are not free from racism's many manifestations, including everyday interpersonal discrimination and bias from others. Indeed, a numeric majority of students of color at an institution does not automatically equate to a positive climate in HSIs (Hurtado, Griffin, Arrellano, & Cueller, 2008; Hurtado, Clayton-Pedersen, Allen, & Milem, 1998). Even though Latina/o students are predominantly concentrated in HSIs and that discrimination has been shown to have a negative impact in this group, studies have seldom focused on Latina/o students at HSIs. Virtually no quantitative

studies to date having examined whether Latina/o students at HSIs contend with racial discrimination and whether and how it affects their academic-related outcomes. Thus, this remains an empirical question.

B. Beyond Identification: The Role of Critical Consciousness

A large body of research examines ethnic/racial identity as a protective factor against racial discrimination. However, findings from studies on how ethnic/racial identity shapes the association between perceived discrimination and various outcomes are mixed. Perhaps one reason for these mixed findings is due to limitations of ethnic identity being an individual-level resource that one may tap into to cope and resist against personally-mediated racial discrimination—an interpersonal manifestation of structural systems of power, privilege, and oppression deriving from racism. More comprehensive theoretical models and measures should shift the current emphasis on marginalized individuals' identities toward their awareness of the interrelationships of the forms of oppression, and suggest that researchers use critical consciousness as a tool to start (Shinh, 2014).

Critical consciousness (Freire, 1990) is the process by which oppressed and marginalized people learn to critically analyze their social conditions by learning about the relation between historical events and current structures of inequality and learn to question cultural hegemony and act to change systems of inequality (Hopper, 1999). More specifically, critical consciousness is composed of three components: (1) critical reflection, (2) political efficacy, and (3) critical action (Watts et al., 2011). *Critical reflection* refers to the analysis and moral rejection of social inequality in such a way that allows them to see inequality in systemic terms. For example, developing critical reflection allows a person to explore the dynamics of privilege and oppression rooted in social construction (Nagda & Zúñiga, 2003). *Political efficacy* refers to

belief in change through individual and/or collective activism. For example, marginalized youth critical on social inequality may be motivated to effect social change via political participation and civic engagement (Metz & Youniss, 2005). Finally, *critical action* is a broad view of activism as an effective approach to changing aspects of society that are perceived as unjust (Watts et al., 2011). Like political efficacy, critical action necessitates a motivation to change prejudiced social conditions and policies however through non-traditional political processes (i.e., participation or intentions to participate in social action).

For Latina/o students (and other students of color), who may find themselves in hostile campus environments, developing or strengthening critical consciousness may serve as a resource (Diemer & Bluestein, 2006) that helps them to understand and critically analyze discriminatory events as external forces, externalizing rather than internalizing them, and may see collective action as a way to combating this source of oppression. This may protect them from the adverse impact of racial discrimination on life outcomes. This process is an alternative protective factor that addresses structural levels (i.e. understanding of inequality and oppression, action) to cope and resist against racism (and other forms of oppression) not only internally but as part of a collective.

1. Critical Consciousness and Academic Outcomes

Prior studies find that critical consciousness is associated with positive academic outcomes among students of color. For example, in a study of Latina/o high school students, critical consciousness was associated with postsecondary plans to attend 4-year colleges (McWhirter & McWhirter, 2016). Further, using longitudinal data from the Tucson Unified School District, Cabrera, Milem, Jaquette, and Marx (2014) found that students who took part in the Mexican American Studies (MAS) program, an ethnic studies course developed to incorporate components of Critical Race Theory to raise critical consciousness among students,

were more likely to pass the Arizona state standardized test and graduate from high school compared to students who did not take part in the MAS program. And in an ethnographic study with 40 Latina/o youth enrolled in the MAS course, Cammarota (2004) found that young students perceived academic achievement as resistance to oppression. For example, the Latina/o students expressed that because they face gendered and racial discrimination, they had to graduate from high school to “be respected as equals, capable, and worthy” individuals (pg. 63).

Far fewer studies have examined critical consciousness among college students. In the context of racial discrimination, Latina/o students with high levels of critical consciousness (i.e., critique about the opportunity structure) perceived the greatest level of future occupational discrimination when compared to those with low levels of critical consciousness (Rivas-Drake & Mooney, 2008). Students in both the low and high critical consciousness groups perceived the same level of racial discrimination during the first year in college; however, no significant association was found between racial discrimination and GPA for Latina/o students in the high critical consciousness group. As argued by the authors, students may have had a “skeptical-but-aware” view of the opportunity structure for people of color in society and this awareness may have shielded them from internalizing discrimination once they encountered it during college (Rivas-Drake & Mooney, 2008). In effect, critical consciousness may act as a protective factor, inoculating Latina/o students from deleterious academic outcomes associated with racial discrimination.

2. Toward a New Consciousness: Critical Intersectional Awareness

Measures on critical consciousness thus far have either captured general perceptions of oppression and action against it (Diemer, Rapa, Park, & Perry, 2017) or have focused on individual or singular social identities such as race (Peller, 1990) or gender consciousness (Gurin, 1985). Such measures fail to capture the complexity of multiple intersecting identities

that locate individuals on different dimensions of power, privilege, and oppression (Myers et al., 1991; Shih, 2014). Instead, LatCrit and the work by women of color helps bring into focus the importance of intersectionality and for considering the interlocking layers of oppression and privilege that Latina/os face in regard to advantages and disadvantages tied to their different social identities. For example, Gloria Anzaldúa argues that individuals live embedded in multiple or “dual identities” in which the subject straddles multiple lifeworlds (as cited in Barvosa, 2008), while Audre Lorde (1984) has noted that, “there is no such thing as a single-issue struggle because we do not live single-issue lives” (p. 138). Intersectionality centers intersecting social structures and identities, the existing power relations within them and how they reinforce one another in complex and dynamic ways across different contexts (Collins 2000; Crenshaw 1989; King 1988; McCall 2005). In this way, intersectionality allows for capturing the unique experiences of persons with multiple marginalized identities (e.g., women of color), and how they may understand their social marginalization on one dimension as being linked to other forms of marginalization.

Although empirical studies have yet to measure individuals’ understanding of their social location within the social hierarchy and the need for solidarity and collective action from an intersectional perspective, Mahalingam (2017) developed a measure to assess *critical intersectional awareness* to capture a person’s *awareness of how intersections of multiple social identities* shape one’s social location. Examining how this kind of critical consciousness relates to academic outcomes and how it shapes the association between racial discrimination and these outcomes is an important empirical contribution to psychological research on discrimination and risk and resilience and a conceptual contribution to critical studies.

IV. PRESENT STUDY

Using a Risk and Resilience Model integrated within a LatCrit theoretical lens, this study examines the relation between racial discrimination and academic outcomes, and whether this association is dependent on Latina/o students' level of critical intersectional awareness (see Figures 1 and 2). This study seeks to accomplish the following aims:

Aims 1a and 1b: To test associations among racial discrimination and (a) self-reported GPA and (b) academic skepticism.

H1a: It is hypothesized that racial discrimination will be associated with lower self-reported GPA.

H1b: It is hypothesized that racial discrimination will be associated with heightened levels of academic skepticism.

Aim 2a and 2b: To test whether critical intersectional awareness moderates associations between racial discrimination and academic outcomes.

H2a & H2b: It is hypothesized that among Latina/o students with high levels of critical intersectional awareness, the expected adverse effects of racial discrimination on both academic outcomes will be attenuated (i.e., reduced). In contrast, among Latina/o students with low levels of critical intersectional awareness, the expected adverse effects of racial discrimination on academic outcomes will remain or be exacerbated.

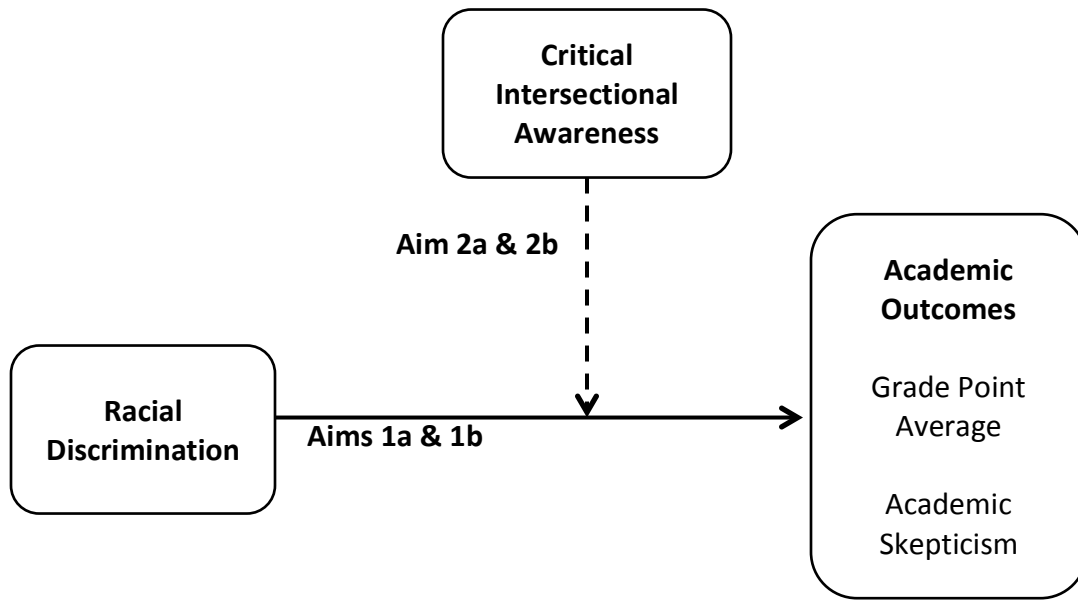


Figure 1. Proposed Aims and Hypotheses. This figure demonstrates the proposed research aims and hypotheses for direct effect of racial discrimination on academic outcomes and moderation effect of critical intersectional awareness. Dashed line represents moderation effect.

