

**Racial and Gender Identity Beliefs Among Black College Women Attending PWIs:
Examining Developmental Trajectories and Associations with Interpersonal
Discrimination and College Adjustment**

by

Seanna C. Leath

A dissertation submitted in partial fulfillment
of the requirements for the degree of
Doctor of Philosophy
(Education and Psychology)
at the University of Michigan
2019

Doctoral Committee:

Professor Tabbye M. Chavous, Chair
Professor Eric Hurley
Professor Stephanie Rowley
Professor Robert M. Sellers
Professor Monique Ward

Seanna C. Leath

scadel@umich.edu

ORCID iD: 0000-0002-2223-7389

© Seanna C. Leath 2019

Dedication

To my children:

Cayde – your free spirit inspires me

Daniel – your joy keeps me smiling, and

Jayse – you remind me to slow down and enjoy every moment

You three have defined my graduate school journey and kept me grounded

My love for you all makes me work smarter and dream bigger – thank you

Table of Contents

Dedication	ii
List of Tables	viii
List of Figures	x
List of Appendices	xi
Abstract	xii
Chapter One: An Introduction to the History of Black Women in Predominantly White Institutions in the United States of America	
Dissertation Goals.....	5
Dissertation Organization.....	9
Chapter Two: A Literature Review on Discrimination, Identity Development, and College Adjustment Outcomes among Black Women in College	
The Failed Promises of Higher Education.....	14
A Psychological Focus on Identity-Based Discrimination.....	14
<i>Interpersonal Discrimination and College Adjustment: Grounding Black Women’s Experiences</i>	17
<i>Discrimination & Academic Adjustment among Black Women</i>	19
<i>Discrimination & Psychological Adjustment among Black Women</i>	21
Theoretical Approaches to the Study of Identity Development.....	23
<i>Framing Racial Identity Research with African Americans in the U.S</i>	26
<i>Framing Gender Identity Research with Women in the U.S</i>	31

<i>Measuring Racial & Gender Identity Development with Black Women: A Snapshot of Multidimensional and Intersectional Research</i>	36
Identity Development during College: Emerging Adulthood in Context.....	41
College Adjustment: The Role of Race & Gender in Context.....	47
Academic Adjustment	
<i>Racial Identity</i>	48
<i>Gender Identity</i>	51
Psychological Adjustment	
<i>Racial Identity</i>	54
<i>Gender Identity</i>	57
Considering Race & Gender Identity for Black Women’s College Adjustment.....	59
Summary.....	61
Chapter Three: A Person-Oriented Approach to Studying Racial and Gender Identity Beliefs among Black College Women: Examining Associations with Discrimination and College Adjustment during the First-Year Transition	
The Current Study	64
Method	70
Overview of Dissertation Data.....	70
Overview of Dissertation Procedure.....	72
Demographics of Institutional Settings.....	73
Overview of Study Measures.....	73
Study 1 Participants.....	80
Study 1 Analytic Strategy.....	81
Results	84

(RQ1) Descriptive Summary of Clusters.....	84
(RQ2) Interpersonal Discrimination Experiences and Black Women’s Identity Clusters.....	87
(RQ3) College Adjustment Outcomes and Black Women’s Identity Clusters.....	88
(RQ4) Associations between Discrimination and Adjustment by Cluster Group Membership.....	88
(RQ5) Interpersonal Discrimination Experiences as Predictors of College Adjustment Outcomes.....	89
Discussion	93
Latent Classes of Identity Beliefs among Black Women.....	95
Interpersonal Discrimination Experiences and Black Women’s Identity Clusters.....	98
College Adjustment Outcomes and Black Women’s Identity Clusters.....	100
Associations between Discrimination and Adjustment by Cluster Group Membership.....	101
Interpersonal Discrimination Experiences as Predictors of College Adjustment Outcomes.....	104
Limitations and Considerations.....	107
Tables and Figures	112
Chapter Four: Racial and Gender Discrimination as Predictors of Black College Women’s Racial and Gender Identity Change over Time using Multinomial Logistic Regression	
The Current Study	125

Method	131
Overview of Study Measures.....	131
Study 2 Participants.....	137
Study 2 Analytic Strategy.....	139
Results	142
Black Women’s Race and Gender Identity Profiles over Time.....	142
Time 1 Profiles.....	144
Time 2 Profiles.....	145
Time 3 Profiles.....	147
Profile Group Comparison across Time.....	149
Mapping Identity Change over Time.....	151
Interpersonal Discrimination Experiences and Black Women’s Identity Clusters.....	153
College Adjustment Outcomes and Black Women’s Identity Clusters.....	154
Black Women’s Change Clusters and Interpersonal Discrimination Experiences.....	154
Discussion	157
Latent Classes of Identity Beliefs among Black Women.....	159
Mapping Identity Change over Time.....	163
Black Women’s Change Clusters and Interpersonal Discrimination Experiences.....	169
Limitations and Considerations.....	174

Conclusions.....	176
Tables and Figures.....	177
Chapter Five: Discussion and Conclusion.....	198
Race and Gender Identity Beliefs among Black College Women.....	201
A Longitudinal Consideration of Changes to Black Women’s Identity Beliefs in response to Interpersonal Discrimination.....	209
Considerations and Directions for Future Research.....	213
Implications for Theory and Practice.....	216
References.....	220
Appendices.....	268

List of Tables

Table 1. Model fit statistics for latent class analyses of racial and gender identity classes at Time 1.....	112
Table 2. Raw means, standardized means (and standard deviations) of identity variables for Black women’s cluster group membership at Time 1.....	114
Table 3. Demographic characteristics by cluster at Time 1.....	115
Table 4. Means and standard deviations for Time 2 outcomes by Time 1 clusters.....	116
Table 5. Bivariate correlations for Time 1 Achieved cluster and Time 2 outcomes.....	117
Table 6. Bivariate correlations for Time 1 Diffused cluster and Time 2 outcomes.....	118
Table 7. Bivariate correlations for Time 1 Mixed Status-Gender Central/Exploring cluster and Time 2 outcomes.....	119
Table 8. Hierarchical linear regression predicting academic competence and academic curiosity.....	120
Table 9. Hierarchical linear regression predicting academic persistence and autonomy.....	121
Table 10. Hierarchical linear regression predicting environmental mastery and self-acceptance.....	122
Table 11. Model fit statistics for latent class cluster analyses for change classes for race and gender identity variables.....	177
Table 12. Raw means, standardized means (and standard deviations) of identity variables for Black women’s cluster group membership at Time 1.....	179
Table 13. Demographic characteristics by cluster at Time 1.....	180
Table 14. Raw means, standardized means (and standard deviations) of identity variables for Black women’s cluster group membership at Time 2.....	182
Table 15. Demographic characteristics by cluster at Time 2.....	183

Table 16. Raw means, standardized means (and standard deviations) of identity variables for Black women’s cluster group membership at Time 3.....	185
Table 17. Demographic characteristics by cluster at Time 3.....	186
Table 18. Means and standard deviations in identity variables for Achieved clusters over time.....	187
Table 19. Cluster movement across time.....	191
Table 20. Means and standard deviations for “Movement Into” clusters from Time 1 to Time 2 and Time 2 outcomes.....	192
Table 21. Means and standard deviations for “Movement Into” clusters from Time 2 to Time 3 and Time 2 outcomes.....	193
Table 22. Means and standard deviations for “Movement Into” clusters from Time 2 to Time 3 and Time 3 outcomes.....	194
Table 23. Summary of multinomial logistic regression for Time 2 “Movement Into” clusters with Time 2 discrimination outcomes.....	195
Table 24. Summary of multinomial logistic regression for Time 3 “Movement Into” clusters with Time 2 discrimination outcomes.....	196
Table 25. Summary of multinomial logistic regression for Time 3 “Movement Into” clusters with Time 3 discrimination outcomes.....	197

List of Figures

Figure 1. Time 1 race and gender identity profiles.....	113
Figure 2. Interaction plot: Predicting Black women’s self-acceptance in context of racial hassles by identity clusters.....	123
Figure 3. Interaction plot: Predicting self-acceptance in context of gender hassles by identity clusters.....	124
Figure 4. Race and gender identity profiles for Black women at Time 1.....	178
Figure 5. Race and gender identity profiles for Black women at Time 2.....	181
Figure 6. Race and gender identity profiles for Black women at Time 3.....	184
Figure 7. Achieved clusters over time.....	188
Figure 8. Diffused clusters over time.....	189
Figure 9. Mixed Status clusters over time.....	190

List of Appendices

Appendix A – Demographic Measures.....	261
Appendix B – Identity Centrality Measures.....	264
Appendix C – Identity Exploration and Commitment Measures.....	265
Appendix D – Interpersonal Discrimination Measures.....	266
Appendix E – Classroom Inferiorization Measures.....	267
Appendix F – Academic Engagement.....	268
Appendix G – Academic College Competence.....	269
Appendix H – Psychological Well-Being.....	270
Appendix I. Institutional demographics at commencement of the study (Fall 2012).....	271
Appendix J. Representation of survey completion by wave.....	272
Appendix K. Demographic characteristics of full sample of Black women at Time 1.....	273
Appendix L. Means and standard deviations of primary study variables over time.....	274
Appendix M. Frequency counts for racial hassles over time.....	275
Appendix N. Frequency counts for gender hassles over time.....	276
Appendix O. Frequency counts for race and gender hassles over time.....	277

Abstract

Black women occupy a unique social position as members of two socially marginalized groups—being both Black and female—in a country that privileges Whiteness and maleness (Henry, Butler, & West, 2012). Scholarship suggests that Black women’s experiences in college play a significant role in shaping their belief systems regarding personal identity, particularly as they develop a stronger sense of who they are (Arnett, 2000). Grounded in developmental and social identity theory, the current dissertation uses a two-study approach to examine how race and gender identity processes help explain individual variation in Black women’s experiences of interpersonal discrimination and academic and psychological adjustment outcomes at predominantly White institutions. The dissertation’s samples were drawn from the College Academic and Social Identities Study (CASIS) (PI: Dr. Tabbye Chavous), a multi-method, longitudinal study of ethnic minority students attending five large predominantly White, public 4-year institutions in the Midwest region.

Study 1 examined a sample of Black women (n=325) over their first year of college and (a) identified latent cluster profiles based on patterns of Black women’s race and gender identity beliefs upon entering their college (Time 1) and (b) explored associations between identity profiles and indicators of college adjustment at the end of the academic year (Time 2). The study also considered Black women’s challenges with race and gender discrimination using hierarchical regression models (c) to examine how Black women’s discrimination experiences during the first year of college (reported at Time 2) were related to their Time 2 adjustment outcomes, and finally, (d) analyzed whether Black women’s identity profiles moderated the

associations between discrimination and college adjustment outcomes. Key findings show that Black women vary in the extent to which they have explored the meanings attached to their race and gender identities and formed a sense of attachment and commitment to these identities. Overall, there were few significant differences by cluster group membership in discrimination experiences or college adjustment outcomes. However, Black women who were in the Achieved cluster (characterized by higher identity centrality, exploration, and commitment) reported more academic curiosity at Time 2 than women in clusters characterized by lower identity endorsement.

Study 2 examined a subset of the sample from Study 1 (n=235) over three time points – the beginning and end of the first college year (Times 1 and 2) and the end of third college year (Time 3) - to (a) consider the extent to which Black women’s identity profiles remained stable or shifted and (b) whether profile stability and change was predicted by women’s experiences of race and gender discrimination. Descriptive analyses and latent cluster profiles were examined at each time point, and cluster stability and movement was coded (stable cluster profile from Time 1 to Time 2 vs. “Movement into Achieved” cluster profile from Time 1 to Time 2). Findings highlighted no singular, predominant pattern of stability or change for the sample, but instead, a range of movement pathways among the women. Results also indicate that interpersonal discrimination experiences were predictive of change in Black women’s cluster group membership. For instance, Black women who experienced more classroom race inferiorization were more likely to move into the Achieved cluster, while women who experienced fewer classroom discrimination experiences were more likely to move into the Diffused cluster. Implications for Black college women, stakeholders in higher education, and researchers are discussed.

Chapter One: An Introduction to the History of Black Women in Predominantly White Institutions in the United States of America

In 1862, Mary Jane Patterson, an African American¹ woman from Raleigh, North Carolina, graduated with a bachelor's degree from Oberlin College. She was the first Black woman to earn a bachelor's degree in the United States, setting the stage for a long and challenging pathway of resilience among Black women interested in pursuing higher education in America (Titcomb, 2017). Another Oberlin alumna, Mary Church Terrell, described Ms. Patterson as “a woman with a strong, forceful personality who showed tremendous power for good in establishing high intellectual standards in the public schools,” and she was known for her active participation in civic community projects and organizations that focused on educating African American youth (Sterling, 1984). However, we know very little of Ms. Patterson's experiences as one of the only Black women attending Oberlin College. Emma Brown, a fellow African American classmate, once wrote in a letter, “There is considerable prejudice here which I did not at first perceive...,” suggesting that their social status as Black women attending a predominantly White institution (i.e., college or university in which the majority of the students are White, non-Hispanic; PWIs) was fraught with experiences of prejudice and discrimination (African American Registry, 2005). In general, Black women's entry and graduation from

¹ I use African American and Black interchangeably throughout the dissertation, as the study focus was on women who racially identify as African American/Black.

predominantly White colleges and universities in the U.S. has been marked by interpersonal and institutional encounters with racial and gender bias (Allen, 1992), and yet, Black women have continued to resist racist and patriarchal norms to attain educational success.

According to the National Center for Education Statistics (2016), the undergraduate enrollment rate among African American students increased from 10 percent to 14 percent between the years of 1970 to 2015. Within that, Black women earn about sixty percent of all baccalaureate degrees, as well as seventy percent of all master's degrees, and more than sixty percent of all doctorates (JBHE, 2016). Despite this proliferation in Black female enrollment and the relative progress of Black women in accessing higher education, Black women are less likely to complete their degree than students from some other racial/ethnic groups (NCES, 2016). This suggests that Black women's increased access to institutions of higher education has not concurrently translated into graduation success (Harper, Patton, & Wooden, 2009; Winkle-Wagner, 2015). For Black women at predominantly White institutions (PWIs), this translation issue from enrollment to graduation may relate to the ways they are supported or discouraged as racial and gender minorities on campus. Past research has documented the challenges with interpersonal discrimination and campus climate that students of color experiences on PWI campuses (e.g., Cabrera, Nora, Terenzini, Pascarella, & Hagedorn, 1999), and in particular, Black women may encounter various forms of discrimination related to their racial, gender, and/or race and gender identities (McCabe, 2009). There is a dearth of research, however, considering how intersecting oppressions impact Black women's experiences and adjustment to college.

The present dissertation considers interpersonal discrimination experiences within predominantly White institutional contexts as college adjustment risk factors among African

American women, and whether various forms of identity beliefs and meaning-making processes help reduce the negative academic and psychological effects associated with these experiences (Jones, Cross, & DeFour, 2007; Prelow, Mosher, & Bowman, 2006; Upton, Panter, Daye, Allen, & Wightman, 2012). Black women occupy a unique social position as members of two socially marginalized groups—being both Black and female—in a country that privileges Whiteness and maleness (Henry, Butler, & West, 2012). In addition, Black women have a contingency of other social statuses that may afford them privilege or serve as a disadvantage within institutional contexts, such as social class, sexuality, ethnicity and nationality, and religious orientation. Given that colleges serve as a microcosm of broader society and generally embody the structural values and beliefs that privilege certain groups over others (Rainey-Brown, Johnson, Richardson, Stinson, & Ellis, 2012), the explicit and implicit identity markers that Black women carry with them into predominantly White educational contexts have implications for the ways they are perceived and treated by others (Chambers, 2011; Walt, 2011; Yenika-Agbaw & Jesus, 2011). Black women in college commonly report various encounters with interpersonal discrimination related to race (Donovan, Galban, Grace, Bennett, & Felicie, 2013), gender (Szymanski, & Lewis, 2016), social class (Jack, 2014; Torres, 2009), and sexuality (Henry, Fuerth, & Richards, 2011). A growing body of literature suggests that individuals' beliefs around their social statuses (i.e., racial pride or womanist ideology) help mitigate the harmful academic and psychological effects of interpersonal discrimination (Banks & Kohn-Wood, 2007; Jones et al., 2007; Williams & Wiggins, 2010).

While, Black women's social identity beliefs and ideological constructs around race and gender may help explain their academic and social persistence in unsupportive college contexts, the meaning-making processes by which this resilience is achieved is less clear. Interestingly,

literature on self-authorship suggests that experiencing discrimination as a Black woman from a lower-income background at an institution with mostly higher-income White students, may encourage more complex ways of knowing and a more internalized, stable sense of self (e.g., Pizzolato, 2003). For instance, Stewart (2008) asserts that Black students who attend PWIs regularly negotiate the multiple dimensions of their identities in an environmental context that may be exclusionary and unwelcoming. Students in the sample discussed working toward identity integration, or a stage of “psychosocial development that is marked by an understanding of the self as inherently composed of multiple facets, which come together and influence each other in transformative ways” (p. 185, Smith & Watson, 1992). Abes and colleagues (2007) contend that college students grapple with the interplay between multiple dimensions of their identity (e.g., race, gender, sexuality) and how these social identities are positioned within different contexts. In the study, participants shifted from more formulaic, externally-defined definitions of self (i.e., children believing what their parents tell them about race) to a more foundational meaning-making stage that relied on internally-defined ways of knowing (i.e., rejecting or modifying messages you have received from others about race to align with personal viewpoint). Their findings suggests that individuals who use more complex meaning-making processes demonstrate a critical awareness of surrounding social contexts and expectations in relation to the performative nature of their identity, but also maintain the ability to resist stereotypes and present their identity in a consistent manner regardless of environment. This work suggests that students’ identity development involves an ongoing negotiation between their beliefs and their contextual experiences.

Very little theoretical or empirical scholarship in this area, however, has explicitly considered the interactions between interpersonal discrimination experiences, racial and gender

identity processes, and academic and psychological adjustment among Black women in college. Thus, it is not clear whether individual differences in Black women's identity-related beliefs might contribute to our understanding of their college adjustment outcomes in the context of interpersonal discrimination. It is possible, for example, that certain racial and gender identity beliefs may help Black women process discrimination experiences in predominantly White institutional contexts. It is also possible that discriminatory experiences in college inhibit the extent to which Black women are willing to explore their beliefs around race, gender, and other social statuses as an avoidant coping mechanism. Finally, we know very little about how Black women's identity beliefs shift over time during college, and the extent to which their contextual experiences influence this process.

Dissertation Goals

The present dissertation uses a multi-study approach to explore the ways in which Black women's identity beliefs protect against the deleterious influence of interpersonal discrimination on their college adjustment outcomes, as well as how Black women's racial and gender identity beliefs shift over time. Specifically, this work seeks to understand how identity processes related to the meaning and function of race and gender contribute to academic and psychological resilience in the face of race and gender-based discrimination. To address these goals, I draw on developmental and social identity perspectives (Brewer, 2001; Cross, 1991; Phinney, 1990) and recent scholarship highlighting the promotive role of identity exploration in facilitating positive academic and psychological adjustment among racially minoritized students in college (Hope, Chavous, Jagers, & Sellers, 2013; Szymanski et al., 2016). Finally, drawing on ecological-systems scholarship, I consider how their perceptions and experiences of identity-based

discrimination in college influence shifts or stability in their racial and gender identity beliefs over time (Swanson, Spencer, Dell'Angelo, Harpalani, & Spencer, 2002).

A growing body of literature supports the utility of drawing attention to the ways in which Black women have unique experiences related to race and gender (e.g., Thomas, Hoxha, & Hacker, 2012; Szymanski et al., 2016; Lewis, Williams, Peppers, & Gadson, 2017). Although theoretical and empirical research on the effects of perceived racism for African American students (Banks, 2010; Cabrera, Amaury, Terenzini, Pascarella, & Hagedorn, 1999) and perceived sexism for female students (e.g., Boysen, 2013; Hurst & Beesley, 2013) is well established, there is less research that focuses on how the intersection of racism and sexism influences the academic and psychological well-being of African American women. Much of the extant literature on Black women's experiences of discrimination utilize a unidimensional approach that focuses on racism (Donovan et al., 2013) or sexism (McGee & Bentley, 2017), generally finding that discrimination undermines Black women's academic (McGee et al., 2017; Reynolds, Sneva, & Beehler, 2010) and psychological outcomes (Szymanski et al., 2016).

Alternately, a few have focused on the additive effects of race and gender discrimination. For example, Szymanski & Stewart (2010) found that more incidents with racist or sexist events related to greater psychological distress for Black women, but the interaction of racist and sexist discrimination did not significantly predict distress. Although the findings from this work explore the singular, additive, and interactive effects of racism and sexism, these approaches still measure experiences of racism and sexism separately. More recently, researchers have begun to consider how Black women's experiences with race and gender oppression relate to mental health. The majority of these studies find that experiences of gendered racism, or the simultaneous experience of both racism and sexism (Essed, 1991), is associated with poorer

mental health outcomes such as greater depressive symptoms (Carr, Szymanski, Taha, West, & Kaslow, 2014), higher levels of psychological distress (Lewis & Neville, 2015; Szymanski et al., 2016; Thomas, Witherspoon, & Speight, 2008), more post-traumatic stress symptoms (Woods, Buchanan, & Settles, 2009), lower self-esteem (King, 2003), maladaptive coping styles (Lewis et al., 2017), and an increased likelihood of suicidal ideation (Perry, Pullen & Oser, 2012). This literature, however, focuses on psychological and mental health outcomes. There remains a dearth of empirical work highlighting how discriminatory experiences related to race and gender influence academic outcomes for African American women.

The prevalence and detrimental influence of race and gender discrimination experiences contributed, in part, to more research focused on the cultural assets that Black students use to achieve academic success and maintain psychological well-being. Some work suggests that individuals' social identities and the meanings they attach to their group memberships play an important role in how well individuals respond to and cope with discriminatory experiences (Brondolo et al., 2009; Lee & Ahn, 2013; Pascoe & Richman, 2009). For Black women encountering discrimination experiences due to race, gender, or race and gender, identity processes involving these two identities may serve as one type of personal and cultural asset. A major focus in racial identity literature with Black women examines how various racial identity beliefs function in relation to experiences of racial discrimination. Research suggests that while certain components of racial identity (e.g., stronger centrality of race to one's overall self-concept) may contribute to perceiving discrimination more frequently (e.g., Sellers & Shelton, 2003), positive in-group identification with one's racial group also relates to better academic and psychological outcomes in the face of racial discrimination (Branscombe, Scmitt, & Harvey, 1999d). In general, there is very little research that focuses on how Black women use gender

identity beliefs to processes experiences of sexism. Most work in this area highlights how women across racial/ethnic groups process gender discrimination (e.g., DeBlare & Bertsch, 2013; Settles, O'Connor, & Yap, 2016), or how race and gender influence Black women within disciplinary domains such as Science, Technology, Engineering, and Math (STEM) fields (Dortch & Patel, 2017; Johnson, 2001, 2011, 2012; Russell & Russell, 2015). Thus, while prior evidence suggests that Black women's racial identity beliefs, and to a lesser extent, gender identity beliefs, help mitigate the negative effects of discrimination on academic and psychological functioning, it is less clear how different dimensions of race and gender identity function as protective mechanisms, and further, how race and gender identity operate in relation to one another. This work also fails to consider whether Black women's identity beliefs change over time in response to experiences of discrimination, or the variation that likely exists among Black women in their racial and gender identity beliefs.

Finally, a broader goal of this dissertation is to push the field forward in rectifying the absences in social identity and developmental literature that exist by overlooking significant communities within broader society. In general, Black women experience the world at the intersection of multiple visible social identities – like race and gender – in ways that significantly inform (1) how they see the world, (2) their interpersonal interactions, and (3) the opportunities that are available to them, i.e., education, occupation, health care access, etc.. The predominant focus in psychological theory on groups like White, male college students (who are privileged within U.S. society), obscures our understanding of how individuals who are marginalized in institutional settings (and other places), navigate, survive, and thrive in these spaces. Further, the field lacks a holistic understanding of Black women's healthy identity development – beyond a concentration on discrimination, stigmatization, or marginalization. Given the history of deficit-

based theories in psychology about Black populations, scholars tended to focus on challenging these theories by illustrating the strengths in Black communities, as well as the resilience. While it is important to continue to do this work, we must also nuance our empirical understandings of Black women's development to include topics like happiness, hope, and fulfillment. How do Black women pursue and realize wholeness in their lives? What can we come to understand about forgiveness and acceptance by studying Black women? How well do Black women's goals and desires map onto mainstream psychological literature when we examine the heterogeneity within this population versus considering them a monolith? Many of these questions are beyond the scope of the present dissertation, but they are important inquiries that I will continue to investigate in the future.

Dissertation Organization

The primary objectives in this dissertation are to address these gaps through two studies that will:

Study 1

- Identify and describe emergent patterns among Black women across racial and gender identity centrality, exploration, and commitment (race and gender identity profiles) over the first-year transition
- Examine whether Black women's experiences of interpersonal discrimination (daily hassles and classroom inferiorization) and college adjustment outcomes (academic and psychological) differ by cluster group membership
- Describe the associations between Black women's interpersonal discrimination experiences and college adjustment outcomes by cluster group membership

- Evaluate whether the effects of interpersonal discrimination on college adjustment outcomes vary by cluster group membership after the first-year transition

Study 2

- Consider the extent to which Black women change or remain stable in their racial and gender identity profiles over time in college (from the fall of their first year – to the spring of the first year – and finally, the spring of their junior year)
- Describe the patterns of change and stability in Black women’s cluster group membership over time
- Investigate how Black women’s interpersonal experiences of race, gender, and race and gender discrimination predict changes in cluster group membership over time

This dissertation addresses several key empirical gaps in current social identity and interpersonal discrimination research by (1) examining multiple components of racial and gender identity (relative importance of race and gender to one’s self-concept as well as level of active exploration and commitment to race and gender) and (2) considering the extent to which individual variation in Black women’s race and gender identity processes help explain differences in their academic and psychological outcomes. This work also contributes to research on Black collegiate women by exploring whether race and gender serve as cultural assets and contribute to academic and psychological resilience in the context of discrimination.

Additionally, exploring how Black women draw on their race and gender identities to negotiate academic environments may illuminate the ways in which predominantly White college contexts both inhibit and promote healthy identity development and well-being among students.

Less research considers the extent to which Black women encounter a range of discrimination experiences across institutional contexts, as well as the varying impact of race, gender, and race and gender discrimination on academic and psychological adjustment. Further, existing frameworks do little to account for how Black women's identity beliefs mitigate the negative effects of interpersonal discrimination. Black women's experiences of discrimination, particularly at the intersection of race and gender, are often overlooked in discussions that focus broadly on racial discrimination and identity among African Americans or gender discrimination and identity among women. Further, no investigations have explicitly considered whether Black women's identity beliefs shift over time in response to discriminatory experiences.

The following dissertation is grounded in a historical framing of the importance and relevance of how race and gender relate to Black women's perceived sense of belonging and acceptance within predominantly White institutional contexts. The first section provides a discussion of the embedded nature of interpersonal and institutional marginalization on predominantly White campuses for students of color and the potential effects of such marginalization on Black women's academic and psychological adjustment to college. This review is followed by a theoretical review on social identity development as it relates to Black women to help frame my thinking about race and gender identity beliefs for the dissertation committee. Next, I analyze research relevant to my working conceptualization of the transactional relationship between the development and role of Black women's identity beliefs and experiences of interpersonal discrimination within the college setting. I then present individual chapters on the two studies with a section for methodology, results, and discussion for each. The final chapter is an integrated discussion that addresses how these two studies move the

field forward in thinking about Black women's identity development within predominantly White college contexts.

Chapter Two: A Literature Review on Discrimination, Identity Development, and College Adjustment Outcomes among Black Women in College

In this chapter, I first detail the types of challenges with interpersonal discrimination that Black women confront in predominantly White institutional settings, with a focus on how their race and gender may position them to have unique discrimination experiences. Next, I consider the implications of racial and gender discrimination on the college adjustment outcomes of Black women, with specific sections highlighting prior empirical work on academic and psychological outcomes. The following section transitions to a focus on identity development frameworks, with attention to how these models capture or overlook the intersections of Black women's race and gender identity. Then, I discuss how racial and gender identity beliefs may change over time, especially during certain critical periods of adjustment, such as Black women's transition to college, and in response to interpersonal discrimination. Next, I provide an overview of research demonstrating that race and gender identity beliefs may serve as cultural assets to mitigate or protect against the deleterious influence of discrimination on adjustment outcomes among college students. This discussion includes research highlighting the associations between interpersonal discrimination and racial and gender identity beliefs in relation to the college adjustment of Black women attending PWIs. Given the dearth of research that focuses specifically on identity and adjustment among Black college women, I also draw on broader, relevant students with African American and/or female samples to discuss how this dissertation builds on prior literature to extend our understanding of identity development (Foley, Ngo, & Loi, 2006; Foley, Ngo, Loi, & Zheng, 2015; Fries-Britt & Griffin, 2007; Hausmann, Ye,

Schofield, & Woods, 2009; Hughes, Kiecolt, Keith, & Demo, 2015; Kessels, Heyder, Latsch, & Hannover, 2014; Strayhorn, 2013).

The Failed Promises of Higher Education

The increased presence and power of Black female scholars in higher education has contributed to a rising demand for educational equity and inclusion in institutional policies and practices for students who remain at the margins. Historically, colleges in America were only accessible to upper-class, White male students (Freeman, 1999), and laden with admission policies that served as institutional barriers to upward social mobility for African Americans and other socially stigmatized groups in U.S. society. When unrelenting resistance and perseverance from these same communities led to the demise of de jure segregation in the 1950's, access to higher education for students who were previously excluded should have been well within reach. Yet, de facto segregation in the form of interpersonal and institutional discrimination has remained a prevalent barrier for many, which may relate to the disproportionately lower rates of college enrollment and graduation for racial/ethnic minority students compared to European American students (Allen, 1992). With this historical perspective in mind, it becomes evident that students must experience significant challenges while trying to adjust to college life and make sense of who they are and who they want to be while attending institutions designed to exclude them (e.g., people of color, women, LGBTQ). Black women's college experiences at predominantly White institutions are inherently tied to the entrenched social marginalization of African American peoples within U.S. educational structures, practices, and beliefs.

A Psychological Focus on Identity-Based Discrimination

Individuals are categorized by a variety of different social identity groups, such as race/ethnicity, gender, and socioeconomic status. Historically within America, individuals within

certain identity groups have been afforded more rank and privilege within society (e.g., being White, male, a member of an upper socioeconomic class) than others (e.g., being a person of color, a woman, or being in a lower socioeconomic class) (Croteau, Talbot, Lance, & Evans, 2002). This type of identity-based hierarchy contributed to a body of research in psychology that focused on the effect and implications of belonging to a group whose members are afforded less status in U.S. society. According to Crocker (1999), identity-based stigmatization occurs when individuals possess or embody an attribute or characteristic that belongs to a devalued social identity in a context.

Major and O'Brien (2005) highlighted that stigmatization is relationship- and context-specific; thus, stigma manifests at an interpersonal level through social interactions within an environment. Also, while individuals from both higher-status and lower-status groups may have negative beliefs and stereotypes about members from other groups, higher-status groups tend to have access to more societal resources in ways that allow them to translate their negative biases into concrete outcomes for lower-status group members (Crocker & Major, 1989). Such prejudiced treatment towards members of a socially stigmatized group is commonly referred to as discrimination (Harrell, 2000). A substantial body of literature suggests that individuals who belong to stigmatized social identity groups encounter a range of discriminatory experiences related to those social identities (e.g., Buchanan & Omerod, 2002; Capodilupo et al., 2010; Essed, 1991; Harrell, 1997, 2000; Klonoff & Landrine, 1995; Lewis, et al., 2015; Sue, Capodilupo, & Holder, 2008; Torres-Harding, Andrade, & Romero-Diaz, 2012). From a social psychological perspective, discrimination manifests in a variety of ways, all of which are generally related to mental, emotional, psychological or physical harm to individuals belonging

to the marginalized identity group (Clark, Anderson, Clark, & Williams, 1999; Carter et al., 2013).

For example, African Americans are a stigmatized racial group in American society, which has translated to disenfranchisement from educational, career, and health domains, in part, due to interpersonal and systematic discrimination from European Americans (Ehlers, 2012). Empirical evidence estimates that close to 70% of African Americans can recall significant experiences with racial discrimination in their lifetime (Barnes & Lightsey, 2005; Landrine & Klonoff, 1996; Utsey, Ponterotto, Reynolds, & Cancelli, 2000), and higher education research suggests that racial discrimination and stigmatization against Black college students is associated with poorer academic (Chao, Mallinckrodt, & Wei, 2012), social (Cabrera et al., 1999; Prelow et al., 2006), and psychological outcomes (Banks, 2010; Smith, Allen, & Danley, 2007). Even when infrequent, discrimination experiences can deleteriously influence the academic, behavioral, and psychological functioning of targeted individuals (Banks et al., 2007; Carter, Lau, Johnson, & Kirkinis, 2017; Rivas-Drake et al., 2014).

This research has developed our understanding of the ways in which interpersonal discrimination plays a role in Black college students' educational experiences. However, much of the research on racial discrimination in education and psychology has overlooked how Black women embody devalued racial and gender social categories. This oversight is problematic, given prior research suggesting that Black women are perceived and treated in ways that are distinct from Black men and women from other racial/ethnic groups who experience gendered discrimination (e.g., Coles, 2009, Crenshaw, 1989, 1991). Donovan and colleagues (2013) found that 63% of the Black college women in their sample recalled experiencing overt, purposeful discrimination (e.g., being called a racist slur) in the past year, and in addition, 96% of

participants reported contending with subtler forms of discrimination (e.g., being treated suspiciously) at least a few times in the past year. Another recent study by Lewis et al. (2012) explored African American women's experiences with gendered racial microaggressions (i.e., subtle discriminatory incidents based on the intersection of one's race and gender) and found that participants often felt silenced and marginalized in school settings during interpersonal interactions in which their behaviors were misrepresented or misinterpreted to coincide with negative stereotypes of Black women (i.e., angry Black woman, hypersexual Black woman). This emerging body of work draws attention to the prevalence of interpersonal discrimination experiences among Black college women in PWI settings, and the reality that this stigmatized treatment may be due to racial, gender, or race and gender bias. To gain a richer understanding of the ways that interpersonal discrimination experiences hinder Black women's adjustment to college, it is essential to examine their experiences within a theoretical framework that addresses the historical, educational, and social contexts of Black women's lives (Collins, 2000).

Interpersonal Discrimination and College Adjustment: Grounding Black Women's Experiences

For Black women who attend predominantly White institutions, academic and social experiences across a variety of contexts such as classrooms, study spaces, dorm halls, and social events, convey norms and expectations from faculty, peers, and others on campus about their status on campus. Kanter's (1977) "theory of proportions" suggests that being in the minority within a context contributes to interactions characterized by: being more visible and on display, feeling more pressure to make fewer mistakes, trying to become more socially invisible, being more isolated and facing stereotypical misperceptions from others, and having less access to networks of peer support. Although Kanter's work focused on White women in corporate settings, the implications of being "tokenized" in this way may speak to some of the challenges

that Black students experience while attending predominantly White institutions (e.g., Sekaquaptewa & Thompson, 2002; Turner, 2002; Vue, Haslerig, & Allen, 2017). For example, studies with Black college students highlight their experiences of interpersonal discrimination in academic and social settings on campus, such as being called on less by professors, being excluded from study groups and parties, being treated suspiciously by campus security, and overhearing racist and sexist jokes (e.g., Ford, 1995; Frazier, 2012; Fries-Britt et al., 2007; Shahid, Nelson, & Cardemill, 2018; Smith et al., 2007; Torres-Harding et al., 2012). This work draws attention to the interpersonal challenges with discrimination Black students experience in schooling contexts, and further, how Black college students negotiate their status as racial minorities in predominantly White learning spaces.

A related body of research, which includes empirical evidence on the effects of gender discrimination, is stereotype threat literature, which examines how individuals' awareness of negative societal stereotypes about their social groups can undermine their performance in a particular domain (e.g., Brown & Pinel, 2003; Fries-Britt et al., 2007; Steele, 1997). For example, Brown and colleagues (2003) found that mathematically talented women who were reminded of negative societal stereotypes regarding women's poorer math ability (i.e., stereotype threat condition), performed worse on a math task than women who were told the test had been shown to be "gender neutral." This perspective highlights the extent to which an awareness of pejorative social stereotypes can influence individuals' thoughts and behaviors. Research with African American students have obtained analogous results in that individuals tend to underperform when they are primed with their racial group membership and demonstrate poorer academic and psychological outcomes when they have a stronger investment in their racial identity (Steele, 1997; Steele & Aronson, 1995).

In relation to college adjustment, studies indicate that experiences of interpersonal discrimination can hinder students' academic and psychological adjustment. For example, prior research with Black college students reveal that perceiving a tense or negative campus racial climate (i.e., behaviors, practices, and attitudes that reflect the level of racial inclusion at a given institution) is associated with a decreased sense of belonging and campus participation (Chavous, 2005; Fischer, 2007; Strayhorn, 2013). Banks (2010) found that experiencing daily racial discrimination in college settings was associated with increased depressive symptomology among African American students, and other research supports a similar relationship between discrimination and poorer mental health (Barnes et al., 2005; Landrine et al., 1996). Related research with college women finds that a significant factor that diminishes women's intentions to continue in STEM fields is an unsupportive environment that reinforces negative beliefs about women's academic abilities and inherent value as scientists and scholars (e.g., Lacrosse, Sekaquaptewa, & Bennett, 2016). The authors suggested that when women witnessed other women's devaluation or negative treatment in the academic setting, this activated the perception that they were similarly unwelcome in the stereotypically male domain. Still, much of this work focuses broadly on the effects of racial discrimination among African American samples, or gender discrimination with White female samples. Without an explicit consideration of Black women, we know less about the effects of racial and/or gendered discrimination experiences on this group's adjustment to college. In line with this, a rising number of scholars are focusing on the effect of racism and sexism on Black college women's academic and psychological adjustment.

Discrimination & Academic Adjustment among Black Women

For instance, Hannon and colleagues (2016) highlighted how participants' status as Black women at a predominantly White institution influenced their academic experiences. Results indicated that the heightened awareness of often being the only Black person in their immediate surroundings and the additional stressors of discrimination and tokenism (i.e., being called upon in class to serve as a spokesperson for the Black community) provided significant roadblocks to their college adjustment, engagement and completion. In another study, Johnson (2012) sampled racially diverse women pursuing STEM degrees and found that Black women reported an overall lower sense of belonging than other women of color on campus due to more experiences of harassment and stereotype-based treatment, such as professors suggesting to the women that they were inadequately prepared for the academic rigors of coursework in math and science fields (Johnson, 2012). In this case, the women focused on their experiences of gender-related bias in STEM departments, but a few of the women also remarked on the presence of racial prejudice among faculty, as well. Other research similarly suggests that discriminatory treatment from peers and faculty undermine Black women's interpersonal relationships and challenges their academic engagement and effort (Johnson, 2011).

Finally, other scholarship highlights how Black college women experience discrimination related to both race and gender. For example, Upton and colleagues (2012) revealed a significant interaction between experiences of racial and gender discrimination among Black women in law school, in that women who experienced racial discrimination were more assertive when they also reported experiencing gender discrimination. In this case, Black women's increased sense of assertiveness due to racism and sexism related to academic motivation, but the authors suggested that combatting such incidents of bias made them vulnerable to mental health risks. In a more recent investigation, Dortch and colleagues (2017) found that although the Black women in

STEM mentioned issues with racial discrimination more often than gender discrimination, the double marginalization of race and gender most often challenged their sense of belonging in the discipline. The women recounted how university officials and other students implied they received admission to college based on their skin color rather than their academic merits, as well as ongoing struggles with feelings of isolation from being one of the only African American women in their department and classes. A few other studies demonstrate the ways in which identity-based discrimination undermines the academic adjustment of Black college women (Bentley-Edwards, Agonafer, Edmondson, & Flannigan, 2016; Johnson et al., 2012).