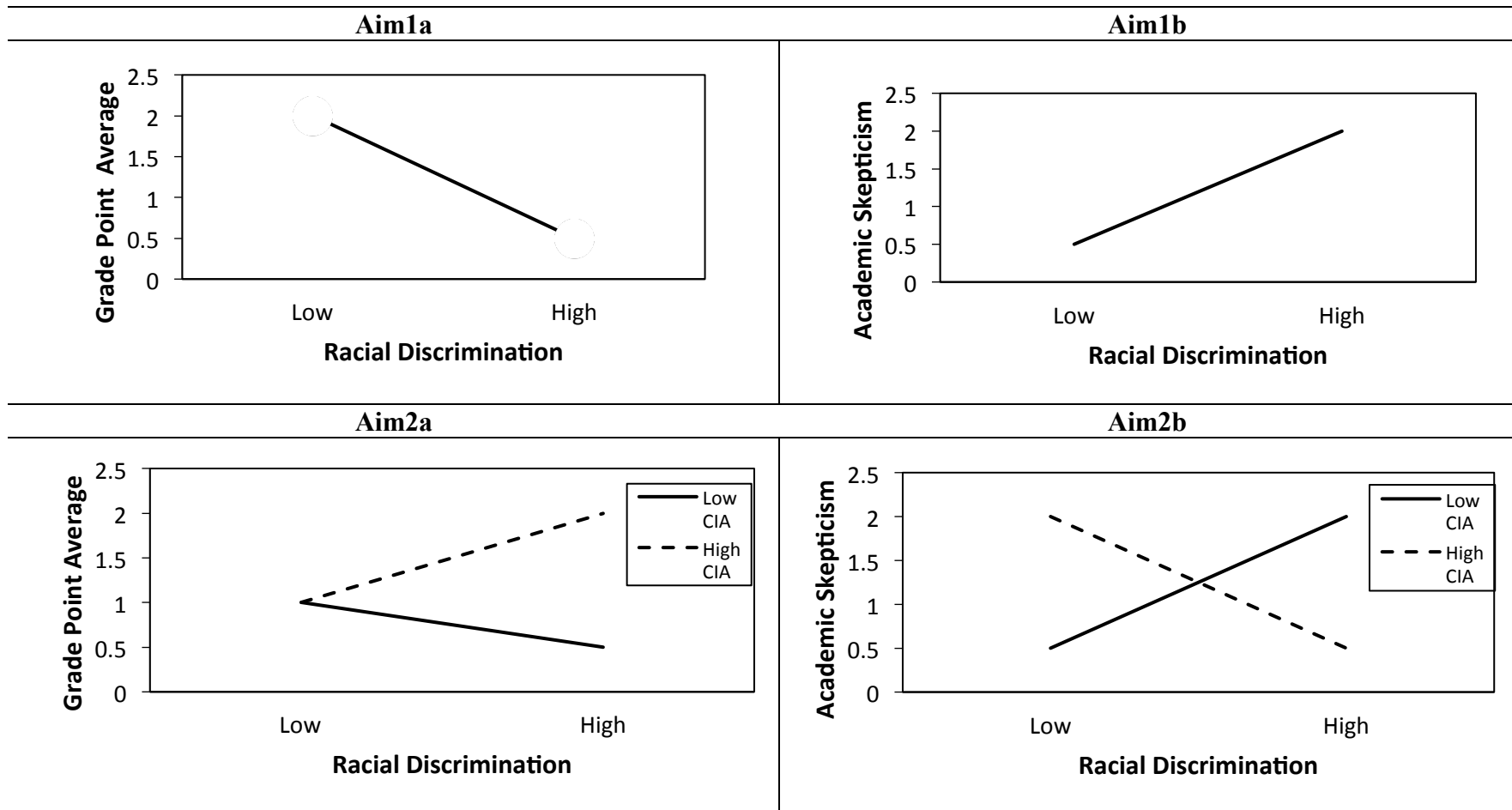


Figure 2. Proposed Results for Proposed Aims and Hypotheses. This figure illustrated the proposed results by aim.

V. METHODS

A. Participants

Participants were 203 self-identified Latina/o or Hispanic students aged 18 years or older ($M= 20.44$; $SD= 2.54$; range= 18-34) who at the time of recruitment (2016-2017) were enrolled at an urban, Midwestern public university (i.e., University of Illinois at Chicago). See Table 1 for other demographic information regarding the study sample.

B. Procedures

Data for the present study are part of a larger study investigating the role of social experiences, coping, and health of Latina/o undergraduate students. Participants were recruited through UIC's mass mail, and UIC's Latin American Recruitment and Educational Services Program (LARES) email listserv, flyers, and in-class announcements. Prospective participants were instructed to contact research personnel via email if they were interested in taking part in the study and met the following eligibility criteria: (1) self-identified as Latino/a or Hispanic; (2) were currently enrolled as UIC undergraduates; and (3) were at least 18 years of age. Once research personnel ensured that prospective participants met eligibility criteria, they sent the eligible participant an email response that included the Qualtrics online survey link. Participants could complete the survey at their own leisure. All participants were presented with a consent form to complete prior to moving to the questionnaire section of the Qualtrics survey; if a student agreed to take part they could then complete the online questionnaires. Once participants completed the survey they were presented with a code, which they emailed to study researchers to receive compensation for their participation. Study researchers responded to participant emails with instructions for claiming their \$20 Amazon gift card, along with a copy of the study

debriefing and consent forms. UIC's Institutional Review Board approved all study procedures of the proposed study (Protocol #: 2015-0787).

C. Measures

Demographic Questionnaire. All participants reported on sociodemographic characteristics, including respondent's age, gender, class year, Latino background, and nativity status. Respondents also reported on their family's annual household income. Participants' *gender* was based on an item with three categories from which to choose: male (=0), female (=1), or other: specify. No one in the sample indicated other as their gender. *Latina/o ethnicity* was assessed with the following question: "Which of the following best describes your Hispanic/Latino heritage?" Categories and their response distributions included: Dominican (.57%), Central American (3.98%), Cuban (3.41%), Mexican (77.84%), Puerto Rican (1.7%), South American (10.23%), More than one heritage (1.7%), or Other (.57%). Given the distribution of responses, with an overwhelming majority of Latina/o students reporting being of Mexican heritage, data were categorized into two categories, Mexican-descent (=0) or other Latina/o group (=1). *Current class standing* was a categorical variable with the following options: Freshman, Sophomore, Junior, Senior, or Other. Due to respondents' responses, class-standing categories were dichotomized into "Entry level status" (Freshman or Sophomore=0) and "Senior level status" (Junior or Senior=1). Five respondents indicated "Other." One of the five participants specified, "5th year senior," and was included in the senior level category. *Work Status.* Participants' work status was assessed with a single question that asked participants to indicate whether they were: employed full time (>35 hours/week in one job or one or more jobs), employed part-time (\leq 35 hours/week), not currently employed, or out of the labor force. Based on the response distribution, the response categories were collapsed into currently employed (=1)

or not employed (=0). *Age*. Participants' age was assessed with a one open-ended question that asks: "How old are you?" One participant outlier was removed from the analytic sample. Due to the response of this question, the age variable was dichotomized into 18-21 years old (=0) and 22 year olds and above (=1). *Nativity Status*. Participants' nativity status was assessed with a single question, "Did you immigrate to the US or were you born outside the US mainland?" which asked participants to indicate yes or no. Participants who indicated "No" were considered "US Born" (=0) while those who indicated "yes" were considered "Foreign-born" (=1). *Household Income* was assessed as a participants' total household (family) income in the past year. Ten response categories ranged from "Less than \$10,000" to "More than \$100,000." Based on the response distribution for this question, categories were collapsed into: Less than \$25,000 (=1); \$25,001-50,000 (=2); \$50,001 or more (=3).

Racial Discrimination. Perceived racial discrimination was assessed using a slightly modified version of the Daily Life Experiences (DLE) scale. The original DLE is part of the Racism and Life Experiences Scales (RaLES) (Harrell, 1997b; Harrell, Merchant, & Young, 1997). The DLE consists of 24 questions that assess the frequency of discrimination experiences on a 6-point Likert scale ranging from 0 ("Never") to 5 ("Once a week"). For instance, sample items ask participants to indicate the frequency of, "Being treated rudely or disrespectfully" or "Being left out of conversations and activities" due to their racial/ethnic group membership. Given that the DLE does not ask about the racial/ethnic background of the perpetrator, the modified version of the DLE added the phrase "...by someone of a different race" to the end of each item on the scale in order to explicitly assess racial discrimination as perpetrated by an out-group member. Participants' responses on frequency of racial discrimination were summed, with higher scores indicating higher levels of racial discrimination. The DLE has been found to

evidence high reliability among racially diverse college samples (Sanchez, Himmelstein, Young, Albuja, & Garcia, 2016) and Latina (i.e., Dominican) immigrant women, with Chronbach's alphas in these prior studies ranging between .91 and .95. In the current sample, the DLE scale also showed high reliability ($\alpha = .96$).

Critical Intersectional Awareness. The Critical Intersectional Awareness (CIA) scale is a 37-item scale that measures an individual's critical consciousness (i.e., critical reflection, critical collective action) through an awareness of intersecting identities and understanding of the role of context (Mahalingam, 2017). For example, sample items include: "We should reach out or form coalitions with socially discriminated groups to combat systemic discrimination," "Social identities have different privileges associated with them," and "Context plays an important role in the construction of our identity." Respondents responded to items on a 7-point Likert scale ranging from 1 ("Strongly Disagree") to 7 ("Strongly Agree").