Discrimination & Psychological Adjustment among Black Women

When thinking about how well Black women acclimate to a PWI, it is important to consider psychological well-being and adjustment, or the degree to which students experience stress, anxiety, and/or somatic issues (i.e., insomnia) in response to the demands of a new college environment (Kramer, 1980). Prior research suggests that entering college presents students with a variety of challenges that extend beyond academic demands such as negotiating new social relationships, constructing one's beliefs about the institution, adapting to new roles and responsibilities, and becoming an engaged member of the university community (Crede & Niehorster, 2012). Black women's experiences with race and/or gender discrimination may present a unique type of barrier regarding psychological adjustment, particularly in relation to developing a sense of belonging, finding ways to become involved on campus, and feeling like a valued member of the community.

For example, Banks (2010) examined the relationships between daily racial hassles and general college life and symptoms of depression among Black college students. Findings suggested that experiencing racial discrimination was directly correlated with decreased mental

health; in addition, participants in the study who encountered more daily college hassles (e.g., being let down by friends) were more vulnerable to the harmful effects of discrimination on depressive symptoms. In a more recent study, Chao and colleagues (2012) found that 1 in 4 African American college participants reported high levels of psychological distress in response to racial discrimination. Black women reported more discrimination distress than Black men, as well as more anxiety, depression, and uncertainty about the future in response to such experiences. The authors suggested that compared to Black men, Black women may also be experiencing gender discrimination distress, which has received a dearth of attention in the extant literature.

Greer (2011) found that African American women reported more exposure to racism than to sexism, but that both types of discrimination related to increased levels of anxiety, depression, obsessive-compulsive symptoms, and somatization. While others have found that African American women report more exposure to sexism than racism (Moradi & Subich, 2002), some suggest that Black women report the most severe psychological distress in response to intersectional racist and sexist events (e.g., gendered racism, Thomas et al., 2008). Unfortunately, research suggests that despite the high levels of discrimination distress that Black college students report in adjusting to college (Anglin & Wade, 2007; Chao et al., 2012), they do not utilize counseling or other mental health services at the same rate as other racial/ethnic groups (Constantine & Sue, 2006; Ridley, 2005). This may relate to poorer psychological well-being and adjustment outcomes (Bernard, Lige, Willis, Sosoo, & Neblett, 2017; Prelow et al., 2006; West, Donovan, & Roemer, 2010), especially among Black women, who respond to discrimination experiences with internalized coping mechanisms, such as social withdrawal (McLaughlin, Hatzenbuehler, & Keyes, 2010).

Finally, for some Black women attending PWIs, the school setting may involve a cultural departure from their high school and home communities, a phenomenon that has been termed “culture shock” (Amos, 2015; Joseph, 2012). These women are more likely, for example, to struggling with feeling accepted in the new college environment, secure positive mentoring relationships, and locate the necessary institutional supports to encourage their well-being and psychological growth (Joseph, 2012). In all, this literature indicates that Black women’s experiences with interpersonal discrimination related to race, gender, and race and gender have significant implications for their adjustment to and sense of academic and psychological belonging in college. Another important reason to examine Black women’s experiences at PWIs concerns how such events inform their developing sense of self. Institutional settings play a significant role in shaping emerging adults’ belief systems regarding personal identity, particularly as students begin to develop a sense of who they are independent from the socialization they received before college (Arnett, 2000). For some Black women, drawing upon cultural resources, such as their social identity beliefs may help them adjust academically and psychologically to college despite identity-based discrimination (e.g., Settles, O’Connor, & Yap, 2016; Settles, Navarrete, Pagano, Abdou, & Sidanius, 2010). Yet, very few studies have considered whether Black college women’s race and gender identity beliefs mitigate the influence of different types of discriminatory experiences on their college adjustment.

Theoretical Approaches to the Study of Identity Development

Identity development is a major psychosocial task that occurs across the lifespan. Researchers suggest that during emerging adulthood, individuals begin to spend more time thinking critically about defining themselves in relation to their broader social communities (Arnett, 2000). Theoretical frameworks on identity development suggest that we must consider:

what is developing – the *content* of individuals’ beliefs – as well as how this content develops— or the *process* of individuals’ identity development (McLean, Shucard, & Syed, 2017). For example, several studies suggest that a significant life event (i.e., Cross’s “encounter” moment; Fhagen-Smith, Vandiver, Worrell, & Cross Jr., 2010) or a series of events can encourage individuals to rethink their identity beliefs and emerge with a new understanding of said identity (i.e., process). In general, most early identity status models suggest a linear progression of identity development in which individuals transition from a less examined identity stage to a more advanced stage that corresponds with substantial identity exploration (Fhagen-Smith et al., 2010; Parham, 1989; Yip, Sellers, & Seaton, 2006). Other work focuses on the content of individuals’ identity beliefs, such as their affective connections to an identity, how strongly attached they are to an identity, and their perceptions of how others view an identity (Chavous et al., 2018; Lee, Durkee, Francois, & Anderson, 2012; Rivas-Drake et al., 2014; Sellers, Copeland-Linder, Martin, & Lewis, 2006). Current understandings indicate that the process and content of individuals’ identity development is culturally defined, context-specific, and involves negotiation with and the internalization of larger cultural conceptions about identity (McLean & Syed, 2015). Increasingly, scholars are highlighting that we need more comprehensive studies to examine how the process and content of identity come together and develop over time (Umana-Taylor et al., 2014).

Erikson (1968) proposed that identity development, or “defining oneself” involves constructing a coherent sense of self across time, context, and within one’s cultural communities. His conceptualization framed identity development as an ongoing process that begins in childhood and continues throughout early adulthood as individuals become more aware of surrounding social structures and how they are expected to exist within those structures. Erikson

suggested that individuals undergo a gradual process of identity exploration that ultimately leads to an accomplished sense of resolution about one's social identities. Early adulthood was a critical developmental period, during which individuals begin to integrate disparate aspects of the self to arrive at a sense of personal sameness across time and context (Brubaker & Cooper, 2000). Over the past few decades, identity development theory has expanded to incorporate a wider range of social identity categories (e.g., race, ethnicity, gender, sexuality, and nationality) to better represent the dynamic and complex way individuals make sense of themselves, and scholars began to enumerate on the ways that peoples' surrounding contexts informed their identity development processes.

The present dissertation will use an Eriksonian framework and identity status approach to conceptualize race and gender identity development among Black college women, with an emphasis on how contextual experiences of discrimination relate to identity change over time. Identity status literature focuses on the personal processes of identity development, predominantly using survey measures or interview assessments to how individuals explore and form a sense of commitment to a given social identity (Cross, 1971; Erikson, 1968; Marcia, 1966, Phinney, 1989; Sellers et al., 1998). These approaches emphasize how individuals move from a position of less engagement or thoughtful exploration of an identity to a more nuanced, mature sense of identity (Syed, Azmitia, & Phinney, 2007), and many of the studies focus on a singular component of identity (e.g., race or gender). In my investigation of identity development, I will focus on three identity components: centrality, exploration, and commitment, and centrality. Specifically, I will consider the **content** of Black women's identity beliefs by focusing on (1) centrality – i.e., individuals' sense of attachment to their identity and the importance of the identity to their self-concept. In addition, I will focus on the **process** of Black

women's identity development by examining (2) exploration – i.e., the extent to which individuals have engaged in cognitive and/or emotional exploration of the meanings of their identity through reflection, interactions with others, educational activities, etc., and finally, (3) commitment – i.e., the degree to which individuals feel a sense of clarity or resolution about the meanings of that identity in their lives. Prior evidence links these identity dimensions to psychosocial adjustment outcomes for African Americans (Harper & Tuckman, 2006; Harris & Marsh, 2010; Lige, Peteet, & Marsh, 2010) and women (Hyde & Kling, 2001; Jones et al., 2007; Kessels et al., 2014).

Framing Racial Identity Research with African Americans in the U.S.

African Americans' racialized history in the United States, including but not limited to—the effects of enslavement and Jim Crow laws, and more recently, mass incarceration and Jane Crow criminalization (Alexander, 2010; Battle, 2016)—contributes to the unique and major role that racial beliefs and ideologies play in the life experiences of African Americans. African Americans have systematically been denied access to equitable opportunities relating to education, healthcare, housing, and occupational attainment that relegate them to second-class citizenship (Alexander, 2010). Moreover, the deeply ingrained nature of anti-Blackness in the U.S. warrants African Americans less personal and institutional protection daily, translating to injustices like the racially-motivated slaying of Nia Wilson (Andone & Simon, 2018) and extrajudicial murder of Sandra Bland (Battle, 2016). Race as a social construct has had, and continues to have, significant implications for the life outcomes of African Americans, and in response to that, Black psychologists began to empirically study the psychological experiences of African Americans as early as the 1900's (Horowitz, 1939).

According to a seminal review by Sellers and colleagues (1997), the earlier research traditions on racial identity took two main approaches, namely: the mainstream approach and the underground approach. The mainstream approach focused on the negative effects that living in a racist society must have on the self-concept of African Americans and generally assumed that most individuals would form an unhealthy, stigmatized sense of identity (e.g., Horowitz, 1939). This approach is consistent with the findings from the infamous Clark et al., (1947) “doll studies,” which highlighted how young African American children preferred White dolls over Black dolls and assigned more negative characteristics to Black dolls compared to White dolls, presumably indicating that Black children internalize racial self-hatred based on their experiences with discrimination and prejudice from society. In contrast to the mainstream approach, the underground approach highlights how African Americans’ identity development also includes positive cultural influences that can result in a healthy self-concept of resilience (Cross, 1991). Proponents of this approach recognize that while African Americans necessarily contend with racism from broader society, the experiential meaning of being Black extends beyond discrimination to include community traditions and cultural socialization (Baldwin, 1984). The underground approach emphasizes the heterogeneity of African American racial identity, as in the varied possible meanings of what it means to be Black.

Building from this scholarship, contemporary social psychological and developmental perspectives define *racial identity* as a multifaceted component of individuals’ overall sense of self, which encompasses the knowledge and understanding of one’s in-group history, the affective meanings individuals ascribe to their racial group membership, as well as a sociopolitical lens to process race-related experiences (Rowley, Sellers, Chavous, & Smith, 1998; Sellers, Smith, Shelton, Rowley, & Chavous, 1998). As mentioned before, I focus

specifically on racial *centrality*, *exploration*, and *commitment* in the present study. Marcia's (1966) developmental model of identity statuses, Tajfel and Turner's (1986) social identity theory, Cross's (1971) model of Nigrescence, and Phinney's (1989) multidimensional model of identity provide the most useful frameworks for the empirical measures of racial identity development that I use in the current study (e.g., Phinney, 1992; MIBI; Sellers et al., 1998).

Marcia's (1966) paradigm describes four identity statuses based on the presence or absence of exploration and commitment. The first status, *diffused*, refers to individuals who have neither engaged in exploration nor made a commitment. The second status, *foreclosed*, includes individuals who indicate a commitment to an identity, but do so without accompanying levels of exploration. This status is common among early adolescents (Syed et al., 2007), who may internalize the messages and socialization from parents about identity beliefs (i.e., having cultural pride as an African American or being aware of discrimination) without examining the beliefs for themselves. Individuals in this stage generally lack a clear understanding of the meanings and implications of their identity beliefs, given the lack of personal exploration (Marcia, 1980). As emerging adults enter college and begin to have new experiences with diverse peers and settings, they may enter the third stage, *moratorium*, which involves the process of exploration without a sense of commitment. Finally, individuals who make a firm commitment following a period of exploration, reach what is termed an "achieved identity status." Although achieved identity is the most complex and mature identity status and literature tends to focus on how individuals move through each "stage," Marcia originally noted that the identity status paradigm was not designed to reflect a linear developmental progression.

Tajfel's & Turner's (1986) social identity theory of intergroup behavior highlighted how members of marginalized minority groups, such as African Americans, contend with negative

views from society about their group membership that they can reject by exploring what their sense of identity membership means to them. Several identity status models of racial identity have focused on this complex phenomenon by considering how African Americans' meaning making around race is central to their normative personal development. For example, Cross's (1971) model of Nigrescence describes changes in Black identity development with five stages: (1) pre-encounter, (2), encounter, (3) immersion-emersion, (4) internalization, and (5) internalization-commitment. Like other identity status models, the Cross Model assumes that African Americans move from an unexamined position on racial identity (pre-encounter; characterized by a worldview that is dominated by Euro-American cultural ideas that degrade Blackness), to a more advanced stage (internalization-commitment; characterized by a worldview that is committed to Black social and political advancement with positive beliefs about racial group membership). However, unlike other general models of ethnic identity development, the Nigrescence model specifically focused on African Americans and how their experiences with discrimination in America influenced their racial identity.

Finally, Phinney's (1989) model of ethnic identity development draws on tenets from both Marcia (1966) and Tajfel and Turner (1986). Phinney's original conceptualization included three stages. The first stage collapses the foreclosed and diffused identity statuses of Marcia's (1980) model into an "unexamined" status, which includes individuals who exhibit minimal exploration of the meaning of their ethnic identity and little understanding about the implications of their ethnic group membership for their experiences. The second stage is similarly termed "moratorium"; while individuals display an increasing awareness of their ethnicity and active engagement in the process of exploring what their ethnic identity means to them, they lack a strong sense of commitment or belonging to their ethnic group. Individuals in the final stage, the

achieved status, show evidence of exploring what their ethnic identity means to them and have an internalized sense of acceptance and commitment to their ethnic group. Like Erikson (1968) and Marcia (1966), individuals move from unexamined → moratorium → achieved in response to experiences that incite them to construct new meanings related to their ethnic identity. In a later reconceptualization of her original work, Phinney et al. (2007) modified the stage theory approach to focus more on how exploration and commitment are interconnected and dynamic over time.

In all, identity status models examine the extent to which individuals are actively thinking about the meanings associated with their social identity groups. The measures that were adapted from these theoretical models tap into individuals' identity development, and those that were designed and intended for African Americans highlight the race-related beliefs of members within that community (Hoggard, Jones, & Sellers, 2017; Jones, Lee, Gaskin, & Neblett, 2014), and). These models have been reliably used to consider how racial identity beliefs correlate with academic (Smalls et al., 2007) and psychological (Pieterse & Carter, 2010) outcomes, and further, present theoretical explanations as to why the beliefs associated with certain stages relate to various outcomes. For example, Yip and colleagues (2006) examined the existence of racial identity statuses among African American adolescents, college students, and adults using Phinney's (1992) Multigroup Ethnic Identity Measure and found that older participants were more likely to be in the achieved status category (i.e., active engagement in exploring an identity and forming a sense of commitment to that identity), and moreover, that individuals in the achieved category reported higher levels of racial centrality (suggesting a relationship between the level of exploration and commitment one has to an identity with the sense of attachment they have to that identity). Their findings also indicated that individuals shifted between different

identity statuses in a nonlinear fashion (i.e., moratorium – achievement – moratorium), highlighting that identity development is not unidirectional and that students may recycle between the identity statuses. Further, Black college students in the diffused status (i.e., low exploration and low sense of commitment to an identity) reported more depressive symptoms than students in the achieved status, suggesting that exploring and gaining a sense of clarity about the meaning of one's ethnic identity is associated with better psychological wellbeing (for similar results, see Seaton, Scottham, & Sellers, 2006). Still, less of this research empirically examines how racial identity processes and content shift over time, especially in response to new environments (i.e., college) or among subgroups within the Black population (i.e., women).

Framing Gender Identity Research with Women in the U.S.

The development and proliferation of research on gender identity in the U.S. is complicated by the myriad conceptualizations that have been used by psychologists, particularly the historical conflation of assigned sex at birth with gender identity (Nadal, 2017), as well as the prominent issue of using gender roles as an indicator of gender identity beliefs (Dugger, 1988). Gender identity theory has also undergone numerous transformations in conjunction with an increasing demand to recognize the fluidity of gender rather than the binary gender categorizations (i.e., male and female) that has been used in most psychological literature (Nadal, 2017). Further, much of the research on gender identity has focused on sex differences in attitudes, ideological beliefs, or expectations of societal roles between men and women, rather than an exploration of how girls and women develop their beliefs about gender and the affective meanings associated with their gender group membership. In addition, until the second wave of feminism in the early 1970's drew attention to the whitewashing of gender theory, most related scholarship was about middle-class, formally educated, White women (Winifred, 2007). While a

full review is beyond the scope of this dissertation, I will draw attention to the implications of available gender identity scholarship to Black women's gender identity development.

The current study will examine specific dimensions related to the content and process of Black women's gender identity development. *Gender identity* is generally defined in social psychology and developmental literatures as the ways in which people understand themselves as male or female in the cultural contexts in which they are developing (e.g., Wood & Eagly, 2015).² Similar to literature on racial identity, gender identity involves a continual renegotiation process that begins in childhood and extends through adulthood (Wood et al., 2015). This renegotiation includes perceptions of oneself in relation to an understanding of gender and assessing how one identifies along conventional definitions of femininity and masculinity, such as appropriate behaviors, mannerisms, and external appearances (Bem, 1974). For example, a component of gender identity is individuals' gender expression, or how they publicly present their gender (i.e., wearing their hair, using make-up, choices in body language and voice; Ontario Human Rights Commission, 2015). Across both social identities, scholarship concurs that development shifts over time and includes an awareness of larger cultural and societal structures (Phinney & Ong, 2007). In the present dissertation, I focus on gender *centrality*, *exploration*, and *commitment* among Black college women. Similar to racial identity, centrality captures how important gender is to a woman's overall self-concept, exploration involves the extent to which a woman has explored what their gender group membership means to them, and commitment,

² This definition of gender identity is representative of a historical understanding of available gender identifications (i.e., only male and female), and does not exemplify the shift in more recent literature to include genders outside the binary (i.e., trans, non-conforming gender identity, gender queer; Johnson & Wassersug, 2010). While this definition of gender identity accurately represents the women in the present dissertation based on their responses to survey items, I think it is important to acknowledge the limitations with this definition.

relates to the sense of clarity or resolution a woman has about what her gender identification means to her (Vespa, 2009).

A significant gap in current identity literature with Black women is the extent to which they believe that gender is a central component of their identity, as well as the meaning-making processes and experiences that contribute to Black women's gender identity beliefs. For example, Collins (2004) stated, "Black women do not adhere to traditional gender role beliefs or behaviors because they could not" (p. 202), which highlights how Black girl's gender identity development occurs within the context of what it means to be both Black and female within American society. Bem's (1981) GST notes that children are learning content-specific information about gender-appropriate behaviors and attributes from their community and society, and yet, the author's original gender-typed examples are mainstream, Eurocentric definitions (i.e., girl children do not hear about how strong they are, and boys are not expected to be nurturing or do chores). Scholarship on gender socialization within African American communities suggests that Black families opted to enact more egalitarian gender socialization with their children that run counter to the notion that boys do not receive messages about doing chores or being nurturing (Hill, 2001). Thus, the overarching erasure of racial/ethnic differences in gendered histories in Bem's gender schema theory likely means that it has limited relevance for Black women's identity development. This concept—that race has shaped the social relations and realities of Black and White women in distinct ways that has implications for their gendered beliefs—reiterates the likelihood that measures of gender identity, which were operationalized and normed with White female samples, will have less construct validity for Black women. Or, at least, that Black women's divergent status in society as a racialized and gendered minority may foster different beliefs about gender than White women (Kane, 1992).

Moreover, we know very little about how Black women develop their beliefs about gender; instead, we know the extent to which their beliefs differ from individuals with other racial/ethnic backgrounds. One of the founding feminist identity models, Downing and Roush's (1985) measure, drawn from Cross's (1971) Nigrescence racial identity model, assessed an individual's initial acceptance of dominant perspectives of gender characteristics and roles and a lack of awareness regarding institutionalized forms of gender inequalities (i.e., Pre-Encounter Stage). Both models suggest that an event initiates an individual's exploration of the respective identity (race or gender), and that the process of identity exploration leads to new information and experiences that resolves in a stronger sense of commitment to that identity. Interestingly, the similar conceptualization of these two measures (i.e., this feminist identity measured used an earlier racial identity scale as a model), presents the idea that race and gender identity may involve similar developmental processes. This is an unresolved area of contention in current identity literature (e.g., Hill & Thomas, 2002), in line with the idea that Black girls and women may have engaged in more exploration of their gender identity development given the necessity of navigating the meaning of their racial identity. While some authors have found that racial identity attitudes were not significantly related to gender identity attitudes (e.g., Martin & Hall, 1992), others have found that Black women reported being at similar stages in the two models (i.e., being in both the pre-encounter stage of racial and gender identity) (White, Strube, & Fisher, 1998). Still, Black women's ideological beliefs about gender and the development of those beliefs are largely overlooked in prior identity research.