The CIA measure had not previously been used with a Latino sample and its psychometric properties were not available. To detect structure in the relationships between this large set of items and be able to select a subset of variables with the highest correlations, I conducted a principal component analysis (PCA) with varimax orthogonal rotation using maximum likelihood estimation for missing data. Results from the PCA found support for a 1-factor structure (Eigenvalue = 3.71), with nine items comprising 51.72% of the total variance accounted for by this factor. Factor loadings of these nine items ranged from 0.62 to 0.83. Accordingly, the scale was used as a one-dimensional 9-item measure. Items were summed, with higher scores reflecting a higher level of CIA. In the current sample, the revised CIA scale evidenced high reliability ($\alpha = .90$).

Academic Outcomes. Two academic-related outcomes were included in the current study. *Grade point average* (GPA) was measured as self-reported current overall GPA. *Academic skepticism* was assessed with the 6-item subscale of the Patterns of Adaptive Learning Scales (Midgley et al., 2000). The Academic Skepticism subscale measures students' beliefs about how their academic performance will influence their future. Sample items include: "My chances of succeeding later in life don't depend on doing well in school" and "Even if I am successful in school, it won't help me fulfill my dreams." Participants responded to items on a 5-point Likert scale ranging from 1 ("Not at all true") to 5 ("Strongly true"). Items were averaged, with higher scores reflecting higher levels of academic skepticism. The Academic Skepticism subscale has shown strong reliability ($\alpha = .82$) with Mexican American adolescents (Piña-Watson, López, Ojeda, & Rodriguez, 2014). In the current sample, the academic skepticism scale had a high Chronbach's alpha level ($\alpha = .87$).

D. Data Analysis Procedures

Preliminary Analyses

There were four participants who indicated graduate or professional student status on the online survey. Tests of mean differences on main variables between senior level students and graduate levels students were conducted. Graduate students were not significantly different than senior level students on perceived racial discrimination ($t(3) = 0.08, p = .93$), critical intersectional awareness ($t(3) = -0.86, p = .30$), or academic skepticism ($t(3) = 1.21, p = .23$). Thus, the four graduate level students were included in the senior level category.

Further, data used in main analyses were checked for missing values and evaluated for missing completely at random (MCAR). There was less than 20% missing data (range= 2% for total discrimination to 8% for age; See Table 1), less than the suggested cut-off required for

imputation of missing data (Garson, 2015). However, I conducted Little's MCAR test in Stata using the "mcartest" add-on module (Li, 2013) in order to make sure that missingness on each of the analytic model variables was not dependent on any other, reducing the potential for bias in model estimates. I conducted two Little's MCAR tests because two regression models, one for each outcome, would need to be conducted for the main analyses. In the first test, where academic skepticism was included along with age, critical intersectional awareness, and racial discrimination, Little's MCAR test was non-significant ($\chi^2(12) = 19.84, p = .07$); this indicates that data are missing completely at random. In the second test, where current GPA was included along with age, critical intersectional awareness, and racial discrimination, Little's MCAR test was non-significant ($\chi^2(6) = 12.73, p = .51$), indicating data are missing completely at random. Given that data were MCAR, this suggests imputation of missing data should not be used and that list-wise deletion of cases is appropriate and no other steps are warranted.

Lastly, correlations between analytic study variables were calculated (i.e., age, GPA, academic skepticism, and CIA). Pearson's r correlations were calculated for any two continuous variables; point-biserial correlation for any dichotomous by continuous variable analysis.

Descriptive Analyses

All descriptive analyses were conducted using STATA 14.0 (Stata Corp, College Station, Tex, 2017). Frequencies and proportions were calculated for categorical variables. Means, along with their standard deviations, were computed for continuous variables.

Main Analyses

Following the steps outlined by Hosmer and Lemeshow (2000), exploratory bivariate analysis was conducted to statistically determine candidate predictors that may have a significant association with each outcome variable. As such, unadjusted linear regressions were conducted,

with each covariate included as a predictor. Demographic variables with a p -value of .25 or below were retained and used as covariates in linear regression models. Results indicated that age ($p = .18$) was a candidate predictor for academic skepticism as the outcome when following Hosmer and Lemeshow's (2000) guidelines. No demographic variable predicted students' GPA.

Regression analyses were conducted using the *Mplus* 7.4 (Muthén & Muthén, 1998-2015) software program for Windows. Missing data on outcome variables (i.e., academic skepticism and current GPA) was accounted for using the full-information maximum likelihood (FIML) approach, which uses all data available for estimating parameters. Further the maximum likelihood estimation with robust standard errors (MLR) procedure was used because it is robust to any model assumption violations such as heteroskedasticity and non-normality of outcome variables (Asparouhov & Muthén, 2006). Missingness under the FIML procedure has been shown to result in unbiased estimates and standard errors (Asparouhov & Muthén, 2006).

Two linear regression models were conducted for GPA as the outcome, whereas three models were conducted for academic skepticism. In Model 1, only age was entered as a predictor of academic skepticism. To test the hypotheses associated with Aims 1a and 1b, Model 2 added the main effects of racial discrimination and critical intersectional awareness, adjusting for age. To test the hypothesis in Aim 2, the final model (Model 3) included the interaction term for racial discrimination x critical intersectional awareness, the two main effects of racial discrimination and of critical intersectional awareness, as well as age. Continuous variables included in the interaction term were mean centered to reduce issues with multicollinearity, (Aiken & West, 1991). Given that age was not significantly associated with GPA when preliminary analyses for model building were evaluated, only two regression models were conducted for this outcome. Model 1 included racial discrimination and critical intersectional

awareness as main effects. Model 2 included the two main effects as well as the interaction term for racial discrimination x critical intersectional awareness. The Wald χ^2 test of parameter constraints are presented instead of the F -test statistics for model fit. A statistically significant Wald test indicates that we can reject the null hypothesis that the coefficients for our outcome variable across the different parameters are simultaneously equal to 0; in other words, the coefficients for each association between a predictor variable and our outcome variable in the model are statistically different (Afifi, Clark, & May, 2004). Further, I plotted the coefficients from any significant interaction present in the final models. Significant interactions were graphed at three values: 1 standard deviation below the mean, at the mean, and 1 standard deviation above the mean, following Aiken and West's (1991) recommendations.

VI. RESULTS

A. Descriptive Statistics

Table 1 presents the distribution of socio-demographic characteristics for the total sample. Overall, there were 115 (65%) female and 62 (35%) male participants. The composition of students' current class standing included roughly equal numbers in their first or second year ($n = 84$; 48%) and third or fourth year of college ($n = 92$; 52%).

Participants in the sample reported frequency of racial discrimination within upper low to moderate levels ($M = 51.47$; $SD = 24.41$; range = 7-144). Regarding critical intersectional awareness, students reported mean levels that were in the moderate to high levels ($M = 49.16$; $SD = 8.88$; range = 23-63). Further, on average, participants reported upper low levels of academic skepticism ($M = 2.34$; $SD = .95$; range = 1-5) and self-reported current GPAs in the moderate to high level ($M = 3.20$; $SD = .53$; range = 1.66-4).

Table 1

Descriptive Statistics of Sociodemographic Characteristics

Participant's Characteristic	N (%)
Age	
18-21	126 (62.1)
22-34	50 (24.6)
Missing	27 (13.3)
Gender	
Female	115 (56.7)
Male	62 (30.5)
Other	0 (0.0)
Missing	26 (12.8)
Latino Ethnicity	
Mexican Origin	137 (67.5)
Other Latino Group ^a	39 (19.2)
Missing	27 (13.3)
Class Year	
Entry Level ^b	84 (41.4)
Senior Level ^c	92 (45.3)
Missing	27 (13.3)
Work Status	
Employed	112 (55.2)
Not Employed	64 (31.5)
Missing	27 (13.3)
Nativity Status	
U.S.-born	141 (69.5)
Immigrant	35 (17.2)
Missing	27 (13.3)
Participant's Household Characteristics	
Income	
< \$25,000	50 (24.6)
\$25,001 - \$50,000	64 (31.5)
\$50,001 - >\$100,000	62 (30.5)
Missing	27 (13.3)

Note. N=203.

^aOther Latino Group= Dominican, Central American, Cuban, Puerto Rican, South American, More than one heritage, or Other.

^bEntry Level= Freshman and Sophomore.

^cSenior Level= Junior, Senior, and Other.

Bivariate correlations between key study variables, including independent and moderator variables (i.e., racial discrimination, critical intersectional awareness), outcome variables (GPA, academic skepticism), and covariate (i.e., age) are presented in Table 2.

Table 2

Correlations between Latina/o Students' Covariate, Predictor, and Outcome Variables

Variables	1	2	3	4	5
1. Age ^a	—				
2. Racial Discrimination	.00	—			
3. Critical Intersectional Awareness	.00	.01	—		
4. Academic Skepticism	.12	.21**	-.21**	—	
5. Overall Grade Point Average	.11	.11	.11	-.24**	—

Note. ^aAge: 0= 18-21 years (reference), 1= 22-34 years.

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

B. Main Analyses

Academic Skepticism. Table 3 shows results for regression models predicting academic skepticism. In Model 1, age did not significantly predict any variance in academic skepticism ($R^2 = 0.02$, $S.E = 0.02$, $p = .37$) and the model was not significant ($\chi^2 (1) = 3.29$, $p = .07$). Model 2 included age, along with racial discrimination and critical intersectional awareness as main effects; this model was statistically significant ($\chi^2 (3) = 15.65$, $p < .001$). After adjusting for age, racial discrimination was associated with higher academic skepticism ($b = .01$, $\beta = 0.12$, $p < .05$), whereas critical intersectional awareness was associated with less academic skepticism ($b = -.02$, $\beta = -.021$, $p < .05$). Model 3 added the interaction term between racial discrimination by critical intersectional awareness to test for the moderating effect of critical intersectional awareness on the association between racial discrimination and academic skepticism. This model was statistically significant ($\chi^2 (4) = 43.01$, $p < .001$). After adjusting for age, racial discrimination was associated with higher levels of academic skepticism ($b = .01$, $\beta = 0.14$, $p < .05$), whereas critical intersectional awareness was associated with less skepticism ($b = -.02$, $\beta = -.19$, $p < .05$). Results indicated that the interaction was significant ($b = -.00$, $\beta = -.21$, $p < .01$).

Table 3

Multiple Linear Regression Model Predicting Academic Skepticism

	Model 1 (N= 176)			Model 2 (N= 172)			Model 3 (N=172)		
	<i>b</i>	SE	β	<i>b</i>	SE	β	<i>b</i>	SE	β
Age	0.05	0.03	0.12	0.06 [*]	0.03	0.13 [*]	0.04	0.03	0.10
Main Effects									
RD ^a				0.01 [*]	0.00	0.16 [*]	0.01 [*]	0.00	0.14
CIA ^b				-0.02 ^{**}	0.01	-0.21 ^{**}	-0.02 [*]	0.01	-0.19 [*]
2-way Interactions									
RD x CIA							-0.00 ^{**}	0.00	-0.21 ^{**}
R ²		2%			9%			12% ^{**}	
<i>Wald Test</i>		(1) = 3.29			(3) = 15.65 ^{***}			(4) = 43.01 ^{***}	

Note. ^aRD= Racial Discrimination. ^bCIA= Critical Intersectional Awareness.

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

To interpret the significant interaction, the slope of change for the predicted value of academic skepticism was plotted at +1 standard deviation (i.e. high), at the mean (i.e. average), and at -1 standard deviation (i.e., low) critical intersectional awareness and racial discrimination (see Figure 3). The graph indicates that at low levels of racial discrimination participants with high CIA report the highest level of academic skepticism (Mean= 2.7). At the same level of racial discrimination, people with average CIA indicated less academic skepticism (Mean= 2.1) than people with high CIA, but more than people with low CIA. Indeed, when individuals with low CIA report low frequencies of racial discrimination, their skepticism towards their academic achievement is low (Mean= 1.4). Inversely, among the individuals who reported high rates of racial discrimination, those with low CIA indicated the most academic skepticism (Mean= 1.5), while people with the highest CIA indicated the least academic skepticism (Mean= 0.7). Those with average CIA indicated average academic skepticism (Mean= 1.1) at low rates of racial discrimination.

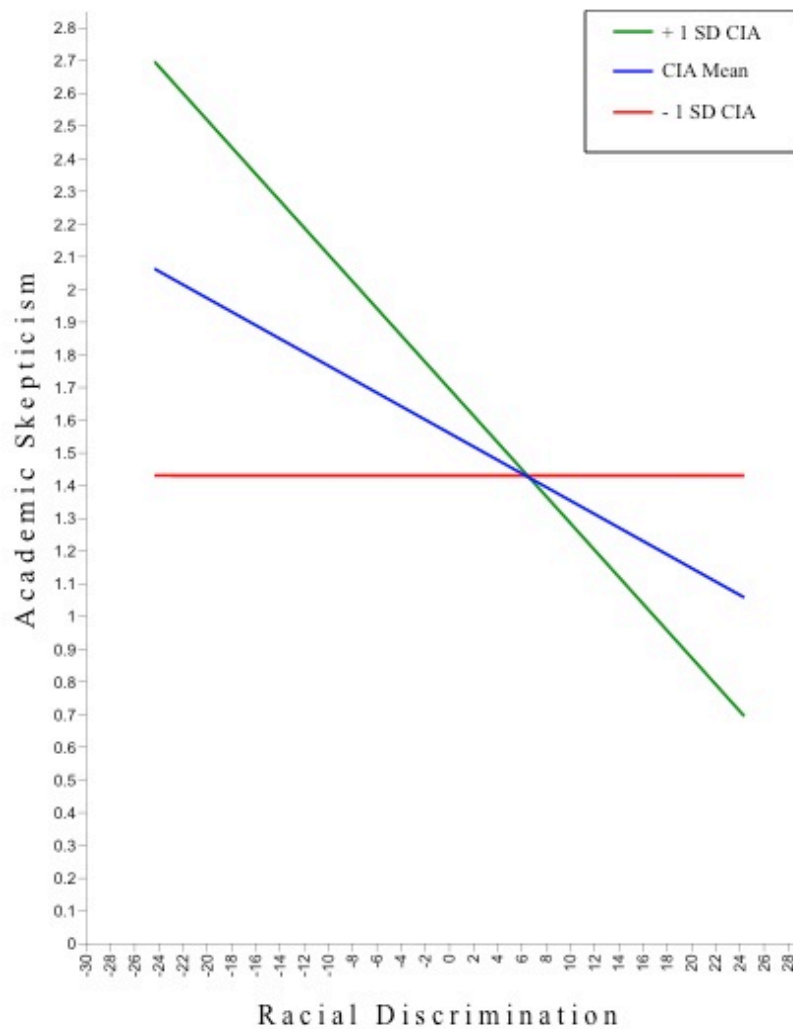


Figure 3. Academic skepticism as a function of racial discrimination and critical intersectional awareness. Centered racial discrimination is plotted at ± 1 SD (24.41) and at the mean (0).

Current GPA. Table 4 shows results for regression models predicting current GPA. In Model 1, racial discrimination and critical intersectional awareness as the main effects did not significantly predict any variance on GPA ($R^2 = 0.02$, $S.E = 0.02$, $p = .38$) and the model was non-significant ($\chi^2 (2) = 3.02$, $p = .22$). Model 2 added the interaction term between racial discrimination by critical intersectional awareness to test for the moderating effect of critical intersectional awareness on the association between racial discrimination and students' GPA. This model was not statistically significant ($\chi^2 (3) = 3.81$, $p = .28$) and the interaction did not significantly predict any variance on GPA ($R^2 = 0.02$, $S.E = 0.02$, $p = .33$).

Table 4

Multiple Linear Regression Model Predicting Current GPA

	Model 1 (N=142)			Model 2 (N= 142)		
	<i>b</i>	SE	β	<i>b</i>	SE	β
RD ^a	0.00	0.00	0.11	0.00	0.00	0.10
CIA ^b	0.01	0.01	0.08	0.01	0.01	0.08
RD x CIA				0.00	0.00	0.04
R^2		2%			2%	
<i>Wald Test</i>		(2) = 3.02			(3) = 3.18	

Note. ^aRD= Racial Discrimination.

^bCIA= Critical Intersectional Awareness.

VII. DISCUSSION

The present study extends research on the role of critical consciousness in the academic lives of students of color by understanding how critical intersectional awareness interacts with perceived racial discrimination.

There was partial support for hypotheses tied to the first aims of this study. Racial discrimination was associated with heightened academic skepticism, but was not related to GPA. The findings for academic skepticism are consistent with prior research that indicate racial discrimination is negatively associated with subjective academic outcomes (i.e., economic value of education, academic motivation) (Colon & Sanchez, 2010; Reynolds et al., 2010). When students are asked how education will affect their personal lives, in terms of their future livelihood and financial well-being, current and prior experiences of perceived discrimination are damaging. The current finding is also in line with studies that provide qualitative examples of the pervasive nature of racism experienced by students of color on college campuses (Yosso et al., 2009; Rivas-Drake & Mooney, 2008) and how it may impact the way they perceive themselves and beliefs about their future (Reynolds et al., 2010; Brown et al., 2017). It is plausible that chronic exposure to negative racial encounters are appraised as being one's fault, which may be internalized—manifesting for example, as self-devaluation, hopelessness, and powerlessness—which may increase doubt and result in heightened academic skepticism among Latina/o students.

Racial discrimination did not predict current GPA among this group of Latina/o college students. One reason for the null finding may be explained by potential gender differences. For example, Cogburn (2011) found that racial discrimination was associated with GPA and perceived school importance only among African American boys, and not among African American girls. Alfaro and colleagues (2009) found a significant negative association between

racial discrimination and GPA and academic motivation among Latino boys and not among Latina girl. The negative effect of racial discrimination on participants' GPA may have been obscured in the present study given Latinas comprised 75% of the study's sample. Previous research on gendered academic disparities suggest that young girls perceive more social support (i.e. family, peers, teachers) compared to boys which may influence their positive academic outcomes (Cammarota, 2004).

Further, previous studies with college aged samples find evidence for indirect relationships between perceived discrimination and academic outcomes (Nora, 1996; Witkow, 2015). Witkow (2015) suggest discrimination might be more strongly associated with actual performance during adolescence, partly because grades may be perceived as playing a more important role on being able to further one's education from high school to college. At the college level, racial discrimination may not impact one's ability to do well academically, because working harder may be a strategy used to prove others wrong (McGee & Stovall, 2015), even if they believe that their efforts may not matter or pay off in the future. To the extent that students' perceptions about education are tied to academic performance (Colon & Sanchez, 2010), the present findings for the association between racial discrimination on GPA suggest that rather than experiences having a direct impact on one's actual performance, they may instead be indirectly related via students' *beliefs* about their academics or psychological factors not measured in this study such as self-esteem and internalized racism.

Second, partial support was found for the hypothesis that critical intersectional awareness would moderate the association between racial discrimination and academic outcomes; this moderation effect was only found for academic skepticism and not for GPA. CIA is a protective factor in this case. Our findings support our aim to apply a risk and resilience model that

examines independent and synergistic effects of racial discrimination and protective factors that measures one's resistance to racism via an intersectional and critical lens in predicting academic outcomes among Latina/o students. Importantly, the protective effects of critical intersectional awareness supports the LatCrit framework that endorsing a critical awareness of social injustice and systemic oppression at the intersection of multiple social structures and identities may empower individuals to capitalize on strategies—at the collective level—that help them to resist against rather than internalize oppressive structures and social marginalization (Sanders, 1996; Yosso, 2000). Further, results are also consistent with previous empirical research that finds heightened critical consciousness is protective against the injury of racial discrimination in the context of academic outcomes (Camarota, 2014; McWhirter & McWhirter, 2016).