Finally, in one of the few papers to examine components of both ethnic/racial and gender identity, Wilson and Leaper (2016) explored how centrality, self-perceived typicality, and felt conformity pressure were interrelated and associated with self-esteem among a group of

ethnically diverse emerging adults. The authors found that participants who reported higher centrality in race and gender identity also indicated higher self-esteem than individuals who reported lower centrality in both domains or reported higher centrality in only one domain. While this was a great example of how bridging aspects of identity status measures offer a better understanding of the ways in which different identity dimensions relate to psychosocial outcomes among emerging adults, the sample did not include Black students. Further, it used a cross-sectional design to focus on the associations between variables at a time point, rather than a longitudinal design that would offer insight into how identity content beliefs shift over time. Still, the findings offer insight as to why a multidimensional focus on racial and gender beliefs among African American women may shed new light on their identity development processes.

It is worth noting that compared to literature on racial identity, there is an absence of research that uses identity status models to explore gender identity development. This may be partly due to the different histories of racial and gender identity research. While both bodies of scholarship focus on what it means to be an individual with a particular social identity (e.g., what it means to be African American or what it means to be a woman), a distinct cultural history provided a grounding framework for racial identity measures. African Americans represent a vast and heterogeneous community of individuals with unique beliefs and interests, and yet, their systematic relegation to second-class citizenship in the U.S. creates a unifying sense of community (Sellers et al., 1998). What it means to be a part of the African American community, and moreover, the ability to develop a healthy sense of racial identity while immersed in a racist country, generated a substantial body of scholarship on this topic (e.g., Clark et al., 1939, Rowley et al., 1998) and served as a model for a similar increase in research on gender theory. Gender identity status models may also garner less attention because biological and binary

conceptions of gender were so hardwired into early psychological literature (Nadal, 2017). There may have been less attention to someone having an “encounter” moment relating to gender, and rather, the assumption that our assigned sex from birth developed into the concrete distinctions of what it means to be a boy or girl, and later, a man or woman. Gender as a social construction and the fluidity of gender identity has received increased attention in recent years with the advent of critical scholarship on the topics (Richardson, 2007), but historically, gender identity scholarship mostly involved investigating cognitive, behavioral, and social differences between men and women.

Measuring Racial & Gender Identity Development with Black Women: A Snapshot of Multidimensional and Intersectional Research

Overall, theoretical and empirical frameworks that capture both the process and content of social identity development, whether in relation to race, gender, sexuality, or other categories, enhances our understanding of how individuals make sense of who they are. Yet, there remains a paucity of research examining the nature of Black women’s racial and gender identity development. This is concerning, given that race and gender is socially constructed and enacted for Black girls and women in ways that are distinctively unique from the larger sociocultural race and gender expectations in U.S. society for the dominant group, (i.e., White men and women), as well as their racial counterparts, Black boys and men (Hill, 2001). In effect, most of what we know from available empirical work on race and gender identity are (1) general conceptualizations that may or may not accurately represent Black women’s identity beliefs (e.g., GST), or (2) how Black women compare to other groups (i.e., to White women or Black men) (e.g., Boisnier, 2003; Parks, Carter, & Gushue, 1996; Poindexter-Cameron, & Robinson, 1997). In addition, this dearth of research neglects the reality that Black women have experiences

that may alter the nature of their identity beliefs. A small, but growing body of literature has started to attend to the absence of Black girls and women from broader identity theory scholarship. These investigations take up questions of how race, gender and the intersection of race and gender factor into Black women's lived experiences, and more importantly, how Black women think about and attach meaning to these two social identities.

For example, Settles (2006) examined Black women's racial and gender identities with an intersectional framework that emphasized the unique integration of these identities through a quantitative measure that assessed whether the Black woman identity was more or less important than the individual identities of being a woman and a Black person. The author suggested that the intersection of race and gender may present particular identity-related difficulties for Black women, due to tensions between being Black and being a woman. This argument relates back to my earlier contention that one reason Black women's experiences have been overlooked in psychological scholarship is because they are subsumed within broader research on African Americans (grouped with men) and women (grouped with women from other racial/ethnic groups). From Settles' perspective, Black women may experience "identity interference," or identity conflict when their interests as an African American are pitted against their interests as a woman (King, 1988). Some evidence suggests that racial identity tends to be more salient for Black women (Gay & Tate, 1998; Levin, Sinclair, Veniegas, & Taylor, 2002) due to the broader racial climate in the U.S. Others suggest that Black women have unique experiences related to both identities simultaneously (i.e., racialized sexual harassment or being called a Black bitch) that make it difficult to disentangle the effects of race versus gender on their experiences (Buchanan, 2005).

Settles' findings suggest that Black women's intersectional "Black woman" identity was more important than the separate identities of being African American or being a woman. Participants also rated their racial identity as equally important as their gender identity, further suggesting that Black women may choose to create a sense of self that combines these two social identities. In relation to identity interference, Black women who encountered interference in the Black identity from the woman identity (e.g., When I am with a group of Black people, it seems like my opinions are less important because I am a woman) reported lower self-esteem and higher depression. It is telling that disruptions in Black women's enactment of their race, but not their gender, contributed to negative psychological outcomes. These results suggest that the two identities may operate in distinct ways in relation to Black women's psychological wellbeing, and further, that Black women experience gender-related difficulties within the Black community and their Black social networks that detract from their overall sense of identity.

Lastly, the qualitative portion of this study found that Black women mentioned the benefits of their intersectional social identities (i.e., self-complexity, opportunities in the workplace) as frequently as they discussed disadvantages (i.e., discrimination and stereotyping). Interestingly, the positive associations, such as being the first Black women in a particular position at work, were connected and tainted by the negative associations, such as being expected to carry the weight of multiple employees at work. This highlights the complicated reality that the benefits the participants associated with their identities as Black women also related to additional negative pressure, arguably due to their devalued social status position (i.e., stereotypical expectation that Black women can handle everything). The author suggested that future studies need to consider how Black women's intersectional identities relate to their discrimination experiences.

The former example draws attention to how Black women think about their race, gender, and race and gender, and a newly developed gendered-racial socialization scale highlights the unique messages that young Black women receive regarding their intersectional race and gender identities (Brown, Blackmon, Rosnick, Griffin-Fennell, & White-Johnson, 2017). Brown and colleagues suggested that Black girls and young women develop their sense of self, in part, through *gendered racial socialization*, or the process through which their surrounding communities provide specific messages to African American girls and boys based on their perceptions of the race-related experiences they are likely to have. For Black girls, this involves messages about what it means to be Black and female in a society that devalues both. This is the first measure designed to empirically assess gendered racial socialization among young Black women, and confirmatory factor analysis resulted in the identification of nine unique factors. This included factors such as “gendered racial pride and empowerment,” which consisted of messages that encourage young Black girls to feel good about themselves, specifically regarding hair texture, skin color, and physical features that are inconsistent with mainstream American beauty norms (Thomas & King, 2007). Another factor was “Internalized gendered racial oppression,” which included items about Black girls receiving and believing negative race and gender messages (e.g., Black women having a bad attitude or Black women with natural hair are less attractive).

Their findings present a developmental link between the socialization messages that Black girls receive while growing up, to the racial and gender identity beliefs that Black women have when they enter college. Importantly, the scale distinguishes between generalized racial messages about being African American or gender messages about being a girl/woman, and instead, describes messages that are specific to embodying both. This is an important step

forward in specifically investigating the ways that Black girls and women perceive, experience, and respond to the world around them in relation to the challenges they negotiate as racial and gender minorities. For example, understanding the nature of the gendered racial-ethnic socialization messages that Black girls receive and how they internalize or reject those messages may elucidate the extent to which certain identity beliefs are adaptive or disadvantageous in Black women's negotiation of PWI contexts. It is possible that some gendered racial-ethnic socialization messages and experiences serve as a precursor to the development of stereotypical identity beliefs that put young Black women at risk for academic or psychological maladjustment in much the same way that certain racial identity beliefs have been associated with poorer outcomes (e.g., Lee et al., 2013).

Finally, Jones & Day (2018) explored gendered racial identity among adult Black women using latent cluster analysis and an open-ended questionnaire asking about the qualitative meaning women attribute to their Black and woman social identity groups. The quantitative portion of the study identified four distinct clusters of race and gender centrality, namely, *Intersectional Engaged*, *Intersectional Aware*, *Race Progressive*, and *Gender Expressive*. The two intersectional categories included women who rated race and gender as congruently important to their self-concept, thus suggesting that both identities were of similar significance. Women in the "Engaged" category endorsed socialization messages from the Black community, such as "working twice as hard to earn the same recognition as Whites," and women in the "Aware" cluster scored highest on the measures of racial and gender centrality and reflected a nuanced understanding of how these two identities were interconnected to their oppression in society. The Race Progressive category was characterized by women who placed more importance on their racial identity and primarily discussed their experiences through an advanced

racial consciousness. Finally, women in the Gender Expressive cluster scored higher on gender centrality and endorsed more traditionally feminine identity descriptions of women (e.g., focus on beauty). This was one of the first studies to specifically examine identity centrality among Black women using a more intersectional approach. Importantly, the findings highlight that race and gender are important components of Black women's identities, and moreover, that the meaning-making processes around these identities are correlated. The cluster approach also enumerated distinct subgroups of ideologies among Black women, advancing our knowledge of how Black women perceive themselves considering their unique sociohistorical status.

In sum, identity status developmental approaches highlight how individuals progress from unexplored identity states to more complex ways of thinking about who they are and how their social status identities position them in relation to their surrounding environments. The present dissertation will expand the direction of current identity literature by using an identity status approach to concomitantly explore Black college women's racial and gender identity processes. I plan to explore women's level of centrality, exploration, and commitment upon their arrival to college, as well as the extent to which Black women's interpersonal discrimination experiences influence their exploration and meaning-making processes around race and gender over time. This investigation will extend prior literature by using a longitudinal approach to examine how Black women think about themselves as racialized and gendered individuals during a period that is often associated with significant identity change.

Identity Development during College: Emerging Adulthood in Context

Identity development occurs throughout the lifespan but is especially prominent during critical periods of cognitive growth and maturity such as late adolescence, or emerging adulthood (Umaña-Taylor, Douglass, Updegraff, & Marsiglia, 2017). For traditional aged 4-year college

students, college entry and the transition to college occurs during *emerging adulthood*, a period critical to personal identity development and subsequent academic and social adjustment (Mitchell & Syed, 2015). Emerging adulthood refers to the distinct developmental period between adolescence and early adulthood during which youth engage in extended identity exploration, independent from the direct socialization of parents and other childhood influences (Arnett, 2000). According to Habermas & Bluck (2000), youth increasingly use abstract systems and ways of thinking to reconcile and integrate aspects of their identity. In addition to the increasing capacity to engage in complex cognitive thinking, emerging adulthood also marks a time when individuals transition to new contexts and experiences, which can serve as a catalyst for development (Harter & Monsour, 1992). School transitions, such as entering the first year of college, have been shown to be significant periods of identity exploration and renegotiation (Wilson et al., 2016; Van Camp, Barden & Sloan, 2009).

As emerging adults begin their first college semester, they begin to make sense of who they are within the new setting and may be especially attentive to cultural cues and norms in the environment relevant to cultivating a sense of belonging and connectedness to others (Bronfenbrenner, 1989). The transition to college involves developing new relationships with family and friends, and new peer relationships become particularly salient for college-going emerging adults (Arnett, 2000). As young adults spend more time away from their home communities and families and more time around peers in the college context, they often encounter people from different backgrounds who may change the way they think about the world around them and their place within it (Azmitia, Syed, & Radmacher, 2008). Such interactions, both inside and outside the classroom, likely serve as triggers for social identity development. Encountering new perspectives can also transform individuals' belief systems and

consciousness around certain topics (Eccles, Templeton, Barber, & Stone, 2003). Navigating the institutional cues and expectations around social identities such as race and gender, within a predominantly White institutional context, may encourage identity development for Black women.

In general, identity development involves an increased understanding and acceptance of one's membership in a social identity group (Phinney, 1992); for Black women, this includes an awareness of how their group status as an African American and as a woman affords lower status and prestige in society. As Black women transition to PWI colleges during emerging adulthood, their classes and experiences on campus and surrounding areas with faculty, peer, and extracurricular activities may heighten their awareness of their racial and gender identity and how these social identities affect their lived experiences. For example, in the 1st year of college, Black women shift away from home communities and adjust to a new college environment. While Black women may have experiences that are positive and motivating related to their unique group membership, they may also encounter distinct challenges in the new college context. Prior research suggests that during this year, Black women confront negative racial stereotypes (e.g., stereotype threat) and feeling marginalized or isolated on campus, which has been associated with high levels of stress and dissatisfaction, as well as lower GPAs and decreased motivation (Baber, 2012; Griffin, Cunningham, & Mwangi, 2016; Schmader, Johns, & Forbes, 2008; Walton & Cohen, 2007). Recent evidence suggests that engaging in college-based organizations and mentoring activities that focus on racial diversity, equity and inclusion, or supporting students from underrepresented groups (i.e., women in STEM), can help mitigate the harmful effects of such experiences on students' college adjustment (e.g., Blake-Beard, Bayne, Crosby, & Muller, 2011; Shahid et al., 2018). These forms of campus engagement may spur

racial and gender identity development for Black women as they make sense of and find their place in a new campus environment. Thus, transitioning to college during the emerging adulthood period represents a developmentally significant period in which Black women may explore and further construct their racial and gender identities in response to new contextual experiences.

More recently, research with Black college students has considered how racial identity beliefs shift over time in relation to contextual experiences. For example, Fuller-Rowell, Burrow, & Ong (2011) considered how the 2008 presidential election of Barack Obama influenced the racial identity beliefs of African American college students using a longitudinal daily diary method two weeks before and five months after the event. The authors presented competing ideas regarding how the election of the “first Black president” would influence college students’ beliefs about race, namely that (1) such an important event would make race more salient and relevant for the self-concepts of Black students (Turner, Oakes, Haslam, & McGarty, 1994), thus contributing to an increase in racial centrality, or (2) that his election would lead to an immediate increase in racial centrality, followed by a longer-time decrease if Black students began to believe that race was a less important component of their self-concept. The latter suggestion was based on the idea that Obama’s election would represent an equitable shift in the U.S. social status structure for African Americans, such that race would be a less salient identity for Blacks because they would experience a great increase in sociopolitical power (e.g., Syed & Azmitia, 2009). Finally, the authors expected his election to serve as an “encounter” event for some African American students, thus contributing to an increase in racial centrality as well as a concomitant rise in reported racial exploration processes.

As expected, students generally reported greater levels of racial exploration and racial centrality immediately following the election. Thus, the election served as a significant race-related event that encouraged Black students to reengage the affective and connotative meanings they attached to their racial group membership. However, increases in racial identity exploration were contingent upon the extent to which students normatively defined themselves according to race. Students with higher levels of racial centrality were more likely to engage in identity exploration compared to students with lower levels of racial centrality. This finding is consistent with other research demonstrating that important race-related events (e.g., experiences of discrimination, cultural pride moment, etc.) are associated with racial identity exploration (Pahl & Way, 2006; Cross & Cross, 2008). These results also highlight how racial exploration may have different implications for individuals with varying levels of racial centrality. For example, Cross's earlier Nigrescence theory (1991) suggests that individuals move from a state of little to no exploration of their racial identity (pre-encounter) to a state of active identity exploration due to an event or encounter. Based on this perspective, racial identity exploration after the Obama election would primarily only occur for students with lower levels of racial centrality as a type of "encounter" moment. Instead, the results suggest that the election pushed high race-central Black students, as well, to renegotiate the meanings they attached to their racial group membership. What did it mean to be Black in America now that the highest elected official shared their skin tone? Overall, their investigation demonstrated that identity change may happen in response to a positive race-related event, and further, that identity exploration can occur in tandem with a strong sense of connection to one's social identity group.

More recently, Chavous, Richardson, Webb, Fonseca-Bolorin, & Leath (2018) examined Black college students' racial identity beliefs (racial centrality, group pride, and perceptions of

others' views of Blacks) over their freshman year of college at a PWI using latent class cluster analysis. The authors considered within-group variation in how Black students' identity beliefs changed or remained stable in relation to campus race-related experiences at the interpersonal and institutional level, as well as the extent to which racial identity change related to students' achievement motivation at the end of the first year. Findings indicated that students' centrality change related to their pre-college racial background; for instance, students who reported average or lower racial centrality and remained that way tended to come from neighborhoods and high school contexts with fewer African Americans compared to students with higher centrality across both time points. This demonstrates how the racial demographics of their pre-college contexts related to the sense of connection they had to their Black identity. Further, students with low, stable centrality scores reported having more close White friendships than those with higher, stable centrality. Students who entered college with lower centrality and cultivated more friendships with Whites may have aligned their initial racial centrality beliefs with their intergroup interactions in ways that allowed them to continue to view their race as less important to their self-concept. This finding illustrates that we cannot assume race will be similarly important to all Black students, even those who are immersed in college contexts that could make their race highly salient.

In addition, students with higher racial centrality over the first year of college reported more positive academic outcomes overall compared to students who reported that race was a less important component of their identity. Also, those who entered college with low or average racial centrality and remained low or decreased in centrality, reported less academic competence and more negative academic curiosity and persistence relative to students who entered college with higher racial centrality. This supports prior work suggesting that a strong racial group

connection can support the academic motivation and adjustment of Black students (Chavous et al., 2003). Further, the general findings from this study indicate that there is no one type of normative change in racial identity beliefs for African American college students during the emerging adulthood period. Instead, significant shifts or stability in racial identity beliefs related to both students' pre-college experiences, as well as the ways they chose to engage in the new college campus around them. In all, these studies suggest that (1) college is a developmental context that may encourage identity exploration and changes or new commitment to identity beliefs among Black women and (2) that Black women's identity beliefs, especially regarding race, may relate to academic and psychological outcomes.

College Adjustment: The Role of Race & Gender in Context

Each decade, significantly more Black women enroll and attend college in the United States (Allen, Jayakumar, Griffin, Korn, & Hurtado, 2006; National Science Foundation, 2017). To help maintain this positive trend, researchers should work to identify factors that contribute to the motivation and persistence of Black women in college, especially for Black women who attend institutions that historically excluded them due to their racial and gender identities (Harper et al., 2009; Winkle-Wagner, 2015). Social identity and developmental theorists have also explored the ways in which developing a coherent sense of self relates to academic and psychological health among emerging adults (e.g., Chavous et al., 2018). Scholars also suggest that the external messages young adults receive about their social identities in college influence their academic, social, and psychological adjustment to campus settings (Baxter-Magolda, 2014), in part due to the ways that individuals use their social identity beliefs to process and make sense of external messages and contextual experiences. Further, according to identity theory, central identities will have a greater impact on academic, behavioral, and psychological outcomes than

will less important identities because of their prominence within the individual's self-concept (e.g., Stryker & Serpe, 1982, 1994). For Black women, this could mean that their racial and gender identity beliefs, as well as the experiences they have during college related to these identities, may play a critical role in their overall college adjustment. In the present dissertation, I explore how Black women's meaning-making processes around race and gender inform their academic and psychological adjustment outcomes over the first-year transition.