In terms of the interaction between perceived discrimination and academic skepticism, we found that at low levels of racial discrimination, those with low critical intersectional awareness indicated low academic skepticism, while those with the highest critical intersectional awareness indicated the highest academic skepticism. It is plausible that individuals whom are not aware or critical of social injustices may not be vigilant about discrimination and may not have a reason to question whether their current academic performance matters for their future. If an individual rarely encounters discrimination, it may not be threatening to the self and they may not internalize it to the extent that someone who experiences it chronically may need to develop forms of coping with it more often. This finding suggests that one would have to have a greater understanding of critical intersectional awareness to reap the benefits of it.

Students with high levels of critical intersectional awareness reported high academic skepticism even though they reported low frequency of racial discrimination. Previous research on stereotype threat and stigma consciousness may lend evidence why these highly aware

individuals are reporting poor academic outcomes. For example, Rivas-Drake and Mooney (2008) found that Latina/o college students with high levels of critical consciousness perceived the greatest level of future occupational discrimination when compared to those with low levels of critical consciousness. Reynolds and colleagues (2010) found that racism-related stress due to knowledge of institutional racism, not actual or perceived discrimination, was associated with lower levels of extrinsic motivation and higher levels of academic amotivation among African American and Latina/o college students. These studies suggest that awareness of threatening and demeaning experiences, beyond the experience of them, may be a better predictor of student's beliefs about their education.

However, when we examine the results at high perceived levels of racial discrimination, we find high critical intersectional awareness to be protective of poor academic outcomes of academic skepticism. Maybe for students who perceive more frequent racial discrimination, they have developed the correct coping mechanisms that ensures their positive outlook on their educational value.

It is important to also point out the tool used to assess critical intersectional awareness and what the levels of the process mean are abstract. Maybe some individuals agree and engage in critical reflection of social structures but are less committed to engaging in non-traditional collective action. Kim (2013) argues that critical consciousness without action may be futile and may work against individuals because one may become hopeless if they are passive about the social inequalities they perceive. Future studies should aim to parse critical intersectional awareness measurement tools (and other tools that examine critical consciousness) to better understand the process and mechanisms of this construct.

Last, considering LatCrit theory, it is possible that the current political climate including an explicit xenophobic, anti-immigrant and anti-Latina/o agenda (Kingsolver, 2017) may help explain why even students who have not experienced frequent direct racial discrimination may feel threatened and even powerless about their future.

A. Limitations and Future Directions

There are a number of limitations to consider when interpreting these results. First, although this study is one of the few studies that have examined prevalence of racial discrimination among Latina/o students attending an HSI, the measurement itself assessed for general daily racist hassles and not discriminatory experiences while on campus. Unlike other studies that have examined campus climate (Maestras, et al., 2007), we cannot ascertain whether experiences of racial discrimination reported by participants occurred on or off campus, among a sample of Latina/o students in a commuter university from which we sampled students. Still, it is reasonable to believe some of the experiences being reported on by participants capture those that may occur in an academic setting (e.g., ideas or opinions being minimized, ignored, or devalued; being left out of a conversation or activities). Future studies should examine both on and off-campus discrimination in relation to students' academic outcomes. These studies may help us better understand what role institutions and communities can partake in by working together to achieve educational equity.

Another limitation related to our measurements on the frequency of perceived discriminatory experiences is the lack of insight about *how stressful* experiences of racial discrimination may have been. Individuals may experience discrimination only on rare occasions but those times may be more impactful for someone who experiences more frequent and trivial discrimination. Future research should consider how experiences of racial discrimination are

appraised to impact the strategies students engage in or not, all of which may impact their academics.

The tool we used to measure experiences of discrimination only focused on racial discrimination rather than on multiple forms of discrimination that individuals may experience (i.e., gender, class, ability). Considering we are focusing on critical intersectional awareness as a protective factor, it would have been important to survey for multiple forms of discrimination. Research reveals that students face multiple forms of discrimination (Yosso et al., 2009), and that race and gender-based discrimination have distinct effects on outcomes (Cogburn et al., 2011). However, there is evidence that shows that although Latinos may report various forms of discrimination, most Latina/o adults report racial/ethnic-based discrimination (Molina, 2012).

The nature of our cross-sectional design limits the directionality between our variables. For example, our data could suggest that students with high academic skepticism are more likely to perceive racial discrimination when they have low critical intersectional awareness. Timing in terms of historical and sociopolitical context may have impacted these reports. For example, during the time of data collection, there was a heightened anti-Latina/o political agenda by a presidential nominee (Kingsolver, 2017). This could have impacted prevalence rates of racial discrimination. Future studies should consider longitudinal or experimental research designs to examine whether subjective and psychological academic outcomes such as academic skepticism precede racial discrimination or if they have bidirectional associations. While the temporality of the observed relationships is not feasible with cross-sectional data, evidence from previous longitudinal studies support the current findings (Alfaro et al., 2009).

Due to the small sample size and a large majority of participants self-identifying as female, it was not possible to examine gender differences in the current study. Given that racial

discrimination and critical consciousness may hold distinctive meaning across genders, future research should examine, from qualitative and quantitative approaches and from intersectional approaches, how Latina/os of different genders experience and resist against oppression. Such studies might provide a more nuanced understanding of gendered academic disparities among Latina/o college students. Furthermore, we could not compare whether Latino students at PWIs are also reporting the same levels of racial discrimination, CIA, and academic skepticism than at the current HSI. Research shows that students of color at PWIs, especially elite ones (Small & Winship, 2007), are more likely to graduate on time and have higher academic performance than students of color at public institutions such as HSIs. However, perhaps their academic successes come at the cost of their mental health (McGee & Stovall, 2015). It will be important to consider comparative studies of Latinos at different institutions.

Another limitation to note is the potential for sample selection bias. Participants who completed the study were required to be enrolled in college. It may be that the current sample of Latina/o college students differed from students who did not take the online survey because they did not enroll in college or had dropped out of college. Thus, sample selection bias may have affected the results of the study. For example, it might be that currently enrolled college students are less academically skeptic and have more optimal academic grades than Latina/o students not included in the sample. Future studies should consider assessing measured constructs in the study using community-based samples of young emerging adult Latina/os to better understand the relations among racial discrimination, critical intersectional awareness, and academic-related outcomes among those who are in college and those who did not attend or dropped out of college.

CRT researchers evaluate qualitative and mixed methods studies as an asset, which may provide a unique methodological avenue for research, focused on perceptions of racial discrimination and how critical intersectional consciousness may be used among people of color to resist oppression.

B. Study Implications

The academic disparities among Latina/os and white undergraduate students has widened, with white students receiving five times the number of degrees compared to Latina/os (NCES, 2016). Based on this study's findings, a viable solution to reducing academic inequities includes developing or supporting existing campus-based programs that empower students of color to examine the insidious ways in which racial discrimination may seep into their academic lives and help them combat them through components of critical consciousness (i.e., critical reflection, political efficacy, critical action) rather than through internalized racism. Some students of color may come to see internalized racism as a self-protective strategy; thus, our work rests on "understanding the underlying elements that facilitate this [and] finding effective solutions that recognize capacities within individuals and communities that empower them to challenge and resist rather than accept negative dominant ideologies and beliefs about one's group and move to collective action" (Molina & Drexler, 2016, p. 454).

Further, findings suggest the need for considering multiple and interlocking social locations that individuals occupy that may hold different meaning and salience across different contexts. A more nuanced approach to how people of color understand inequality and resist it requires moving beyond seeing individuals as holding singular identities in ways that combine to impact them in complex ways. Thus, programs centered on empowering Latina/os and other students of color should consider within-group differences in how discrimination may be

experienced and any program activities and goals regarding consciousness raising should aim to frame them within a LatCrit and intersectionality lens (Solórzano & Yosso, 2001; McCall, 2005), as these perspective draws from intersectionality to locate race and ethnicity at the intersection of other social identities and to work in solidarity with others across different social locations.

Last, findings revealed that Latina/os students at an HSI were facing at least moderate levels of racial discrimination. Whether racial discrimination was experienced in or outside of the walls in which they learn, the onus to solve or resist oppression should not fall exclusively on those already disproportionately burdened by it. Thus, another implication could be that universities—faculty, staff, and administrators—take the lead in creating and supporting spaces in and opportunities by which liberatory results can take place. Universities are at the forefront of addressing and instituting the strategies that undo oppressive structures maintaining academic disparities among its students. As Latina/o students continue to enroll in colleges and universities at an exponential rate, it will be important for institutions—whether PWIs and HSIs—to take into account the racialized experiences of this critical segment of our population by evaluating policies that may directly or indirectly be disproportionately impacting this group of students (and other socially marginalized students). Pursuing social justice by ensuring the academic success of Latina/os students has never been more important.

VIII. CONCLUSION

In summary, this study is contributory to the ever-growing body of research seeking to understand the role of racial discrimination on the academic outcomes of students of color, and on factors that promote positive outcomes despite racism. Incorporating the role of critical intersectional awareness is an important baseline for future research that considers the role of critical consciousness. It should also serve as a stepping stone to understanding the role of racial oppression as being intricately linked to other forms of oppression in the lives of racialized groups such as Latina/o students.

This study contributes to a better understanding of how racial discrimination is associated with academic outcomes for Latina/os attending an HSI. Latina/os are the fastest growing segment of the U.S. population (Krogstad, 2016). Young Latina/os are increasingly enrolling in institutions of higher education; however, a closer look at the data shows they are graduating at a much lower rate than their non-Latino white counterparts (NCES, 2016). This study further supports previous studies that find racial discrimination to be a risk factor on students of color academic outcomes. This is important given the current political climate including an explicit xenophobic, anti-immigrant and anti-Latina/o agenda (Kingsolver, 2017), which suggests that Latina/os will continue to face racial discrimination in their everyday lives. Young adults and youth of color are at the forefront of current sociopolitical collective movements (e.g., Black Lives Matter, DACA), which shows an increased critical awareness of social issues. Future research should continue to examine how students of color use critical intersectional awareness as a source of *resistance*—a defense—that can help them develop resilience in the face of discrimination to positively impact their lives.

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APPENDICES

APPENDIX A

Institutional Review Board Approval

UNIVERSITY OF ILLINOIS AT CHICAGO

Office for the Protection of Research Subjects (OPRS)
Office of the Vice Chancellor for Research (MC 672)
203 Administrative Office Building
1737 West Polk Street
Chicago, Illinois 60612-7227

Approval Notice Continuing Review

July 21, 2017

Kristine Molina, PhD
Psychology
1007 W. Harrison Street
Room 1050 A
Chicago, IL 60607
Phone: (312) 996-5258

**RE: Protocol # 2015-0787
“Stress, Coping, and Health among Latinos”**

Dear Dr. Molina:

Your Continuing Review was reviewed and approved by the Expedited review process on July 18, 2017. You may now continue your research.

Please note the following information about your approved research protocol:

<u>Protocol Approval Period:</u>	August 5, 2017 - August 5, 2018
<u>Approved Subject Enrollment #:</u>	500 (204 subjects enrolled)
<u>Additional Determinations for Research Involving Minors:</u> These determinations have not been made for this study since it has not been approved for enrollment of minors.	
<u>Performance Sites:</u>	UIC
<u>Sponsor:</u>	None

Research Protocol(s):

- a) Stress, coping, and health, Protocol; Version 5; 12/19/2016

Recruitment Material(s):

- a) If student meets criteria: Response Email; Version 1, 07/22/2015

- b) If student does not meet criteria; Version 1, 07/22/2015
- c) Amazon Gift Card; Version 1, 07/22/2015
- d) Recruitment Email; Version 2; 12/19/2016
- e) Stress, coping, and health, Classroom Announcement; Version 1; 12/19/2016
- f) Stress, coping, and health among Latinos, flyer; Version 1; 12/19/2016

Informed Consent(s):

- a) Debriefing Statement; Version 1, 07/22/2015
- b) Consent Form; Version 4; 12/19/2016
- c) A waiver of consent has been granted under 45 CFR 46.116(d) for parents and relatives as secondary subjects; minimal risk
- d) A waiver of documentation of informed consent has been granted under 45 CFR 46.117 for this on-line survey (minimal risk; information sheet containing all the required elements of consent will be provided)
- e) A waiver of documentation and an alteration of consent have been granted under 45 CFR 46.117 for screening of subjects in the recruitment process; minimal risk.

Your research meets the criteria for expedited review as defined in 45 CFR 46.110(b)(1) under the following specific category:

(7) Research on individual or group characteristics or behavior (including but not limited to research on perception, cognition, motivation, identity, language, communication, cultural beliefs or practices and social behavior) or research employing survey, interview, oral history, focus group, program evaluation, human factors evaluation, or quality assurance methodologies.

Please note the Review History of this submission:

Receipt Date	Submission Type	Review Process	Review Date	Review Action
07/07/2017	Continuing Review	Expedited	07/18/2017	Approved

Please remember to:

→ Use your **research protocol number** (2015-0787) on any documents or correspondence with the IRB concerning your research protocol.

→ Review and comply with all requirements on the enclosure,

"UIC Investigator Responsibilities, Protection of Human Research Subjects"
[\(<http://tiger.uic.edu/depts/ovcr/research/protocolreview/irb/policies/0924.pdf>\)](http://tiger.uic.edu/depts/ovcr/research/protocolreview/irb/policies/0924.pdf)

Please note that the UIC IRB has the prerogative and authority to ask further questions, seek additional information, require further modifications, or monitor the conduct of your research and the consent process.

Please be aware that if the scope of work in the grant/project changes, the protocol must be

amended and approved by the UIC IRB before the initiation of the change.

We wish you the best as you conduct your research. If you have any questions or need further help, please contact OPRS at (312) 996-1711 or me at (312) 996-0548. Please send any correspondence about this protocol to OPRS at 203 AOB, M/C 672.

Sincerely,
Brandi L. Drumgole, B.S.
IRB Coordinator, IRB # 2
Office for the Protection of Research Subjects

Enclosure(s):

1. Informed Consent Document(s):

- a) Debriefing Statement; Version 1, 07/22/2015
- b) Consent Form; Version 4; 12/19/2016

2. Recruiting Material(s):

- a) If student meets criteria: Response Email; Version 1, 07/22/2015
- b) If student does not meet criteria; Version 1, 07/22/2015
- c) Amazon Gift Card; Version 1, 07/22/2015
- d) Recruitment Email; Version 2; 12/19/2016
- e) Stress, coping, and health, Classroom Announcement; Version 1; 12/19/2016
- f) Stress, coping, and health among Latinos, flyer; Version 1; 12/19/2016

cc: Michael E. Ragozzino, Psychology, M/C 285

APPENDIX B

Informed Consent Form

University of Illinois at Chicago Research Information and Informed Consent for Participation in Social Behavioral Research

You are being asked to participate in a research study. Researchers are required to provide a consent form such as this one to tell you about the research, to explain that taking part is voluntary, to describe the risks and benefits of participation, and to help you make an informed decision. If you have any questions or concerns regarding the information on this consent form or about the study, please feel free to contact us at latinohealthlab@psch.uic.edu

Kristine Molina, PhD
Department of Psychology, University of Illinois at Chicago
1007 W. Harrison St, Room 1050A
Chicago, IL 60614
(312) 996-5258

Why am I being asked?

You are being asked to participate in a research study examining the social experiences and health-related behaviors of Latina/o college students. You have been asked to participate because you are an undergraduate student, self-identify as Latino/Hispanic and are 18 years or older. Your participation in this research is voluntary. Your decision whether or not to participate will not affect your current or future dealings with the University of Illinois at Chicago (UIC). **If you decide to participate, you are free to withdraw at any time without your decision affecting your relationship with UIC.**

Approximately 500 participants may be involved in this study at UIC.

What is the purpose of the research?

The researchers are conducting this study to learn more about the experiences of Latina/o college students with regard to a variety of social situations and health-related behaviors.

What procedures are involved?

If you agree to participate, you will be asked to complete an online survey concerning your social experiences and health-related behaviors. The survey will ask sensitive questions, including questions about emotional well-being, discrimination, and smoking/alcohol use. The survey will take approximately 60 minutes or less to complete. Once you have finished the survey, a code will appear on your screen. You will then be asked to email us that code in order to receive your Amazon gift card code.

What are the potential risks and discomforts?

The anticipated risks of this study are minimal. Although some participants may find being asked about their health and experiences of discrimination to be temporarily discomforting or distressing, we anticipate any negative effects in this case to be minimal and brief in most circumstances. In addition, the measures included in this study have been routinely used in past research studies within the psychology field. Although you will be asked to answer these questions, you do not have to do so and may discontinue participation at any time. If you are still feeling any discomfort or distress at the end of the study, you may contact Dr. Kristine Molina (Ph.D.) or use any of the resources listed below. In addition, we will make every effort to ensure your privacy (not letting others know you are participating in a research study) and your confidentiality (not allowing accidental disclosure of identifiable data) as a participant. We are required, however, to inform you that in research there is a chance that a breach of privacy and confidentiality may occur. Although we cannot make any guarantees, to date, our lab has not had any issues or breaches in privacy or confidentiality.

Are there benefits to taking part in the research?

There are no direct benefits expected from participating in this study. Taking part in this research study may not benefit you personally, but the findings of this study may help us understand the social experiences of Latino college students and their relationship to a wide range of health-related outcomes. In turn, this may help improve the social climate of universities and the personal well-being of Latino college students.

What other options are there?

You have the option to not participate in this study. If you decide not to participate, you will not be penalized in any way, and you will not be compensated. However, if you decide to participate and discontinue participation at any point of the study, you will still be compensated. If you experience distress or discomfort as a result of the questions in this survey and decide to withdraw from the study, please send an email to latinohealthlab@psch.uic.edu informing us of your decision to withdraw.

What about privacy and confidentiality?

The people who will know that you are a research participant are members of the research team. Otherwise, information about you will only be disclosed to others with your written permission, or if necessary to protect your rights or welfare or if required by law.

Study information that identifies you and the consent form signed by you will be looked at and/or copied for checking up on the research by: UIC's Office for the Protection of Research Subjects (OPRS) or State of Illinois Auditors. When the results of the research are published or discussed in conferences, no information will be included that would reveal your identity. Your electronic consent document will be collected before other study materials are administered. You will not be asked to write your name or UIN on the survey. The code you will receive at the end of the study will link your survey to your name and email address; however, we will only use

this code to keep record of who has been compensated. A master list with your code, name, and email address will be kept in a password-protected document separate from your responses. All the data including the master list will be kept in password-protected documents in password-protected computers in a locked lab. Once data collection and payments have been completed, this master list will be destroyed. Thus, after the master list is destroyed, there will be no way to link your name and/or email address to your survey. Only trained members of the research team will have access to any data collected from you during this study.

What are the costs for participating in this research?

There are no costs to you for participating in this research.

Will I be reimbursed for any of my expenses or paid for my participation in this research?

You will receive an electronic \$20 Amazon gift card for your participation in this research.

Can I withdraw or be removed from the study?

If you decide to participate, you are free to withdraw your consent and discontinue participation at any time without consequence of any kind. You may also refuse to answer any questions you do not want to answer and still remain in the study. Study investigators will not remove you from this study.

Who should I contact if I have questions?

If you have any questions about this study or your participation in it, or if you have any questions, concerns, or complaints about the study, please contact the principal investigator, Kristine Molina, Ph.D. Dr. Molina can be reached at 312-996-5258 or kmolina@uic.edu. We do not anticipate any significant distress or discomfort as a result of participating in this study, however, if you're feeling distressed you may contact the Office of Applied Psychological Services (312-996-2540), UIC's Counseling Center (312-996-3490), or the Anxiety and Stress Disorders Clinic on UIC's medical campus (312-355-3000). Also, you may contact any of these hotlines, which are available to the community at large, the 24-hour national hotline (1-800-273-TALK), an after-hours hotline for members of the UIC community (312-996-5535), and the UIC Hospital Emergency Room (312-996-7296).