Academic Adjustment

Racial Identity

Based on a breadth of studies with African American students, it is generally accepted that racial identity beliefs promote academic motivation, resilience, and achievement (e.g., Chavous et al., 2018; Hope et al., 2013; Syed & Azmitia, 2010). In particular, having a strong sense of connection to one's racial group (centrality), having positive feelings about one's racial group membership (private regard), and having a cultural understanding of the African American community within society (racial pride) has been associated with positive academic adjustment outcomes such as achievement motivation (Butler-Barnes, Leath, Williams, Byrd, Carter, & Chavous, 2018) and academic efficacy (Oyserman, Harrison, & Bybee, 2010). Further, literature highlights how racial identity beliefs, such as an awareness of racial discrimination, buffers against the deleterious influence of interpersonal discrimination on the academic outcomes of Black students (e.g., Oyserman et al., 2010). Most of this research focuses on adolescence as a period of identity development and change, a stage when youth begin to think more about how their social identities influence their experiences in surrounding contexts, such as school (Rivas-Drake et al., 2014). In the present dissertation, I contend that the transition to college represents a similar critical developmental period, in that emerging adults are making significant adjustments

to a new institutional setting, which may include reexamination or new exploration of their social identities. For Black women, this research suggests that certain racial identity beliefs, such as pride or a strong sense of connection to their racial group, may bolster their academic adjustment.

For example, Marsh (2010) examined whether young, high-achieving Black women endorsed racelessness (e.g., Fordham, 1988) or integrated their racial identity beliefs into their experiences as a student to maintain high academic performance. Like other work challenging racelessness as an adaptive strategy for Black students (e.g., Ford, Harris, Webb, & Jones, 1994; Harris & Marsh, 2010), findings indicated that the young women viewed themselves as part of a larger collective struggle within the African American community to use education as a route to upward social mobility. In addition, the students received support and encouragement from family and community members to strive for academic excellence, which integrated their perceptions of being Black with their identity as students. The students recognized that if they continued to pursue their education to attain upward social mobility, more non-Black colleagues would likely surround them. This translated into a worldview that included the belief that while it was necessary to live and work with others outside the Black community, they did not have to distance themselves from Blackness or their racial heritage. The women drew upon their racial connectedness to navigate less racially diverse school and workplace settings and discussed how “staying Black,” and possessing a strong racial awareness helped them remain grounded and motivated. While this study was conducted with Black girls in high school, the author suggests that future research needs to examine how high-achieving Black women in other school contexts (i.e., predominantly White spaces or college settings) negotiate their racial identity beliefs and achievement within institutional structures.

Another recent investigation with young Black women (Butler-Barnes et al., 2017) demonstrated that a strong connection to one's racial group and positive feelings about being African American was associated with higher achievement motivation beliefs over time; in addition, racial centrality mitigated the effects of perceiving less teacher support on girls' sense of academic curiosity in the classroom. Thus, for girls who felt more connected to their racial group, receiving less teacher support did not relate to decreased interest and motivation in school, supporting the assertion that racial centrality and other racial identity attitudes act in ways that protect Black women from negative cues in the school environment (e.g., Smalls, White, Chavous, & Sellers, 2007). In this same study, the authors found that for Black girls, feeling positively about being Black *and* feeling supported in school related to the highest levels of classroom engagement and curiosity. This suggests that while Black girls may draw on cultural assets such as racial identity beliefs to overcome risk factors (Evans-Winter, 2005; Thomas, Davidson, & McAdoo, 2008), immersion in supportive school contexts maximizes the academic potential of highly motivated African American students.

Compared to research on racial centrality or racial pride, there is less work examining how the process of racial identity exploration and commitment supports academic achievement. However, there are studies that highlight how African American students who have an internalized sense of racial identity or an "achieved" racial identity have better academic achievement and motivation outcomes compared to more unresolved identity beliefs (e.g., Perry, 2008; Spencer, Noll, Stoltzfus, & Harpalani, 2001). For example, in a sample of older African American high school students, Perry (2008) found that racial internalization attitudes (i.e., positive and internalized affirmation related to one's racial group membership) was associated with more school engagement and vocational exploration (readiness for making future

educational and occupational choices). Conversely, Brown, Rosnick, & Segrist (2016) found that greater internalized racial oppression (i.e., adoption of racially oppressive beliefs toward Black people from broader society such as notions of racial inferiority) was associated with a lower valuing of higher education among African American students. Students who endorsed more negative views about their racial group felt less control over their academic achievement and potential. While this study did not measure racial exploration explicitly, other research has connected higher internalized racial oppression with lower identity exploration processes among African Americans (e.g., Banks & Stephens, 2018), suggesting that racial exploration promotes more positive views of one's racial heritage and the abilities of members within the community.

Although the terminology may differ, racial internalization and an achieved racial identity require that individuals have thought meaningfully about what their racial identity means to them and formed a sense of attachment, i.e., engaged in racial identity exploration to an extent that they have made a commitment about their cognitive and affective beliefs about their identity as African Americans. Overall, extant literature suggests that racial identity exploration leads to a stronger commitment to one's racial group membership, oftentimes strengthening the ties between racial identity and self-concept. And in relation to achievement, the predominance of literature suggests that racial identity exploration, commitment and centrality serve as promotive cultural assets for the academic outcomes of African American women.

Gender Identity

There is dearth of research that focuses on gender identity development and beliefs among African American women in relation to academic achievement, motivation, and educational attainment (e.g., Marsh, 2010). Much of the work available focuses on gender role orientation, or the extent to which individuals endorse stereotypical feminine or masculine characteristics as

appropriate for their gender (e.g., Hill & Lynch, 1983) with adolescent European American girls. Gender role orientation relates more to the content of individuals' gender identity beliefs, which is somewhat empirically distinct from gender identity development, which relates to both *how* individuals develop their beliefs about gender (process), and the qualitative nature of those beliefs (content). In general, gender schema theory proposes that individuals' thoughts and feelings about gender are in response to culturally prescribed socialization practices (Bem, 1983), which can vary for members of different racial groups given unique societal and cultural histories (Collins, 2004). Of the work available with Black girls and women, findings indicate that their gender role beliefs are more egalitarian and less focused on traditional notions of femininity (e.g., Collins, 1991; Ward, 1996) compared to White women.

Hill (2001) argued that the historical legacy of racial and socioeconomic disenfranchisement and inequality experienced by Black families necessitated more flexible gender role socialization in Black families. Accordingly, girls' socialization to be self-reliant and independent from family members and the community contributed to motivational and behavioral differences in how Black girls thought about their potential as students and workers (Ramirez, Oshin, & Milan, 2017). For example, White girls were more able to adhere to traditional gender role philosophies, such as "males are the breadwinners of the family," whereas Black girls received the message that they needed to be financially independent. Regarding academic motivation and adjustment, Black women who endorse less traditional gender role beliefs may be more likely to expect and strive for success in male-dominated domains. Importantly, much of this literature focuses on gender differences in racial socialization practices among African American families (e.g., Suizzo, Robinson, & Pahlke, 2008); thus, while it speaks to how the development of gender-related beliefs among Black girls is cultivated by family

members and other socialization factors, the studies are not directly focused on gender identity development. Instead, the studies highlight how different racial and ethnic groups have distinct ideas about what their daughters need to become well-adjusted adults within U.S. society. As Black girls transition to college, they carry their prior socialization and gender role beliefs with them in ways that may translate to their academic goals and motivation.

There is also research that highlights how girls' gendered self-concept relates to their academic motivation and educational goals (e.g., Kiefer & Sekaquaptewa, 2007). In this body of work, gender identity is framed in relation to certain behaviors that stem from stereotypical beliefs (i.e., boys do better in math and science because they have more spatial reasoning than girls do; Kessels et al., 2014). For example, Leaper, Farkas, and Brown (2012) considered whether components of traditional gender identity and older adolescent girls' gender self-concept (i.e., conformity to traditional gender ideals and sense of gender-role connectedness) related to motivation in math, science, and English in an ethnically diverse sample of youth. Findings indicated that across racial/ethnic groups, girls exposed to feminist beliefs and endorsed more gender-egalitarian beliefs, compared to traditional gender role beliefs, demonstrated higher math and science motivation. A subset of this research highlights the association between students' gender identity beliefs, their gendered discrimination experiences, and their academic performance in various domains (mostly Science, Technology, Engineering, and Math; STEM) (Kiefer et al., 2007; Johnson, 2011; Pietri, Johnson, & Ozgumus, 2018). Scholars have found that when an institution sends the message that STEM is reserved for students who are male, White, and upper middle-class, women are less likely to persist in those departments (e.g., Hurtado, Cabrera, Lin, Arellano, & Espinosa, 2009) and less likely to believe they are academically competent and prepared (Ong, Smith, & Ko, 2018). Thus, this approach focuses on the perceived

misfit between girls' gender identity and the masculine stereotyping of certain academic domains (e.g., Settles et al., 2016).

While this literature does not focus on gender identity *development* among women, and more specifically, Black women, it underscores how contextual experiences relate to individual's beliefs about their identity and their ability to do well academically in certain contexts. In thinking about Black women's academic adjustment to PWI settings, gender discrimination literature intimates that Black women may explore the meanings related to their gender identity when they encounter tokenism or gendered discrimination. However, given prior research illustrating that Black girls and women are less likely to endorse typical feminine gender role beliefs (e.g., Jacobs, 2016; Kane, 2000), it is also possible that having a strong identification with one's gender may not undermine academic motivation or adjustment in the same ways for Black women as found in prior literature with White women. Arguably, Black women who draw on their racial identity as a source of resilience during college, may also frame their gender in a similar manner. Thus, "defying the odds" of higher education success by belonging to two historically marginalized social identity groups, may promote academic persistence among Black women.

Psychological Adjustment

Racial Identity

In addition to academic adjustment, it is also important to consider how Black women's racial identity beliefs relate to their psychological adjustment to college. While social identity theorists tend to highlight the positive effects of racial identity on individuals' wellbeing (Tajfel & Turner, 1986), other research indicates that African Americans who endorse negative racial stereotypes about their group or have beliefs consistent with earlier stages of racial identity

development (i.e., pre-encounter) tend to exhibit poorer mental health outcomes (Cross, 1991; Williams & Mohammed, 2013). This work suggests that there may be certain racial identity processes or beliefs that are more adaptive than others are (i.e., positive versus negative views of African Americans or having a strong sense of racial connectedness) in relation to the mental health and psychological adjustment of African Americans. While most of this work uses indicators such as anxiety, depression, and self-esteem, I am interested in focusing on how Black women's engagement with their racial identity beliefs relate to their ability to navigate their institutional contexts in ways that facilitate autonomy, personal growth, and a sense of mastery. These three indicators seem especially relevant for Black women adjusting to college as they begin to act more independently and continue to think about who they are in relation to the new college context.

For example, *autonomy* refers to how individuals act in agentic ways to maintain and improve their quality of life (Shrogen & Shaw, 2016). According to Wehmeyer (2006), autonomy is a form of self-determined behavior that involves a person initiating and responding to events in a psychologically empowering manner (i.e., belief in the relationship between your actions and the outcomes you experience). According to self-determination theory (SDT), autonomy taps into the degree to which an individual (a) acts according to his or her own preferences, interests, and abilities, and (b) is free from unwelcome external influence or interference (Wehmeyer, 2003). This includes understanding your strengths and limitations, as well as the ability to seek out support when needed. *Personal growth* represents how people change and develop throughout the life span in cognitions, behaviors, and emotions (Robitschek, 1999). Prior work suggests that personal growth occurs across various domains of an individuals' life based on what they consider to be important and central to who they are (Robitschek, 1999;

Weigold, Porfeli, & Weigold, 2014). Recently, Robitschek and colleagues (2012) organized personal growth into four categories: readiness for change (an individual's knowledge of being ready to change in a domain), planfulness (an individual's intentional development of a change process), using resources (an individual's active use of external resources to facilitate change), and intentional behavior (an individual's engagement in external and/or internal behaviors when growing). Finally, *environmental mastery* refers to an individual's sense of control over their life outcomes (Kiecolt, Hughes, & Keith, 2009). A sense of mastery in one's personal life has been related to better mental health outcomes because it fosters active, problem-focused coping styles that encourages individuals to work through daily challenges in ways that help them achieve goals and maintain positive self-esteem (Kiecolt et al., 2009). In all, this literature suggests that a stronger sense of autonomy, personal growth, and environmental mastery relates to better psychological health.

Still, much of the empirical research with these indicators have only included White college students, thus raising questions as to whether the constructs will yield similar results with Black college women (Weigold et al., 2014). Scholarship with African American samples on related characteristics, such as self-efficacy and resilience, suggest that these constructs represent value systems that can help individuals navigate unjust environments and maintain a sense of positive wellbeing (Caldwell-Colbert, Parks, & Eshun, 2009; Lightsey & Barnes, 2007). Given the prevalence of race and gender discrimination on PWI campuses targeted at Black women (Hannon et al., 2016; Porter, 2016), developing a strong sense of autonomy and having a sense of control over one's surrounding environment may be particularly important for Black women's psychological adjustment to college. Further, Weigold's and colleagues' (2014) examination of personal growth and racial identity demonstrated that individuals who reported higher racial

centrality, private regard, and certain racial ideologies (oppressed minority, assimilationist, and humanist ideologies) were more likely to engage in personal growth processes. Thus, racial identity beliefs may relate to certain positive psychological processes among Black college women, but this has yet to be explored empirically. There is also a budding literature on the Strong Black Woman (SBW) schema and the socialization of Black girls to be independent and “graceful under pressure,” which highlights how Black women develop and project a sense of control over their life circumstances (Bronder, Speight, Witherspoon, & Thomas, 2014). The operationalization of the SBW schema involves a high sense of control (i.e., I’ve always felt that I could make of my life what I wanted to make of it), determination (i.e., When things don’t go the way I want them to, that just makes me work even harder), and a tendency to avoid help-seeking behaviors due to the belief that one can persevere alone (i.e., Sometimes I feel that if anything is going to be done right, I have to do it myself) (Bronder et al., 2014). The history of Black women’s racial and gender oppression in the U.S. likely contributes to this type of active, control-focused coping style, and overall, this growing body of work intimates that Black women’s engagement with their racial identity beliefs represent an important, yet understudied area of research regarding Black women’s psychological wellbeing and adjustment.

Gender Identity

Scholars are also drawing more empirical attention to how the content of Black women’s gender identity beliefs relate to psychological adjustment. For example, Saunders & Kashubeck-West (2006) examined the associations between feminist identity beliefs, gender role orientation, and psychological wellbeing among racially diverse women, and found that endorsing a stronger feminist identity was related to better psychological wellbeing outcomes, including more personal growth and a stronger sense of autonomy. The authors suggested that feminist

ideological beliefs support positive mental health correlates among women because they feel less bound to cultural stereotypes on women that limit their sense of self-confidence, assertiveness, and control. While the study presented a monolithic picture of how gender role beliefs and feminist identity influenced psychological functioning across racially diverse women, the authors used similar indicators of psychological adjustment being used in the present dissertation (e.g., environmental mastery, autonomy, and self-acceptance) and included African American women in the sample. Thus, the findings related to feminist identity beliefs may speak to how gender identity exploration influences psychological adjustment, because acquiring gender beliefs that challenge societal norms (i.e., feminist identity) requires intentional reflection. Hence, engaging in more gender exploration might relate to better psychological adjustment among Black women. However, this assumes that exploring one's gender identity would result in an increased sense of solidarity with other women or an increased importance placed on one's gender identity (i.e., stronger feminist identity). Given their status as racial minorities, this may not be the case for Black women. It is alternately possible that more gender exploration will relate to worse psychological adjustment if this process contributes to the belief that a stronger gender identification does not afford the same privilege and benefits as White women (Collins, 2000).

While scant, there is evidence that gender identity beliefs can mitigate the effects of negative experiences. For example, Cooper, Guthrie, Brown & Metzger (2011) examined the relationship between daily hassles (i.e., day-to-day concerns of adolescents, "trying to get good grades"), gender identity beliefs, and psychological functioning among Black adolescent girls. Findings indicated that androgyny (i.e., exhibiting both feminine and masculine personality traits) was associated with increased life satisfaction and reduced anxiety among the girls, suggesting that more flexible gender role beliefs was associated with improved psychological

functioning. The results also indicated that while experiencing more daily hassles was generally related to greater depressive and anxiety symptoms, this relationship was less strong for Black girls who endorsed a more feminine or androgynous gender role orientation. This suggests that gendered ideologies may buffer the effects of negative experiences on Black girls' psychological functioning, but we know less about the relationship between gender identity beliefs and psychological health in the context of gender discrimination. The closest correlate is work by Settles' and colleagues (2016) which found that among women in STEM, having higher gender centrality (gender being an important part of their identity) related to better psychological wellbeing. Still, most of the samples were White women (82%), and gender centrality did not moderate the association between academic climate (i.e., department as welcoming/alienating, kind/hostile, etc.) and psychological wellbeing. Thus, the present dissertation will address several gaps in the literature by highlighting how three dimensions of gender identity (i.e., centrality, exploration, and commitment) correspond to positive psychological adjustment outcomes in the context of gender discrimination experiences among Black women.

Considering Race & Gender Identity for Black Women's College Adjustment

Finally, a core part of this project is to consider how race and gender identity function interactively in relation to Black women's contextual experiences and indices of adjustment. While the literature in this field is slowly, but steadily growing, there are a few studies that have considered how racial and gender identity beliefs, examined together, function for Black girls and women (e.g., Buckley & Carter, 2005; Chavous, Harris, Rivas-Drake, Helaire, & Green, 2004; Stewart, 2008; Winkle-Wagner, 2009). For example, in a study with Black adolescent girls, Buckley and colleagues (2005) found that Black girls who endorsed more androgynous gender role beliefs, reported higher levels of self-esteem than girls who endorsed more feminine

gender role beliefs. Further, androgyny was associated with higher scores of internalization on the Black racial identity measure. Racial identity internalization reflects having a positive attitude toward members of one's own racial group and engaging in interpersonal relationships and activities characterized by social and political activism (Parham & Helms, 1981). Other research has found a similar connection between an internalized sense of racial identity, androgynous gender roles beliefs, and positive academic outcomes (Oyserman et al., 2010; Robinson-Awana, Kehle, Bray, Jenson, Clack, & Lawless, 2001), which is akin to how the authors framed their findings on psychological adjustment among the girls. Thus, Black girls whose idea of womanhood included characteristics such as independence, self-reliance, and confidence (i.e., androgyny) were also more likely to have a stronger sense of racial group connectedness (internalized sense of racial identity), which in turn, related to higher self-esteem. The authors suggest that these girls likely display both stereotypically masculine and feminine characteristics (e.g., independence but deference to authority) in ways that fit gender role expectations from their community, which elicits praise and reinforcement for their behaviors (Collins, 2000).

In a more recent study, Hannon, Woodside, Pollard, & Roman (2016) explored Black women's lived experiences as college students at a PWI and found that interviewees described having to navigate multiple worlds, negotiate expectations around where they belonged, and find adaptive ways to cope with experiences of racial and gender discrimination. Many of the women described feeling set apart from other students and felt a pressure to prove their academic merit in classes with mostly White students. Regardless of whether they attended racially diverse, predominantly White, or predominantly Black high schools, participants described the transition to the PWI context as a new reality of being a "minority within a minority." Some of the women

described their two worlds as a “double job—living as a Black student at a PWI and having to exist as a Black student within the Black community on campus,” (p. 658) highlighting the complex ways that the salience of race and gender fluctuated depending on the surrounding context. Finally, interviewees recounted how they developed various coping strategies to adapt to the new surroundings, most of which evolved into more self-actualized beliefs about their identity (Stewart, 2008). One woman stated, “It means that you are definitely the minority. It means that you must step out of your comfort zone. Get ready for some new experiences and how to deal with them.” (p. 661). While qualitative, this study suggests that experiences related to both race and gender were important to women’s identity development, and moreover, that the predominantly White institutional context encouraged these students to explore anew what it meant to be a racialized gender minority (Malcom & Malcom, 2011). In all, I believe that the most comprehensive and nuanced way to contextualize Black women’s psychological adjustment to college is through a multidimensional lens that accounts for both race and gender (Sanders & Bradley, 2005).

Summary

Black college women are an understudied population in education and psychology literature. For Black women who attend PWIs, the academic and social norms of these institutions have historically and contemporaneously devalued both African Americans and women (e.g., hooks, 1991; Collins, 2000; Jacobs, 2016). While university settings are designed to aid and support all students, Black women and students from other marginalized groups often encounter interpersonal discrimination that undermines the benefits of formal and informal resources at the university (Espinosa, 2011; Hannon et al., 2016; Stewart, 2008). Thus, Black women must find other avenues of support to sustain their academic persistence and emotional

wellbeing. For many, this involves finding out more about who they are, how they are perceived by others, and drawing on their identity beliefs as cultural assets (Shorter-Gooden & Washington, 1996; Winkle-Wagner, 2009). For some, this process of identity exploration is extensive—giving rise to new insights about how they are connected to a historical legacy of vibrant Black women, both past and present. For others, identity exploration may include a novel understanding of racialized and gendered stereotypes attached to Black female identity, or an awareness of how race and gender are connected to the tasks or roles placed upon them by others. There may also be Black women who do not consider their race and gender identity beliefs protective factors, and instead, use other sources of support to maintain resilience. The present dissertation aims to explore a piece of this story by examining individual variation in how Black women perceive and respond to race and gender discrimination experiences in college considering their identity beliefs. This study will build on prior calls to capture the multidimensionality of identity development among Black women by considering race and gender centrality, exploration, and commitment (e.g., Jones et al., 2018), and will also expand prior literature by examining how identity beliefs change or remain stable over time (Chavous et al., 2018).

Chapter Three: A Person-Oriented Approach to Studying Racial and Gender Identity Beliefs among Black College Women: Examining Associations with Discrimination and College Adjustment during the First-Year Transition

The Current Study

The primary aim of this study was to determine what patterns of racial and gender identity beliefs emerged among Black women who were transitioning to college and assess the ways in which certain cluster profiles of racial and gender identity beliefs played a promotive or protective role for college adjustment during the first year in response to race and gender discrimination experiences. Drawing from the first two Times of a longitudinal data set of African American students from the College Academic and Social Identities Study, the current investigation represents the first to examine within-group racial and gender identity profiles among Black college women. Furthermore, it is the first person-centered examination to examine how race and gender identity beliefs mitigate the effects of race, gender, and race and gender discrimination on various indicators of academic (competence, positive affect, curiosity, and persistence) and psychological adjustment (autonomy, environmental mastery, and self-acceptance).

The first research question assessed was: (RQ1) What multidimensional clusters emerged regarding Black women's exploration, commitment, and identity centrality around their racial and gender identities at Time 1 (fall of first year)? While I did not have specific predictions

about the number of clusters that would emerge in Black women's racial and gender exploration, commitment, and centrality profiles, I expected to see variation in the extent to which participants had meaningfully engaged with these identities (e.g., Jones et al., 2018). I anticipated racial and gender profiles that varied in how strongly they were attached to their race and gender identities (centrality), how much time Black women had spent thinking about and trying to find out more about issues related to race and gender (exploration), and the extent to which they had a clear sense of what their racial and gender group membership meant to them (commitment). As one example, this person-oriented approach could reveal groups of Black women who enter college with high levels of racial and gender exploration and commitment and a passionate sense of attachment to these identities, as well as groups of Black women who have given little thought to either their racial or gender membership and consider these identities less relevant to their self-concept. It is also possible that a cluster group would emerge in which Black women indicated high levels of racial and gender exploration and a clear sense of what their racial and gender group background meant to them but report a lower sense of group belonging to either identity group.

Prior research suggests that Black youth spend an increasing amount of time thinking about what their racial identity means to them during adolescence, resulting ideological beliefs and feelings about their racial group membership (e.g., Chavous et al., 2003). There are also a growing number of studies focusing on correlates of gender identity development among young Black girls (Gushue & Whitson, 2006; Jacobs, 2016). Finally, recent work with Black college students highlights patterns of change and stability in racial centrality, private regard (group pride), and public regard (perceptions of others' views of Blacks), drawing attention to how critical transition periods such as the first year of college, could encourage identity development

(Chavous et al., 2018). The present study built upon this work by exploring cluster patterns in three dimensions of race and gender identity beliefs (centrality, exploration, and commitment) with Black college women.

The second research question examined how Black women's cluster group membership was associated with discrimination experiences (RQ2) and asked: How are Black women's racial and gender identity profiles at Time 1 associated with experiences of interpersonal discrimination at Time 2? I expected that Black women in cluster groups that were characterized by a stronger identification with race, gender, or both, would correspondingly report more perceived experiences of discrimination in that social identity category. Framed more explicitly, for example, I expected that a cluster group whose members were characterized by higher levels of racial centrality, exploration, and commitment and lower levels of gender centrality, exploration, and commitment, would report more racial discrimination than gender discrimination. There is research to suggest that African Americans who have a stronger sense of identification with their racial group (racial centrality) are more likely to perceive experiences of racial discrimination (Burrow & Ong, 2010; Sellers et al., 2003). Previous research with Chinese adults and U.S. college students has revealed positive associations between the strength of gender identification and perceived gender discrimination in a similar manner to racial centrality and discrimination research (e.g., Foley et al., 2006; Foley, et al., 2015; Foster, 1999), but these studies specifically highlight organizational work contexts and do not focus on African American populations. Further, given that Black women may think about their racial and gender identity in various ways (for review of monist, additive, and intersectional approaches to identity, see Winkle-Wagner, 2009b), there is also a need to disentangle the ways in which Black women frame their identities around race, gender, and race/gender in relation to their contextual

experiences of discrimination. For example, if a cluster emerged that was characterized by women with high levels of racial centrality, exploration, and commitment, prior research suggests that these women would perceive, and report more racial discrimination compared to gender discrimination. In general, I expected that the extent to which an identity is salient and relevant to one's self-concept would have a direct relationship to the likelihood that an individual would be receptive to instances of bias related to that identity.

The next research question (RQ3) focused on the associations between Black women's cluster group membership and their academic and psychological adjustment at Time 2 (spring)? I hypothesized that Black women in cluster profiles that are characterized by a stronger sense of attachment and commitment to their racial and gender identity would demonstrate better academic and psychological outcomes. Prior research with African American students suggests that a strong sense of attachment and identification with one's racial group (racial centrality) promotes academic engagement and achievement in college (Chavous et al., 2018; Cokley & Moore, 2007), as well as adaptive psychological adjustment (Hope et al., 2013). In relation to gender centrality, some evidence suggests that a stronger identification with one's gender membership promotes academic engagement and career aspirations (Gushue et al., 2006; Settles et al., 2016), while literature on discrimination highlights how gender centrality and salience can undermine academic achievement among women in certain disciplinary contexts (e.g., Shapiro & Williams, 2012). Finally, while research on gender identity and psychological well-being is limited, Dubois and colleagues (2002) found that Black girls with a stronger gender identification (adapted versions of the MEIM; Phinney, 1992) reported higher self-esteem than those who felt less strongly connected to their gender group. Given the extant available literature, I expected racial and gender centrality to operate as promotive cultural assets among Black

college women, in line with evidence highlighting how individuals with a stronger sense of identification may focus on the positive aspects of said social identity (e.g., Sellers et al., 2003; Settles et al., 2016).

There is less research considering the implications of race and gender identity exploration or commitment for Black women's academic and psychological outcomes. However, building on the research with race and gender centrality, I hypothesized that Black women who had engaged in more racial and gender exploration and had a stronger sense of commitment to these identities would report better academic and psychological outcomes after the first year of college. Several studies with adolescent samples note that racial/ethnic identity achievement (a status characterized by high levels of exploration and commitment) is correlated positively to adjustment indices like interest in learning (Borrero & Yeh, 2011), achievement (Buckley et al., 2005), and global self-esteem (Turnage, 2004). The findings from this work suggest that the processes associated with identity exploration and commitment—intentionally finding out more about one's group membership and forming a sense of attachment to that group membership—supports academic and psychological functioning among younger Black students (Rivas-Drake et al., 2014). In all, I expected that the exploratory process associated with forming a stronger sense of attachment and commitment to one's race and gender are connected in such a way that they will function similarly for Black women's college adjustment outcomes.

The fourth research question in this study tied together the previous two questions on discrimination and adjustment by analyzing how experiences of race and gender discrimination related to Black women's academic and psychological adjustment after their first year in college: (RQ4) How are Black women's experiences of interpersonal discrimination at Time 2 associated with their academic and psychological adjustment at Time 2? Do these relationships vary by

cluster group membership? I hypothesized that more instances of interpersonal discrimination related to race, gender, or race and gender would relate to decreased academic performance and psychological well-being among Black women in the sample. I did not have specific hypotheses about how these relationships might vary by cluster group membership. Prior research provides ample evidence that racial discrimination diminishes the academic performance and psychological well-being of African American college students (DeBlaere et al., 2013; Donovan et al., 2013; Greer, 2011; Hausmann et al., 2009; Johnson, 2012). While it is worth noting that some African American students respond to instances of racial discrimination by striving and achieving academic success (Fries-Britt & Griffin, 2007), this type of coping mechanism often relates to poorer psychological health and a lowered sense of belonging (Johnson, 2012). Similarly, literature related to gender discrimination suggests that women who are more aware of their gender's stigmatized status perform significantly less well on academic tasks, given their anxiety about negative academic stereotypes (Brown et al., 2003; Pinel, 1999). Finally, a growing body of work highlights how discriminatory treatment related to race and gender undermines Black college women's academic and psychological well-being (Henry et al., 2012; Lewis et al., 2017; McLaughlin et al., 2010; Winkle-Wagner, 2015).

The final research question in the present study aimed to explore how race and gender identity beliefs functioned interactively as promotive or protective cultural assets for Black college women during the first-year transition: (RQ5) To what extent does cluster group membership at moderate the associations between interpersonal discrimination experiences and academic and psychological adjustment? Although no prior work has integrated Black women's beliefs about their racial and gender identity as protective or promotive factors in this way, patterns identified in previous studies focusing on racial identity and Black female identity

inform my hypotheses regarding the relationship between cluster group membership, discrimination experiences, and college adjustment. In general, research with adolescents and college students suggests that racial identity beliefs (i.e., racial centrality, racial pride) serve a protective function in the context of discrimination for Black students' academic achievement and motivation (e.g., Chavous et al., 2003) and psychological well-being (e.g., Banks et al., 2007; Sellers, Caldwell, Schmeelk-Cone, & Caldwell, 2003; Szymanski et al., 2016). Jones et al. (2007) found that multicultural identity attitudes lessened the harmful influence of race-related stress on Black women's depressive symptomology, which may extend to other racial identity profiles, as well. I expected that Black women who encounter discrimination and belong to cluster groups characterized by stronger attachment and more exploration and commitment would show better outcomes than Black women in other cluster groups.

Method

Overview of Dissertation Data

Data for this dissertation were drawn from the College Academic and Social Identities Study (CASIS) (PI: Dr. Tabbye Chavous). CASIS examines African American college students' interpersonal and contextual discrimination experiences (with race and gender) over time and explores the associations between such experiences with students' academic identities and college adjustment. CASIS employed a cross-sequential research design with three cohorts of students. Each cohort completed surveys during the fall semester of their first year; thus, each initial Time of data for cohorts includes either undergraduate first-years or first-year transfer students. In the following spring of the same academic year, participants completed a second survey. Participants were contacted each spring semester after the first year of the study to take follow-up surveys during their enrollment at the four-year university (from 2012-2017).

Thus, Cohort 1 included five potential times of data (fall of first year and four subsequent spring surveys); Cohort 2 included four times of data (fall of first year and three subsequent spring surveys); and Cohort 3 included three times of data (fall of first year and two subsequent surveys). Table 27 provides a visual representation of the CASIS research design. Participants may have not completed each subsequent time of spring data, and the overall sample for CASIS (n = 2,074) were students from various racial/ethnic backgrounds including African American/Black (n = 791), Asian American (n = 566), Latina/o/x (n = 359), Biracial/Multiracial (n = 201), Asian/Pacific Islander (n = 50), Other (n = 47), Caucasian/White (n = 36), and Native American (n = 24) students attending one of five PWI institutions in the Midwest. Given my focus on within-group variation in the college and identity experiences of Black women, this dissertation focused on the subsample of Black women in the CASIS project who participated in at least two Times of data collection on the main variables of interest.

With this initial inclusion criteria, the subgroup drawn from the overall CASIS data included 501 Black college women³ ranging from 17-18 years of age, attending one of five predominantly White institutions in the Midwestern region (see Table 28 for demographic information on each institution). Inclusion criteria for the present study included self-identifying as an African American/Black woman. Regarding ethnicity, four hundred forty-one (88%) identified as African American, twenty-eight (6%) identified as African, fourteen (3%) identified as Caribbean American, seven (1%) identified as biracial, and eleven (2%) identified as other. For sexual orientation, four hundred seventy women (94%) identified as heterosexual, three (0.5%) identified as gay/lesbian, twenty (4%) identified as bisexual, and six (1%) reported other. Regarding hometown, two hundred thirty (46%) reported being from urban/metropolitan areas,

³ Participant demographic information is provided from the first wave of data collection for each cohort (Time 1-fall semester of first year).

one hundred thirty-six (27%) reported being from suburban areas, one hundred seventeen (23%) reported being from small towns or cities, and fifteen (3%) women reported being from rural locations. The racial composition of the women's neighborhoods ranged from less than 20% Black for ninety-three (19%) women, 20-40% Black for eighty-one (16%) women, 41-60% Black for sixty-eight (14%) women, 61-80% Black for seventy (14%) women, and 81-100% Black for one hundred eighty-eight (38%) women. Annual household income varied widely from <5K for nineteen (4%) women, 5K-45K for one hundred eighty-one (36%) women, 45K-75K for one hundred eleven (22%) women, 75K-105K for seventy-four (15%) women, 105K-135K for twenty-nine (6%) women, over 135K for thirty-four (7%) women, and unsure for thirty-four (7%) women (see Table 28 for percentage breakdown of demographic information). At the first Time of data collection for each cohort, participants were either first year students (n = 493, 99%) or first year transfer students (n = 8, 0.01%). Finally, of the original sample, approximately 305 women completed Time 2 data (61%; spring of the first year) and 285 completed Time 3 data (57%; spring of the junior year).

Overview of Dissertation Procedure

Beginning in the fall of 2012, participants for the larger CASIS study were recruited through a multi-university initiative focused on minority retention in STEM fields. Researchers received a list from each institution's registrar's office with incoming and enrolled African American students. At the initiation of the study, students who self-identified as African American/Black with the university received a recruitment email from the university registrar's office with a link to an online Qualtrics survey. These emails included a detailed description of the project and information regarding how to access the web-based survey. Students were asked to complete the first fall survey within six weeks of the academic term, and several reminder

emails were sent after the initial message. Students were given a unique study ID and web address for survey completion. Students completed surveys at the beginning of their first year and the spring after their first year. They were recruited for continued participation in the fall and spring of each additional academic year. To maintain participation, student payments were increased \$5 each year for survey completion, and students entered a raffle for a bonus prize upon completing the surveys (e.g., MP3 player).

For the present study, we analyzed a subsample of the data from Black female participants. The survey included a range of demographic questions (e.g., age, school year, university, country of birth), as well as items related to campus experiences (e.g., mentors from same race/gender background, perceptions of campus climate, perceived ethnic fit, racial hassles, etc.), and academic motivation beliefs (e.g., academic engagement scale, time spent on class assignments, college satisfaction, etc.). To promote ongoing participation in the longitudinal study, compensation was increased by \$5 each time, and compensation started at \$20.

Demographics on Institutional Settings

Data were collected from five selective predominantly White institutions in the Midwest. At the time of the study's commencement (fall 2012), undergraduate enrollment ranged from approximately 19,000 students to 39,000 students at the four colleges. The universities varied in selectivity, with average acceptance rates from 29% to 84%. African American undergraduate enrollment ranged from approximately 4% to 23%, while European American undergraduate enrollment ranged from approximately 50% to 80%. Appendix A provides general information by institution, including the number of respondents from each institution.

Overview of Study Measures

Demographic Information

Respondents reported several items that were related to their personal backgrounds, including race and ethnic identification, gender, social class status, sexual orientation, household income prior to college, hometown description, and racial composition of students' prior neighborhood and high school (see Appendix A).

Racial & Gender Identity Beliefs

Racial Centrality. The racial identity items used to assess racial centrality in this data set were drawn from the Multidimensional Inventory of Black Identity (MIBI; Sellers et al., 1997) (see Appendix B). The MIBI measures different racial identity attitudes among African Americans regarding the significance of race in how they define themselves (i.e., centrality) and the qualitative meanings they attach to membership in their racial group (i.e., private regard and public regard). The current study focuses on racial centrality, which refers to the extent to which race forms a core part of an individual's self-concept. The subscale includes three items (e.g., "Being a member of my racial/ethnic group is an important reflection of who I am" and "I have a strong sense of belonging with other people from my racial/ethnic group."). Participants responded on a 1 to 7 Likert-type scale indicating 1 = strongly disagree to 7 = strongly agree, and items were recoded such that higher scores indicated higher racial centrality. Interrater reliability was good at Time 1 ($\alpha = .81$) and Time 2 ($\alpha = .83$).

Gender Centrality. The gender identity scale used in this data set were items drawn from Luhtanen & Crocker's (1992) scale on collective self-esteem and was intended to assess the extent to which an individual defines his/herself according to gender (see Appendix B). Items from this modified scale have been used in other studies (e.g., Kiefer et al., 2007) as an indicator of how central being a woman is to individuals' self-concept, and in the current study, "gender" was used in the place of "being a woman." The current study used four items to measure gender

centrality among participants, such as “Being a member of my gender is an important reflection of who I am,” and “Overall, my gender has very little to do with how I feel about myself (reverse-coded)”. Participants responded on a 1 to 5 Likert-type scale indicating 1 = strongly disagree to 5 = strongly agree. In calculating scale means, items were recoded such that higher scores indicated higher gender centrality. Interrater reliability was okay at Time 1 ($\alpha = .58$) and Time 2 ($\alpha = .57$).

Racial Identity Exploration & Commitment. The racial identity exploration and commitment items were drawn from the multi-group ethnic identity measure (MEIM; Phinney, 1992) to measure the extent to which individuals report actively engaging with the meaning and social implications of their racial/ethnic group membership (e.g., *exploration*, “I have spent time trying to find out more about my own racial/ethnic group, such as history, traditions, and customs”), as well as individuals’ sense of belonging or attachment to their racial/ethnic group (e.g., *commitment*, “I have a clear sense of what my racial group membership means to me”) (see Appendix C). Six items were used in the current study, four to assess participants’ racial/ethnic exploration and two to measure participants’ racial/ethnic commitment. Respondents answered on a 1 to 4 Likert-type scale ranging from 1 = strongly disagree to 4 = strongly agree. In calculating scale means, items were recoded such that higher scores indicated more racial/ethnic identity exploration and a stronger sense of racial/ethnic identity commitment. For racial exploration, interrater reliability was good at Time 1 ($\alpha = .67$) and Time 2 ($\alpha = .75$). For racial commitment, interrater reliability was okay at Time 1 ($\alpha = .60$) and Time 2 ($\alpha = .64$).

Gender Identity Exploration & Commitment. The gender identity exploration and commitment items were adapted from the multi-group ethnic identity measure (Phinney, 1992), which was originally intended to measure the extent to which individuals report engaging

actively with the meaning and social implications of their racial/ethnic group membership (e.g., “I think a lot about how my life will be affected by my racial/ethnic group membership.”). Items were amended such that “race” was replaced with “gender” (e.g., “I think a lot about how about my life will be affected by my gender” (see Appendix C). Six items were used in the current study, four to assess participants’ gender exploration and two to measure participants’ sense of gender identity commitment. Respondents answered on a 1 to 4 Likert-type scale ranging from, 1 = strongly disagree to 4 = strongly agree. Items included (e.g., *exploration*, “I really have not spent a lot of time trying to learn more about gender issues” (reverse-coded) and (e.g., *commitment*, “I have a clear sense of what my gender membership means to me.”). In calculating scale means, items were recoded such that higher scores indicated more gender identity exploration and a stronger sense of gender identity commitment. For gender exploration, interrater reliability was good at Time 1 ($\alpha = .72$) and Time 2 ($\alpha = .76$). For gender commitment, interrater reliability was okay at Time 1 ($\alpha = .56$) and Time 2 ($\alpha = .65$).