What are my rights as a subject?

If you feel you have not been treated according to the descriptions in this form, or if you have any questions about your rights as a research subject, including questions, concerns, complaints, or to offer input, you may call OPRS at 312-996-1711 or 1-866-789-6215 (toll free) or email uicirb@uic.edu.

What if I am a UIC student?

You may choose not to participate or to stop your participation in this research at any time. This will not affect your class standing or grades at UIC. You will not be offered or receive any special consideration if you participate in this research.

Remember:

Your participation in this research is voluntary. Your decision whether or not to participate will not affect your current or future relations with the University. If you decide to participate, you are free to withdraw at any time without affecting that relationship.

Signature of Subject

I have read the above information. I have been given an opportunity to ask questions and my questions have been answered to my satisfaction. **Please check the following box if you agree to participate:**

☐ **I agree to participate in this study.**

APPENDIX C

Recruitment Email

Subject: Research Study on the Social Experiences and Health of Latinos

Hello,

We are researchers in the department of Psychology at University of Illinois at Chicago and we are conducting a research study to assess the social experiences, health, and health-related behaviors of current Latina/o undergraduate students at UIC.

Who is eligible to participate?

Any current UIC undergraduate student who self-identifies as Latino/a or Hispanic AND is 18 years of age or older.

What is involved?

The study consists of an online survey, which takes approximately 60 minutes or less to complete.

Compensation?

Participants will be compensated with a **\$20 Amazon gift card** upon completion of the survey.

If you are interested in participating, please email us at latinohealthlab@psych.uic.edu from your UIC email, stating that you meet the eligibility criteria.

You may also email us if you have any questions or concerns regarding the study.

Thank you,

Principal Investigator: Kristine Molina, PhD, Department of Psychology, UIC

APPENDIX D

Recruitment Flyer

ARE YOU A LATINA/O UNDERGRAD?

Participate in a research study for \$20

The UIC Latina/o Health Lab is conducting a study looking at the social experiences, health behaviors, and health of current UIC Latina/o undergraduate students.

Who is eligible to participate?

Any current UIC undergraduate student who is Latina/o or Hispanic AND is 18 years of age or older.

What is involved?

The study consists of an online survey, which takes approximately 60 minutes or less to complete.

Compensation?

Participants will be compensated with a \$20 Amazon gift card upon completion of the survey.

If you are interested in participating, please email us from **your UIC email** at latinohealthlab@psch.uic.edu stating that you meet the criteria for participation.

latinohealthlab@psch.uic.edu

Principal Investigator: Dr. Kristine Molina, Psychology, UIC IRB Protocol #2015-0787

Social Experiences Study
latinohealthlab@psch.uic.edu

Social Experiences Study
latinohealthlab@psch.uic.edu

Social Experiences Study
latinohealthlab@psch.uic.edu

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Social Experiences Study
latinohealthlab@psch.uic.edu

Social Experiences Study
latinohealthlab@psch.uic.edu

APPENDIX E

Classroom Announcement

Good morning/Good afternoon,

We are researchers in the department of Psychology at University of Illinois at Chicago and we are conducting a research study to assess the social experiences, health, and health-related behaviors of current Latin/o undergraduate students at UIC.

We are looking for current UIC undergraduate students who self-identify as Latino/a or Hispanic AND are 18 years of age or older. If you meet this criteria, then you are eligible for the study.

The study consists of an online survey, which takes 60 minutes or less to complete.

Participants will be compensated with a **\$20 Amazon gift card** upon completion of the survey.

If you are interested in participating, please email us at latinohealthlab@psych.uic.edu from your UIC email, stating that you meet the eligibility criteria.

You may also email us if you have any questions or concerns regarding the study.

Thank you,

(Flyer of the study will be distributed after announcement.)

APPENDIX F

Demographic Questionnaire

1. What is your gender?

Male

Female

Other (specify) _____

2. Which of the following best describes your Hispanic/Latino heritage? (Mark only one)

Dominican or Dominican descent

Central American or Central American descent (specify) _____

Cuban or Cuban descent

Mexican or Mexican descent

Puerto Rican or Puerto Rican descent

South American or South American descent (specify) _____

More than one heritage (specify) _____

Other (specify) _____

3. What is your current year in school?

Freshman

Sophomore

Junior

Senior

Other (specify) _____

4. Counting all the income of all the members of your household, was your household income for the year (include all money received from all sources)

Less than \$10,000

\$10,001-\$15,000

\$15,001-\$20,000

\$20,001-\$25,000

\$25,001-\$29,999

\$30,000-\$40,000

\$40,001-\$50,000

\$50,001-\$75,000

\$75,001-\$100,000

More than \$100,000

5. What is your current/overall GPA? _____

6. Did you immigrate to the US or were you born outside the US mainland?

Yes

No

Academic Skepticism

This refers to students' beliefs that doing well in school will not help them achieve success in the future. Circle the number that best describes you for each sentence.

	Not at All True 1	2	Somewhat True 3	4	Very True 5
1. Even if I do well in school, it will not help me have the kind of life I want when I grow up.	1	2	3	4	5
2. My chances of succeeding later in life don't depend on doing well in school.	1	2	3	4	5
3. Doing well in school doesn't improve my chances of having a good life when I grow up.	1	2	3	4	5
4. Getting good grades in school won't guarantee that I will get a good job when I grow up.	1	2	3	4	5
5. Even if I am successful in school, it won't help me fulfill my dreams.	1	2	3	4	5
6. Doing well in school won't help me have a satisfying career when I grow up.	1	2	3	4	5

Critical Intersectional Awareness (Revised)

Please read each statement below carefully and respond by circling your level of agreement using the rating scale provided.

1=Strongly Disagree (SD)
5=Slightly Agree

2=Disagree
6=Agree

3=Slightly Disagree
7=Strongly Agree (SA)

4=Neutral (N)

	SD			N			SA	
1. Context plays an important role in the construction of our identities	1	2	3	4	5	6	7	
2. Intersecting identities affect people's lives in complex ways	1	2	3	4	5	6	7	
3. People's social locations (i.e. socioeconomic status, neighborhoods) have a major impact on the experiences of their intersecting identities	1	2	3	4	5	6	7	
4. Social identities have different privileges associated with them	1	2	3	4	5	6	7	
5. Globalization (i.e. increased contact between cultures across the world) has shaped how I think of my various identities	1	2	3	4	5	6	7	
6. Learning about the privileges and disadvantages associated with my various identities will help me relate to the experiences of privileges and discrimination of those whose social identities differ from my own	1	2	3	4	5	6	7	
7. Knowing more about our intersecting identities will enable us to form coalitions with various social groups	1	2	3	4	5	6	7	
8. We should reach out to or form coalitions with socially discriminated groups to combat systemic discrimination	1	2	3	4	5	6	7	
9. My intersecting identities have helped me to relate to people from social locations that are different from mine	1	2	3	4	5	6	7	

Racial Discrimination

These questions ask you to think about the experiences that some people have as they go about their daily lives. For any experience that have been a problem for you at any point in your lifetime, decide how often you believe INTERGROUP DISCRIMINATION (i.e., being discriminated by someone from a DIFFERENT racial or ethnic group) has been involved in the difficulties you have had. Use the scale in the column to indicate and write the appropriate number on the first blank line.

How often because you're Latino/a?

0= never

1= less than once a year

2= a few times a year

3= about once a month

4= a few times a month

5= once a week or more

1. Being ignored, overlooked, or not given service (in a restaurant, store, etc.) by someone of a different race	_____
2. Being treated rudely or disrespectfully by someone of a different race	_____
3. Being accused of something or treated suspiciously by someone of a different race	_____
4. People of a different race reacting to you as if they were afraid or intimidated	_____
5. Being observed or followed while in public places by someone of a different race	_____
6. Being treated as if you were "stupid" (being "talked down to") by someone of a different race	_____
7. Your ideas or opinions being minimized, ignored, or devalued by someone of a different race	_____
8. Overhearing or being told offensive joke or comment by someone of a different race	_____
9. Being insulted, called a name, or harassed by someone of a different race	_____
10. Someone of a different race expecting your work to be inferior	_____
11. Not being taken seriously by someone of a different race	_____
12. Being left out of a conversation or activities by people of a different race	_____
13. Being treated in an "overly" friendly or superficial way by someone of a different race	_____
14. Being avoided by someone of a different race (others moving away from you physically)	_____
15. Being mistaken for someone who serves others (i.e.,	_____

janitor, bellboy, maid) by someone of a different race	
16. Being stared at by strangers of a different race	_____
17. Being laughed at, made fun of, or taunted by someone of a different race	_____
18. Being mistaken for someone else of your same race (who may not look like you at all) by someone of a different race	_____
19. Being considered fascinating or exotic by someone of a different race	_____
20. Being treated unfairly by people of a different race that you thought were your friends	_____
21. Someone of a different race has misunderstood your intentions and motives	_____
22. Being called racist names like “wetback”, “paisa”, or “beaner”, “indio” or other names (in an offensive manner) by someone of a different race	_____
23. Gotten into an argument or fight with someone of a different race about something racist that was done to you or done to somebody else	_____
24. Being made fun of, picked on, pushed, shoved, hit, or threatened with harm by someone of a different race	_____

VITA

Marbella Uriostegui

Curriculum Vitae

Department of Psychology (M/C 285), University of Illinois at Chicago
1007 W Harrison St., Chicago, IL 60607
E-Mail: murios3@uic.edu
Phone: (323) 674-6217

EDUCATION

- | | |
|----------------|--|
| 2018 - Present | University of Illinois at Chicago
Ph.D. Psychology
Program: Community & Prevention Research |
| 2015 – 2018 | University of Illinois at Chicago
M.A. Psychology
Program: Community & Prevention Research |
| 2010 – 2015 | California State University, Los Angeles
B.A. Psychology
B.A. Sociology
Option: Inequality and Diversity
Minor: Chicana/o Studies |