Racial & Gender Discrimination Experiences

Daily Hassles. Black women reported whether they had experienced discrimination related to race, gender, or race and gender at least one in the past year (see Appendix D). We used a modified version of the Daily Hassles scale (Holm & Holyrod, 1992), which included the option to report racial hassles, gender hassles, and race and gender hassles, with response scales of: 1 (*because of your race*), 2 (*because of your gender*), 3 (*because of both your race and gender*), 4 (*happened for some other reason*), and 5 (*did not happen*). The fifteen item scale statements were preceded by, “You can check more than one box for each event, as a particular event can happen multiple times or multiple events can occur for the same reason. Please indicate whether you have experienced...” with sample experiences such as “Being ignored or

overlooked,” Others reacting to you as if they were afraid or intimidated,” and “Being insulted, called a name, or harassed.” Frequency counts were conducted for racial hassles, gender hassles, and race and gender hassles. To verify that students who reported none of these hassles had not skipped the items, we only included students who checked “happened for some other reason” or “did not happen,” indicating that they read and chose a response item, even if they did not experience a race, gender, or race and gender hassle. The present study focused on Black women’s experiences with race and gender hassles as an indicator of interpersonal discrimination.

Classroom Racial & Gender Inferiorization. Black women also reported whether they had perceived interpersonal discrimination related to race or gender within the classroom, operationalized as “classroom racial inferiorization” and “classroom gender inferiorization” (see Appendix E). Each scale included six items from a study by Gomez & Trierweiler (1999) on cross-group discrimination. Participants were asked to think about experiences in their classes, particularly those related to their major or intended major. Following the stem: “In your classes, how often,” respondents indicated how frequently from 1 = almost never to 5 = very often, they felt discriminated against due to their racial or gender identity. Items for race included, “...how often did professors call on you less than others because of your race/ethnicity?” and “have you heard your racial/ethnic group referred to in a derogatory way?” Gender inferiorization included the same six items, but “race” was replaced with “gender,” (e.g., “...how often has fears of representing your gender group in a negative way discouraged you from participating in class?” and “did professors grade or evaluate your work more harshly than others because of your gender?”). Items were coded such that higher scores indicated a stronger sense of unfair

treatment in the classroom from professors due to race and gender. At Time 2, interrater reliability was good for racial inferiorization at ($\alpha = .85$) and gender inferiorization at ($\alpha = .91$).

Indicators of College Adjustment

Academic Engagement. Academic engagement was assessed after women's first year of college using items from Wellborn and colleagues' student engagement scale (Skinner, Wellborn, & Connell, 1990; Skinner, Kindermann, & Furrer, 2009) (see Appendix F). The adapted scale has been utilized reliably in previous research with African American participants (Neblett, Philip, Cogburn, & Sellers, 2006; Smalls et al., 2007). The current study focused on two subscales within the measure, academic curiosity and academic persistence. Eight items were utilized to assess academic curiosity, which refers to the extent to which students show interest in new course material and learning (e.g., "I work hard when we start something new in class"). Six items were used to gauge academic persistence, or the extent that students report sustained academic effort in the face of a challenge (e.g., "If I can't get a problem right the first time, I keep trying"). For each subscale, response items ranged from 1 = not true of me at all to 5 = very true of me. Items were coded so that higher scores indicated more academic curiosity and persistence. At Time 2, interrater reliability was good for academic curiosity at ($\alpha = .66$), and academic persistence at ($\alpha = .80$).

Academic College Competence. Black women's sense of personal, social, and academic competence in college was assessed using a modified version of Kuperminc's (1994) measure of social competence (see Appendix G). The fifteen items tapped into participants' perceptions of their academic efficacy, social problem-solving effectiveness, and sense of personal growth compared to other college students. Participants responded on a 1-5 scale ranging from bottom 10% (much less than the average college student) to top 10% (much more than the average

college student) with the preceding statement, “Below are a list of statements describing activities, goals, and abilities.” Using the scale provided, please rate how well you feel that you do each of the following things compared to other college students at [University X]. Six items tapped into academic competence, such as “doing my schoolwork quickly and efficiently” and “doing well in math and science.” The subscale was coded such that higher scores indicated a stronger sense of academic competence in college. At Time 2, interrater reliability was good at ($\alpha = .88$).

Psychological Well-Being. The present study included three subscales from the 18-item Psychological Well-Being Scale developed by Ryff (1995), which has been used to assess dimensions of participants’ overall psychological adjustment to college life (see Appendix H). Given this study’s focus on Black women’s sense of emotional well-being and efficacy in managing college responsibilities, I focused on three subscales within the overall measure: autonomy, environmental mastery, and self-acceptance.

Autonomy examined women’s ability to make decisions for themselves without excessive concern regarding external support for those decisions with four items (e.g., “My decisions are not usually influenced by what everyone else is doing.”) At Time 2, interrater reliability was good at ($\alpha = .69$).

Environmental Mastery assessed participants’ sense of how well they were able to navigate the institutional environment to suit their personal needs and value with four items (e.g., “I am quite good at managing the responsibilities of my daily life.”) At Time 2, interrater reliability was good at ($\alpha = .71$).

Self-acceptance included four items and referred to the extent to which respondents valued themselves and felt confident about who they were (e.g., “For the most part, I am proud of who I

am.”) For each subscale, responses ranged from 1 (strongly disagree) to 6 (strongly agree), and items were coded such that higher scores indicated better adjustment on each subscale. At Time 2, interrater reliability was good at ($\alpha = .75$).

Study 1 Participants

This study uses data from participants in the College Academic and Social Identities Study (CASIS), a longitudinal examination of Black college students' interpersonal and contextual experiences of discrimination and college adjustment. The data come from a subsample of Black women at two time points: the beginning of their first semester of college (Time 1 – fall) and the end of their first year of college (Time 2 – spring). The first time of data collection (fall) did not include all measures of discrimination and adjustment (classroom inferiorization and academic engagement) since the students had just entered college. The study had relatively high response and retention rates with 65% of the original sample of Black women ($n = 501$) completing the follow-up survey at Time 2 ($n = 325$). The current study includes women who completed the survey at Time 1 and Time 2. Compared to the overall sample of women who only completed Time 1 data, women in the current study did not differ in reported family household income, racial composition of their neighborhood, or social class background. However, there was a significant difference in hometown description between the full sample of women and women who were included in the current study ($p < .04$). In addition, women who only completed Time 1 data reported lower on gender exploration than women who completed both Time 1 and Time 2 ($p < .05$).

The Black women in the sample for Study 1 were from a diverse range of sociodemographic backgrounds. Most were born in the United States (97%), although some of the women were born in other countries such as Costa Rica, France, Germany, Ghana,

Zimbabwe, and Haiti (3%). Only one woman reported spending most of her time in another country (Ghana), while the rest of the sample indicated that they had spent most of their upbringing in the U.S. One woman reported being an international student, but 40% of respondents left this question blank. The majority were from urban/large metropolitan (43%) or suburban areas (28%), while a smaller percent reported being from small towns (26%) and rural areas (2%). The women's racial composition of their home neighborhoods ranged from <20% Black (19%), 21-40% Black (17%), 41-60% Black (15%), 61-80% Black (13%), and >81% Black (36%). The women's household income ranged from Below <35K (30%), 35K-<70K (35%), 70K-<105K (20%), 105K-<140K (8%), 140K-<175K (2%), and 175K+ (5%). In describing their social class background, a quarter of the women described themselves as poor or working class (26%), a larger group considered themselves lower-middle to middle class (61%), and a small group of women considered themselves upper-middle to upper class (12%). Five percent of the sample described themselves as bisexual or lesbian, while the remaining ninety-four percent identified as heterosexual.

Study 1 Analytic Strategy

Person-centered methodological approaches capture the multidimensional components of social identity given the emphasis on how constructs are similar across individuals rather than how variables are associated with one another (Banks et al., 2007; Harper et al., 2006; Rowley et al., 2003; Jones et al., 2018; Neville & Lilly, 2000). In the present study, I used latent class analysis (LCA) to create race and gender cluster profiles, and then conducted a series of descriptive and bivariate correlation analyses in SPSS Version 25 to explore how Black women's racial and gender identity profiles related to their interpersonal experiences of discrimination and college adjustment outcomes over the first-year transition (Time 1 = fall of first year and Time 2

= spring of first year). Finally, I conducted a series of hierarchical linear regressions to examine whether cluster group membership moderated the association between discrimination experiences and adjustment outcomes.

To assess RQ1 regarding the race and gender identity beliefs, I used latent profile analysis to generate cluster groups based on the patterns of observed responses in Black women's reports of race and gender centrality, exploration, and commitment. To determine the optimal number of latent groups, I used Latent Gold Version 5.1 (Vermunt & Magidson, 2016) to specify a series of models with one to five classes based on theoretical and empirical considerations (i.e., number of race and gender indicators). I assessed the resulting suggested models according to several statistical and conceptual criteria. I determined empirical fit of the model based on absolute and relative fit indices such as the BIC value, the bootstrap p value, and the overall parsimoniousness of the model. I considered the Bayesian Information Criterion (BIC), an indicator of absolute goodness-of-fit, with lower values indicating better fit (Nylund, 2007). I noted the bootstrap p values, given that non-significant p -values (above .05) represent a better fitting model (Nylund, Muthen, & Muthen, 2007), especially when there are several categories being included in the clusters. I also ensured that my final model followed the assumption of local independence and did not include any high bivariate residuals (BVRs) between indicators; BVRs above 3.84 generally indicate that the model does not adequately explain the bivariate associations between indicators (Vermunt et al., 2016). Finally, to compare model fit between models with different number of classes, I compared the bootstrap likelihood ratio test, which provides a p value to show whether the model fit improves with an additional class (Nylund et al., 2007). After selecting the best-fitting and most parsimonious model based on these indices, Black women were assigned to latent classes based on the highest posterior

probability of membership as indicated by the LCA model (Heinen, 1996). I explored the demographic profiles of Black women in each cluster group. For instance, were Black women who reported lower racial exploration, commitment, and centrality more likely to come from neighborhoods with lower percentages (i.e., less than 20%) of African American residents compared to Black women who reported more racial exploration, commitment, and centrality? I used chi-square tests to examine whether there were significant differences on self-reports of parental education, household income, and neighborhood racial demographics across clusters at Time 1. In addition, I conducted ANOVAs and Scheffe's Multiple Comparison Test to analyze mean differences in racial and gender identity beliefs, discrimination experiences and college adjustment outcomes.

To consider the next set of research questions concerning the ways in which cluster group membership is related to experiences of interpersonal discrimination (RQ2) and college adjustment (RQ3). Next, I examined the associations between discrimination and college adjustment (RQ4) by conducting a series of bivariate correlations to examine how participants' profiles in the fall of their first year (Time 1) were associated with academic adjustment, psychological adjustment, and indices of interpersonal discrimination in the spring of the first year (Time 2).

Finally, I used hierarchical linear regression techniques to analyze RQ5 on the extent to which cluster group membership at Time 1 moderates the association between discrimination experiences and academic and psychological adjustment at Time 2. For each regression model, the first model step included the primary study variables: dummy coded variables for cluster group membership, classroom racial inferiorization (CRI), classroom gender inferiorization (CGI), daily racial hassles (RH), daily gender hassles (GH), and daily race and gender hassles

(RGH). The second step included interaction terms to test the moderating effects of Black women's race and gender identity beliefs on the associations between classroom race and gender inferiorization and daily hassle experiences and indices of college adjustment (academic competence, academic curiosity, academic persistence, autonomy, environmental mastery, and self-acceptance). This multistep approach allowed me to consider how Black women's racial and gender identity beliefs upon entering college influenced their perceptions of interpersonal discrimination and their first-year adjustment.

Results

Sample Means for Identity Variables

Overall sample means ($n = 474$) for the race and gender identity beliefs at Time 1 are as follows: racial centrality ($M = 5.20$, $SD = 1.34$), racial exploration ($M = 3.02$, $SD = 0.66$), racial commitment ($M = 3.20$, $SD = 0.72$), gender centrality ($M = 3.46$, $SD = 0.75$), gender exploration ($M = 2.55$, $SD = 0.74$), and gender commitment ($M = 3.17$, $SD = 0.66$).

Descriptive Summary of Clusters

The clusters represent divergent classes in relation to the overall sample means on these indicators. Table 2 provides a summary of raw means and standard deviations, as well as standardized means for the race and gender identity variables at Time 1 for the total sample. The racial identity variables were on a 1 to 7 scale, while the gender identity variables were on a 1 to 5 scale, so I draw on the standardized means to generalize across the sample. Overall at Time 1, Black women reported similar levels of racial centrality ($M = 5.19$, $SD = 1.38$) and gender centrality ($M = 3.47$, $SD = 0.77$). They reported higher gender exploration ($M = 2.63$, $SD = 0.75$)

than racial exploration ($M = 3.03$, $SD = 0.64$), as well as higher gender commitment ($M = 3.18$, $SD = 0.66$) relative to racial commitment ($M = 3.16$, $SD = 0.74$).⁴

I estimated a five latent class model (ranging from 1 to 5 clusters) using the scores for each woman on six indicators: racial centrality, racial exploration, racial commitment, gender centrality, gender exploration, and gender commitment. Summary statistics for these five models are displayed in Table 1. Overall, model statistics favored the 3-cluster solution. The 3-class solution had the lowest BIC (2366.40), a non-significant p value (0.06), and the bootstrap likelihood ratio test revealed that the 3-class model was preferred over the 2-class model ($<.05$), and not significantly different from the 4-class model ($p = .18$). Each parenting cluster comprised a reasonable proportion of the sample, from 21 to 43 percent. Thus, I adopted the 3-class model as the final cluster solution for Black women at Time 1 and used it in subsequent analyses to explore the effect of discrimination on college adjustment during the first-year transition.

The clusters are graphically described using the standardized means of each racial and gender identity indicator: racial centrality, racial exploration, racial commitment, gender centrality, gender exploration, and gender commitment (Figure 1). Standardized means were used so that visual comparisons of clusters could be easily made. Both standardized means and raw means for the race and gender identity measures for each cluster are provided in Table 2. There were not significant differences in any of the demographic variables across the three clusters (Table 3).

The largest cluster of Black women ($n = 128$, 44%), labeled Achieved, was above the sample mean across all six identity measures. More specifically, these women reported significantly racial centrality ($M = 5.88$, $SD = 1.11$), racial exploration ($M = 3.45$, $SD = 0.51$),

⁴ Overall sample means ($n = 474$) for the race and gender identity beliefs at Time 1 are as follows: Racial Centrality ($M = 5.20$, $SD = 1.34$), Racial Exploration ($M = 3.02$, $SD = 0.66$), Racial Commitment ($M = 3.20$, $SD = 0.72$), Gender Centrality ($M = 3.46$, $SD = 0.75$), Gender Exploration ($M = 2.55$, $SD = 0.74$), and Gender Commitment ($M = 3.17$, $SD = 0.66$).

racial commitment ($M = 3.80$, $SD = 0.32$), and gender commitment ($M = 3.54$, $SD = 0.52$) than women in the other two clusters. Looking at variation within this cluster group, Black women reported higher racial centrality ($M = 0.50$, $SD = 0.83$) compared to gender centrality ($M = 0.28$, $SD = 0.98$), had engaged in more racial exploration ($M = 0.66$, $SD = 0.78$) compared to gender exploration ($M = 0.34$, $SD = 1.06$), and reported a stronger sense of commitment to their racial identity ($M = 0.83$, $SD = 0.45$) compared to their gender identity ($M = 0.56$, $SD = 0.78$).

The second largest cluster group at Time 1 was labeled Mixed Status-Gender Central/Exploring ($n = 103$, 35%), based on the within-group variation in the race and gender identity variables and their high level of gender exploration ($M = 2.87$, $SD = 0.60$). Compared to women in the Achieved cluster, Black women in the Mixed Status group reported lower racial centrality ($M = 4.83$, $SD = 1.23$), racial exploration ($M = 2.91$, $SD = 0.53$), racial commitment ($M = 2.60$, $SD = 0.42$), and gender commitment ($M = 2.98$, $SD = 0.61$). Conversely, women in this cluster reported similar levels of gender centrality ($M = 3.62$, $SD = 0.70$) and gender exploration ($M = 2.87$, $SD = 0.60$) to Black women in the Achieved group. However, based on standardized scores, gender was a more central identity to women in this group compared to race ($M = 0.20$, $SD = 0.94$ and $M = -0.27$, $SD = 0.92$, respectively) and they were also actively engaging in more gender exploration ($M = 0.44$, $SD = 0.82$) than racial exploration ($M = -0.83$, $SD = 0.60$). Black women in the Mixed Status group also reported higher gender commitment ($M = -0.29$, $SD = 0.93$) than racial commitment ($M = -0.83$, $SD = 0.60$), and again, their level of commitment to either identity was lower than women's reports of commitment in the Achieved cluster. Women in this second cluster group were actively thinking about what their gender identity means to them and felt a much stronger sense of attachment and commitment to their gender identity compared to their racial identity.

Finally, the smallest proportion of Black women at Time 1 was labeled Diffused ($n = 62$, 21%), given their generally lower means across the race and gender identity measures compared to women in the Achieved and Mixed Status-Gender Exploration groups. Specifically, these women reported significantly lower racial exploration ($M = 2.43$, $SD = 0.46$), gender exploration ($M = 1.92$, $SD = 0.45$), gender centrality ($M = 2.85$, $SD = 0.66$), and gender commitment ($M = 2.70$, $SD = 0.62$) than women in the other two cluster groups. They reported a stronger sense of racial commitment than women in the Mixed Status-Gender Central/Exploring group ($M = 2.86$, $SD = 0.76$ and $M = 2.60$, $SD = 0.42$, respectively), as well as similar low means for racial centrality ($M = 4.45$, $SD = 1.41$) and gender commitment ($M = 2.83$, $SD = 0.67$). Thus, their means were significantly lower than the means for Black women in the Achieved group across all six indicators, but they reported similarly to Black women in the Mixed Status group who had a weaker sense of attachment and commitment to race. Within the cluster, race was a more centrality identity compared to gender ($M = -0.56$, $SD = 1.05$ and $M = -0.81$, $SD = 0.89$, respectively), while their standardized exploration and commitment means were relatively the same. See Table 4 for full means comparison across the three cluster groups.

Interpersonal Discrimination Experiences and Black Women's Identity Clusters

Overall, Black women across the three cluster groups did not significantly vary in the number of racial hassles, gender hassles, or race and gender hassles that they reported during the first year of college. There was a significant range in how many daily hassle experiences the women encountered across categories, with standard deviations from the mean ranging from 1.90 to 5.26. Unlike the hassle means, there were several cluster differences on the measures of race and gender classroom inferiorization. For example, Black women in the Achieved cluster reported significantly more racial inferiorization experiences ($M = 3.81$, $SD = 0.33$) compared to

women in the Mixed Status-Gender Central/Exploring and Diffused clusters ($M = 2.60$, $SD = 0.43$ and $M = 2.86$, $SD = 0.76$, respectively). The mean for the Mixed-Status group was also significantly higher than the mean for women in the Diffused group, who reported the lowest number of classroom racial discrimination experiences. Also, Black women in the Achieved cluster reported more gender inferiorization experiences ($M = 3.59$, $SD = 0.57$) than women in the Mixed Status ($M = 3.16$, $SD = 0.65$) and Diffused groups ($M = 3.23$, $SD = 0.65$), although these two cluster group means were not significantly different from one another. See Table 4 for full means and standard deviations on the discrimination variables by cluster.

College Adjustment Outcomes and Black Women's Identity Clusters

Overall, there were no significant differences in the academic (competence and persistence) or psychological (autonomy, environmental mastery, and self-acceptance) outcomes among Black women across clusters. There was one exception, in that Black women in the Achieved cluster reported higher academic curiosity ($M = 3.27$, $SD = 0.69$) than women in the Diffused ($M = 2.92$, $SD = 0.71$) cluster. Black women in the Mixed Status-Gender Central/Exploring group reported a mean that was in the middle and statistically similar to the other clusters ($M = 3.15$, $SD = 0.59$). See Table 4 for full means and standard deviations on the college adjustment outcomes by cluster.

Associations between Discrimination and Adjustment by Cluster Group Membership

Achieved

Among women in the Achieved cluster, there was a negative association between experiences of gender hassles and self-acceptance ($r = -.31$, $p < .001$). There was a positive relationship between race and gender hassles and academic persistence ($r = .35$, $p < .001$), as well as negative relationships between race and gender hassles and environmental mastery ($r = -$

.27, $p < .01$) and self-acceptance ($r = -.18, p < .05$). There was also a small positive association between classroom gender inferiorization and self-acceptance ($r = .24, p < .001$) for women in this cluster.