FELLOWSHIPS

- | | |
|------|---|
| 2017 | National Science Foundation , Pre-Doctoral Graduate Research Fellowship Program, Awardee |
| 2017 | Ford Foundation , Pre-Doctoral Research Fellowship Program, Honorary Mention |

AWARDS

- | | |
|------|--|
| 2017 | UIC Graduate Student Council Travel Award to present empirical work at the Society for Community Research and Action conference. |
| 2016 | UIC Graduate Student Council Travel Award to present empirical work at the American Psychological Association Division 45 conference. |
| 2016 | The Hispanic Association of Colleges and Universities (HACU) and Kia Motors America Award Recipient (\$4,000) |
| 2016 | The Hispanic Association of Colleges and Universities (HACU) and Southwest Airlines ¡Lánzate! Travel Award Program Recipient |
| 2016 | Travel Award to present empirical work at the Latina Researchers' Network biennial conference. |

2016	Travel Award to present empirical work at the Health Disparities, Education, Awareness, Research and Training Summer Consortium.
2015	Graduate Studies Travel Grant , Cal State Los Angeles
2014	Graduate Studies Travel Grant , Cal State Los Angeles
2014	Honorable Mention for the Sally Casanova Pre-Doctoral Scholarship
2014	Scholarship Recipient, Service Learning and Community Engagement Project (\$3,000) Scholarship presented by Cal State Los Angeles. Proposed an empirical project for community engagement and received monetary award to implement proposed project in community.
2013	Elected Member, Golden Key International Society Membership into the Society is by invitation only and applies to the top 15% of college and university students, based solely on their academic achievements.
2013	Dean's List , Cal State Los Angeles top 10% of student class.

PUBLICATIONS

Kouyoumdjian, C., **Uriostegui, M.**, & Guzman, B. (Manuscript under review). *“Talk dirty to me”: Examining the extent, context, and content of sexting among Latina/o emerging adults.*

Uriostegui, M., & Molina, K.M. (Manuscript in prep). Racial discrimination and critical intersectional awareness on Latina/os students' academic outcomes.

PROFESSIONAL PRESENTATIONS

Uriostegui, M., & Molina, K. (2018, November). The role of racial discrimination and critical intersectional awareness on Latina/o students' academic outcomes. Paper to be presented in a symposium session at the 2018 International Conference of Community Psychology, Santiago, Chile.

Uriostegui, M., & Molina, K. (2018, April). The role of racial discrimination, critical intersectional awareness, and gender on Latina/o students' academic outcome. Paper to be presented in a roundtable session at the 2018 American Education Research Association conference, New York, New York.

Uriostegui, M. (2018, March). Masters' thesis presentation: The role of racial discrimination and critical intersectional awareness on Latina/o students' academic outcome. Paper to be presented at the Current Topics in Community and Prevention Research Symposium, Psychology Department, University of Illinois at Chicago, Chicago, IL.

Uriostegui, M., & Molina, K. (2017, June). Racial discrimination and Latino students' academic outcomes: Do gender and critical intersectionality awareness matter? Paper presented at

“Critical Consciousness Across Groups” symposium at the Society for Community Research and Action Biennial conference, Ottawa, Ontario, Canada.

Uriostegui, M. (2017, April). Examining the extent, context, and content of sexting among Latino emerging adults. Paper presented at the Current Topics in Community and Prevention Research, Psychology Department, University of Illinois at Chicago, Chicago, IL.

Uriostegui, M., Rosas, C. E., Pichardo, C., & Molina, K. (2016, September). *Examining sources of discrimination and Latino students' academic outcomes*. Poster presented at the Biennial National Latina/o Psychological Association conference, Orlando, FL.

Uriostegui, M., Pichardo, C., & Molina, K. (2016, July). *Examining the role of discrimination and family cohesion on Latino students' academic expectations*. Poster presented at the Biennial Latina Researchers Network conference, San Antonio, T.X.

Uriostegui, M., Rosas, C. E., Pichardo, C., & Molina, K. (2016, July). *Latino students' academic outcomes: Does the source of discrimination matter?* Poster presented at the American Psychological Association, Division 45 Society for Psychological Study of Culture, Ethnicity and Race conference, Palo Alto, C.A.

Uriostegui, M., Rosas, C. E., Pichardo, C., & Molina, K. (2016, June). *Latina/o emerging adults' health: The role of school-based discrimination and depressive symptoms*. Poster presented at the Health Disparities, Education, Awareness, Research and Training Summer Consortium, Houston, T.X.

Rodriguez, M., **Uriostegui, M.**, & Leon, N. (2016, April). “*El pueblo unido no sera vencido*”: *Latinas/os and community cultural wealth*. Symposium presentation at the American Educational Research Association annual conference, Washington D.C.

Uriostegui, M., Kouyoumdian, C., & Guzman, B. (2015, November) *Sex alcohol expectancies among Latino adolescents*. Poster presented at the Society for the Scientific Study of Sexuality conference, Albuquerque, N.M.

Uriostegui, M. (2015, October). Past and future research on Latinos and cultural wealth. Paper presented at the Community & Prevention Research Area Brown Bag, Psychology Department, University of Illinois at Chicago, Chicago, IL.

Uriostegui, M., Kouyoumdian, C., & Guzman, B. (2015, June). *Enriching undergraduate experiences through participant action research and community engagement*. Roundtable. Paper presented at the Society for Community Research and Action Biennial conference, Lowell, MA.

Uriostegui, M. (2015, June). Is it dangerous, or just sexy-fun: Emerging adults' *sexting* behaviors and reasons. In Re-thinking, sexual behaviors among youth and emerging

adults. Symposium presented at the Society for Community Research and Action Biennial conference, Lowell, MA.

Kouyoumdjian, C., Guzman, B., & **Uriostegui, M.** (2015, April). *Go East LA Initiative: A pathway for career and success*. Panel presentation at the Continuums of Service conference, Long Beach, CA.

Uriostegui, M., Kouyoumdjian, C., & Guzman, B. (2015, March). *The value of extracurricular activities among Latino youth: Examining factors that reflect education, culture, and risk behavior*. Roundtable. Paper presented at the American Educational Research Association, Chicago, IL.

Uriostegui, M., Kouyoumdjian, C., & Guzman, B. (2014, August). *Keep the lights off: Examining body comfort during sexual activity*. Poster presented at the American Psychological Association, Washington D.C.

Uriostegui, M., Kouyoumdjian, C., & Guzman, B. (2014, May). *Sexting and the lack of sexual exploration among predominantly Latina college students*. Poster presented at the Our Millennial Era: Life in the Digital Age student conference, California State University, Los Angeles.

Uriostegui, M., Leon, N., Kouyoumdjian, C., & Guzman, B. (2014, March). *A real lady does not do that: The relationship among gender norms and sexual practices/behaviors*. Paper presented at the Center of Gender and Sexuality Studies annual student conference, California State University, Los Angeles.

RESEARCH EXPERIENCE

2015 – Present

Research on the Equity and Advancement of Latina/os (REAL Lab)

Advisor: Dr. Kristine Molina

Email: kmolina@uic.edu

Graduate Research Assistant

Assist on research focused on the intergenerational effects of discrimination among Latino youths' health and academic outcomes.

2014 – 2015

Go East Los Angeles Initiative

Advisor: Dr. Bianca Guzman

Email: bguzman@exchange.calstatela.edu

Research Assistant

Research on Latina/o parent-child communication, Latino youth mental health and academic outcomes. Data collection included survey, semi-structured interviews, and focus group conversations. Completed an Internal Review Board research application.

Summer 2013 – June 2015 **Choices CAMP School Project**

Advisors: Dr. Claudia Kouyoumdjian

Email: ckouyou@exchange.calstatela.edu

Lead Research Assistant

Research on mental health, sexual activity, substance use and academic outcomes among Latina/o adolescents and emerging adults. Tasks included data collection and analysis (Statistical analysis of quantitative data; Content analysis of qualitative data.)

TEACHING EXPERIENCE

Spring 2018	Teaching Associate- Psychology of Women and Gender (Department of Psychology, University of Illinois at Chicago)
Fall 2016 – Spring 2017	Teaching Associate- Community and Prevention Research (Department of Psychology, University of Illinois at Chicago)
Fall 2015 – Spring 2016	Teaching Associate- Introduction to Psychology (Department of Psychology, University of Illinois at Chicago)

COMMUNITY ENGAGEMENT

Fall 2017	Enlace Chicago, Community and Economic Development , Researcher Enlace trains and employs community leaders as Community Health Workers (CHW). CHW work and volunteer in the areas of wellness education and mental health promotion.
Fall 2017	S.M.I.L.E. for Change NFP , Advisory Board Member Mentorship program that works to empower youth by helping them develop essential life skills so they can make integrity based decisions in order to overcome formidable challenges and live life with purpose
Fall 2014 – Summer 2015	Go East LA Initiative , Program Coordinator Cradle to career collaborative program between Los Angeles Unified School District, Cal State Los Angeles, and East Los Angeles Community College to promote a college-going atmosphere among East Los Angeles schools and families.
Spring 2014	Workshops at Belvedere Middle School Drug Awareness workshops aimed at promoting healthy behaviors among Latina/o adolescents.
Fall 2014	Workshops City Terrace Youth Activity League Center Sexual Education workshops aimed at promoting healthy choices among Latina/o adolescents.

PROFESSIONAL AFFILIATION/ MEMBERSHIPS

American Psychological Association (APA)

APA, Division 27 Society for Community Research and Action

APA, Division 35 Society for the Psychology of Women, Section III: Concerns of Hispanic Women/Latinas

APA, Division 45 Psychological Study of Culture, Ethnicity, & Race

American Educational Research Association

National Latina/o Psychological Association