Mixed Status-Gender Central/Exploring

Among women in the Mixed-Status Gender Exploring cluster, there was a negative association between racial hassles and autonomy ($r = -.25, p < .05$). There were also positive relationships between race and gender hassles and academic persistence ($r = .36, p < .001$), and a negative relationship between race and gender hassles and environmental mastery ($r = -.24, p < .05$). Finally, there was a moderate, positive association between classroom gender inferiorization and academic curiosity ($r = .37, p < .001$) for women in this cluster.

Diffused

Among women in the Diffused cluster, there was a strong positive association between race and gender hassles and academic persistence ($r = .65, p < .001$), as well as a small, negative association between race and gender hassles and self-acceptance ($r = -.28, p < .05$).

Interpersonal Discrimination Experiences as Predictors of College Adjustment Outcomes

I conducted a series of hierarchical linear regression analyses to examine race and gender-related variables (racial and gender identity beliefs and racial and gender discrimination) as predictors of academic (competence, curiosity, and persistence) and psychological (autonomy, environmental mastery, and self-acceptance) outcomes. I tested separate models for each of the academic and psychological outcomes to explore how Black women's racial and gender identity clusters moderated the associations between discrimination experiences and college adjustment outcomes over the first year.

In the first block of each model, household income was entered as a covariate for socioeconomic status, dummy coded variables were entered for the identity profiles (i.e., Mixed Status Dummy and Diffused Dummy – the Achieved cluster served as the reference group), followed by the racial and gender discrimination variables (racial hassles, gender hassles, race and gender hassles, classroom racial inferiorization, and classroom gender inferiorization). To examine the race and gender clusters as moderation variables, I created a series of two-way interaction terms that were entered into the second model block (e.g., Diffused X Racial Hassles, Mixed Status X Racial Hassles, Diffused X Gender Hassles, Mixed Status X Gender Hassles, Diffused X Race and Gender Hassles, Mixed Status X Race and Gender Hassles, Diffused X Classroom Racial Inferiorization, Mixed Status X Classroom Racial Inferiorization, Diffused X Classroom Gender Inferiorization, and Mixed Status X Classroom Gender Inferiorization).

For all tested models, I used procedures outlined by Aiken and West (1991) to examine higher order regression interactions. Continuous predictor variables were mean-centered before entry into the models, and I calculated the simple slopes of all significant interactions to interpret the nature of the interactions. For each significant “Discrimination X Identity Cluster” interaction, I created a plot of the simple slopes of the dependent variable at selected conditional values (0 = Achieved and 1 = Diffused or 1 = Mixed Status) of the relevant variables (Cohen, Cohen, West, & Aiken, 2003). Regression model results are highlighted in Tables 8 – 10.

Academic Competence. Across Black women in the three clusters, there were no significant main effects between academic competence and the racial and gender discrimination variables.

The initial model was not significant [$F(8, 192) = 1.72, p = .10$], and the addition of interaction terms did not add significantly to the model (Adjusted R -square = .01) or result in a significant

final model [$F(18, 182) = 1.04, p = .42$]. The regression model for academic competence is summarized in Table 8.

Academic Curiosity. The initial model for academic curiosity was significant, [$F(8, 190) = 3.49, p < .001$], and there was a positive main effect for classroom gender inferiorization ($\beta = 0.24, p < .001$). Although the addition of interaction terms did not add significantly to the model (Adjusted R -squared = .09), the final model was significant [$F(10, 180) = 2.11, p < .01$] and there were two significant interactions. Plotting the interaction revealed a negative association between gender hassles and academic curiosity among Black women in the Achieved cluster, as well as a negative association between race and gender hassles and academic curiosity among Black women in the Mixed Status-Gender Central/Exploring cluster. The regression model for academic curiosity is summarized in Table 8.

Academic Persistence. The initial model for academic persistence was significant [$F(8, 187) = 3.45, p < .001$] and accounted for 11% of the variance explained in Black women's persistence compared to only 9% of the variance explained in step 2 [$F(10, 177) = 2.22, p < .01$]. In both step 1 and step 2 of the model, there was a positive main effect of race and gender hassles on academic persistence ($\beta = 0.06, p < .001$). The regression model for academic persistence is summarized in Table 9.

Autonomy. Step 1 of the model was significant [$F(8, 190) = 2.57, p < .01$], and explained approximately 7% of the variance in Black women's sense of autonomy. There was a negative main effect for household income, such that women from lower-income backgrounds reported higher autonomy ($\beta = -0.02, p < .05$). There was also a direct and negative main effect between racial hassles and autonomy ($\beta = -0.03, p < .05$), as well as a significant and positive association between classroom gender inferiorization and autonomy ($\beta = 0.16, p < .05$). Step 2 of the model

was also significant [$F(18, 180) = 1.82, p < .05$], but only explained 1% more of the variance.

There was a negative main effect between Black women's experiences of race and gender hassles and autonomy ($\beta = -0.03, p < .05$). The regression model is summarized in Table 9.

Environmental Mastery. Step 1 model was significant [$F(8, 185) = 2.34, p < .01$] and accounted for approximately 5% of the variance in environmental mastery; while step 2 of the model was not significant [$F(18, 175) = 1.24, p = .23$]. In Step 1 of the model, there was a negative main effect for race and gender hassles on Black women's sense of environmental mastery ($\beta = -0.04, p < .05$). The regression model for environmental mastery is summarized in Table 10.

Self-Acceptance. The step 1 model was significant [$F(8, 185) = 2.70, p < .01$] and explained approximately 7% of the variance in self-acceptance. There were significant and negative main effects for experiences of racial hassles ($\beta = -0.03, p < .05$) and race and gender hassles ($\beta = -0.05, p < .01$). There was also a significant and positive main effect of classroom gender inferiorization on Black women's self-acceptance ($\beta = .25, p < .05$). Step 2 of the model was also significant [$F(18, 175) = 2.24, p < .01$] and accounted for 3% greater variance than explained in the Step 1 model. There was a negative main effect of gender hassle experiences on self-acceptance ($\beta = -.14, p < .05$), as well as a positive main effect for classroom gender inferiorization ($\beta = .38, p < .05$). There were also two significant interactions between racial hassles, gender hassles, and self-acceptance. The first involved the effect of racial hassles on the self-acceptance of Black women in the Mixed Status cluster compared to women in the Achieved cluster ($\beta = -.09, p < .05$). A plot of the interactions indicated a more negative association between racial hassles and self-acceptance among Black women in the Mixed-Status cluster compared to Black women in the Achieved cluster. Further, among Black women in the Mixed Status cluster, more racial hassles were related to lower self-acceptance. The second significant

interaction again involved Black women in the Mixed Status cluster compared to Black women in the Achieved cluster, this time with gender hassles and self-acceptance. A plot of the interactions showed a more negative association between gender hassles and self-acceptance among Black women in the Achieved cluster. Upon probing the interactions, I found that experiencing greater gender hassles was related to lower self-acceptance among Black women in the Achieved cluster, while Black women in the Mixed Status cluster were buffered against the negative effect of gender hassle experiences. The regression model for self-acceptance is summarized in Table 10, and the two significant interaction plots are featured in Figure 2 (racial hassles) and Figure 3 (gender hassles).

Discussion

There is a dearth of research on the relationships between social identity, discrimination, and adjustment processes among Black college women. The purpose of this study was to examine the patterns of racial and gender identity beliefs that would emerge among a sample of Black college women during the first-year transition, and to determine how certain types of identity profiles would relate to interpersonal discrimination experiences and college adjustment outcomes. The present study was the first to consider the interplay between multiple dimensions of race and gender identity beliefs, as opposed to focusing solely on one dimension of identity (race and gender centrality; Jones et al., 2018) or highlighting one type of social identity (racial identity or gender identity; Gushue et al., 2006). In addition, the investigation considered whether certain types of identity beliefs served as a protective asset in the face of race, gender, and race and gender discrimination. By disentangling the effects of discrimination experiences that Black women face as racialized and gendered minorities, we will be more equipped to

understand how social identity beliefs and other cultural and contextual factors support academic and psychological resilience.

Latent class analyses revealed three distinct and meaningful groups of Black women based on the six indicators of race and gender identity. In utilizing this multidimensional approach, I was able to highlight how race and gender identity beliefs functioned in relation to one another, as well as how they varied across subgroups of Black women. Within these three patterns of identity beliefs, Black women differed in how strongly they felt attached to their race and gender identities, how much time and attention the women had devoted to thinking about and exploring the meanings of their identities, as well as the sense of clarity and resolution they had about what their race and gender identity meant to them. The ways in which Black women make sense of group identities that may be especially salient within certain educational contexts (such as race at PWIs) is an important step in understanding their adjustment outcomes in these settings.

Given that prior developmental contexts, such as family socialization and secondary schools, play an important role in shaping the beliefs of students before entering college (e.g., Bailey-Fakhoury, 2014), I considered whether differences in Black women's precollege backgrounds surfaced in the cluster groups. Surprisingly, the groups did not vary in self-perceived social class status, household income, or racial demographics of prior neighborhood, which was inconsistent with prior literature on how social class and neighborhood context influence racial identity beliefs (e.g., Gay, 2004; Hurd, Sellers, Cogburn, Butler-Barnes, & Zimmerman, 2012). Still, the emergence of unique identity profiles reveals that young Black women do not enter college with a homogenous set of identity beliefs, and that their race and gender beliefs do not easily map onto a specific set of experiences tied to socioeconomic status

or the racial demography of their neighborhoods. Moving forward, it will be important to consider the types of experiences across various contexts that factor into the development of certain identity beliefs, such as high racial centrality or a strong commitment to one's gender.

Latent Classes of Identity Beliefs among Black Women

Black women reported significantly different levels of racial and gender centrality, exploration, and commitment during the fall of their first year. The largest group of women, termed Achieved, exhibited race and gender identity beliefs that were slightly above the average sample mean on all six indicators compared to women in the other two clusters. Within this cluster, women reported higher racial centrality, exploration, and commitment than gender centrality, exploration, and commitment – suggesting that while race and gender were both important parts of their self-concept, race was the more central identity of the two. This cluster group is conceptually like the “Race Progressive” group of Black women in Jones and colleagues’ (2018) paper. Women in the Race Progressive cluster demonstrated higher levels of racial centrality compared to gender centrality, and in the qualitative portion of that study, these women discussed that they are “seen as Black first, woman second” by others in society and that “sometimes, we are not viewed as women because we are Black, and Black supersedes any existence of gender.” Still, compared to the other two clusters, women in the Achieved cluster reported higher gender centrality and active gender exploration, too, suggesting that they are also attuned to how their identities as a woman and Black may intersect (Reynolds & Pope, 1991).

Approximately one quarter of Black women in the sample reported lower-than-average race and gender centrality, exploration, and commitment, and were thus labeled, Diffused. Compared to the other clusters, women in the Diffused group were not actively engaging in exploration around either identity, although they reported that race was a more central identity

than gender. In the same way, although their racial commitment scores were lower than the scores for women in the other clusters, they reported more clarity about their racial identity than their gender identity. In all, these women's profile suggest that they are not strongly attached to their racial or gender identity, which may be related to a purposeful distancing among these students from these socially marginalized identities. Given that we collected this data at the start of freshman year, Black women in the Diffused group may have distanced themselves as one way to preemptively cope with attending a predominantly White institution in expectation of negative race- or gender-related biases on campus (Whaley, 2018). Alternately, it is possible that these Black women have been in school or neighborhood settings prior to college that lessened the salience and importance of their race and gender identity (Joseph & Williams, 2008).

Finally, the second largest cluster of women was labeled Mixed Status-Gender Central/Exploring, based on the significant within-group variation in their race and gender identity beliefs compared to the other two clusters of women who presented patterns of higher (Achieved) or lower (Diffused) responses on the identity measures. Women in the Mixed Status-Gender Central/Exploring group reported lower racial centrality, exploration, and commitment relative to women in the Achieved cluster, but similar levels of gender centrality and exploration – highlighting the prominence of race among women in the Achieved cluster, as well as the greater relevance of gender to women in the Gender Exploring cluster. The centrality of gender among this group of Black women aligns with the “Gender Expressive” group in Jones et al. (2018), which included a small cluster for whom being a woman was more important than being Black or being a Black woman. For instance, women in the Gender Expressive cluster stated, “I do not associate Blackness with [being a] woman...I am a woman.” (p. 10). Still, while women felt a stronger sense of attachment to their gender identity and they were engaging in more

identity exploration around gender compared to race, they reported a low sense of commitment to both race and gender.

In all, the varying levels of race and gender identity beliefs across clusters demonstrate a benefit of person-centered methodologies by revealing the various ways that identity beliefs can develop across individuals. Specifically, Black women in the Achieved cluster reported higher-than-average race and gender centrality, exploration, and commitment, just as women in the Diffused cluster reported lower-than-average race and gender centrality, exploration and commitment. These two patterns align with prior literature on the mechanisms of identity development and suggest an association between engaging in explorative thinking around one's identity and forming a sense of attachment and commitment to that identity (as shown in the Achieved cluster), or alternately, not engaging in active exploration around a social identity and lacking a sense of attachment and commitment (Jones et al., 2018; Luyckx, 2008; Phinney, 1989, 1990). Alternately, the lower levels of centrality, exploration, and commitment with race compared to gender in the Mixed Status-Gender Central/Exploring cluster demonstrates that some Black women place different value on these identities, which is overlooked when we focus on a single social identity within a study (Jones et al., 2018). Also, while the Diffused and Gender Exploring clusters represent two distinct sets of identity beliefs, women in these groups reported average or lower-than-average racial centrality, exploration, and commitment. Together, these women make up more than half the sample, which raises interesting questions about how racial identity beliefs factor into college choice decisions among racially minoritized populations. Overall, the present study greatly expands previous theoretical research on the interplay between Black women's race and gender identity by empirically capturing multiple dimensions of both social identities (Collins, 1994; King, 1988; Jones et al., 2018).

Interpersonal Discrimination Experiences and Black Women's Identity Clusters

My hypothesis that Black women's cluster group membership would be related to significant differences in interpersonal discrimination experiences was partially supported. Overall, Black women across the three cluster groups did not report significant variation in the number of racial hassles, gender hassles, or race and gender hassles that they experienced during the first year of college, but they did report significant differences in the number of classroom discrimination experiences they encountered. Each cluster tended to report more racial hassles and race and gender hassles than gender hassles, suggesting that they more often attributed discriminatory experiences to their Black identity or their Black woman identity. This may, in part, be due to the visible salience of their race to others in the world, and the possibility that "gendered" discrimination for Black women inescapably gets paired with racial bias and prejudice (Battle, 2016). For African Americans, race is a visible social identity that carries a long and detailed history of exclusion, poor treatment, and violence, within institutions of higher education and in broader society (Allen, 1992; Amos, 2015; Major et al., 2005).

Yet, this overarching similar pattern in the frequency and types of discriminatory experiences across clusters that emerged for the hassle experiences did not extend to Black women's classroom discrimination. For one, Black women in the Achieved cluster reported significantly more racial inferiorization experiences and gender inferiorization experiences than women in the Mixed Status-Gender Central/Exploring and Diffused clusters. The classroom inferiorization measures tapped into participants' perceptions that they experienced prejudiced treatment in classroom spaces due to their race and gender, such as being called on less by professors, feeling dismissed in the classroom, and being unfairly evaluated on assignments. The constructs also tapped into women's concerns about participating in the classroom environment

in fear of being treated in a derogatory way or hearing negative comments or beliefs about their racial or gender identity. Compared to women in the other clusters, Black women in the Achieved cluster were actively thinking about their race and gender identity and felt a stronger sense of attachment and commitment to these identities. Women in this group may have been more adept at picking up on cues from the environment and been more attuned to how classroom dynamics marginalized the contributions and experiences of African American students and female students (Greer, 2011; Moradi et al., 2003; Szymanski et al., 2010). This finding supports other research on racial tokenization and racial battle fatigue among Black students in predominantly White settings (Smith et al., 2007; Thomas et al., 2008; Thomas et al., 2009; Walton et al., 2007).

Similarly, Black women in the Mixed Status-Gender Central/Exploring cluster reported more classroom racial discrimination experiences than women in the Diffused group. These women reported significantly less racial centrality, exploration, and commitment than women in the Achieved cluster (sometimes scoring like women in the Diffused group), thus challenging the idea that they may have been especially attuned to negative racial dynamics in the classroom in the same way as women in the Achieved group. Instead, it is possible that prior to college, race was not as salient to Black women in the Mixed Status-Gender Central/Exploring group because they were in more homogenous settings or in environments that did not marginalize their identity as a Black student in the same way as the new college setting. Black women in the Gender Exploring cluster group may have assumed that they would be readily accepted in the PWI context and been surprised to find that the classroom setting was less welcoming than expected (Chavous, 2005; Shahid et al., 2018). Prior scholarship notes that the college transition period is a significant adjustment period for all students. For students of color attending PWIs, this

includes learning about and navigating the racial norms at the new institution, which may involve instances of racial bias and discrimination (Azmitia et al., 2008; Constantine et al., 2006; Hurtado, 1992; McGuire, Casanova, & Davis, 2016). A new university context may challenge Black women's beliefs about the importance of their racial and gender identity, even if they were accustomed to being in majority White academic spaces in K-12.

College Adjustment Outcomes and Black Women's Identity Clusters

My hypothesis that Black women who reported higher centrality, exploration, and commitment on race and gender (i.e., Achieved) would also demonstrate better academic and psychological outcomes, was largely unsupported. Overall, Black women across clusters reported similarly on the academic and psychological adjustment outcomes. The one exception was that Black women in the Achieved cluster reported more academic curiosity than women in the Diffused cluster. Thus, it does appear that race and gender identity may serve as a promotive factor for Black women's curiosity in the classroom (Oyserman et al., 2010; Rivas-Drake et al., 2014). These results suggest that having a stronger sense of attachment and engagement with one's social identities promotes positive motivation in academic settings, while a lower sense of attachment, exploration, and commitment to your identity may be related to less active engagement in the classroom (Hernandez, Robins, Widaman, & Conger, 2017; Hope et al., 2013; Kessels et al., 2014). This supports previous research regarding the academic benefits for African American students with higher racial centrality and racial exploration (Butler-Barnes et al., 2018; Sellers, Chavous, & Cooke, 1998). Relating this back to the finding that women in the Achieved cluster perceived more racial and gender inferiorization in the classroom, perhaps Black women who have a stronger sense of attachment to their race and gender feel more prepared to remain ambitious in the classroom despite discrimination (Brown et al., 2003; Fries-Britt et al., 2007;

Nadler & Komarraju, 2016). Given the deficit-based focus on poorer achievement outcomes among Black college students (e.g., for challenges to this work, see), it is important to consider how Black women remain motivated at an institution that does not convey supportive messages about their academic abilities and potential for success.

Associations between Discrimination and Adjustment by Cluster Group Membership

Overall, the results revealed several small to moderate correlations between interpersonal discrimination experiences and the academic and psychological adjustment outcomes for women across clusters. I found general support for my hypothesis that experiences of discrimination, whether due to race, gender, or race and gender, would relate to poorer academic and psychological outcomes. For example, for Black women in the Achieved and Diffused groups, gender hassles and race and gender hassles were associated negatively with women's sense of self-acceptance. For women in the Diffused cluster, experiencing discrimination related to identities that were of little relevance to their self-concept may highlight the incongruence between women's expectations regarding diversity and inclusion in college, and the reality of experiencing negative treatment due to their race and gender identity. Their racialized and gendered experiences on campus may fall short of their pre-college expectations for racial diversity and inclusion, leading them to rethink their social status on campus.

For women in the Achieved group, experiencing gender hassles and race and gender hassles likely undermined their sense of belonging in the college context, as well as any expectation that they would be wholly supported in their race and gender identities. Black women in the Achieved cluster are actively thinking about their race and gender identities, and they may encounter varying levels of acceptance in same-race organizations on campus than in same-gender organizations (Museus, 2008; Patton, 2006). For example, Black women in STEM

may have to contend with negative race *and* gender stereotypes about their intellectual abilities, while White women must solely contend with pejorative gender stereotypes (e.g., Johnson, 2011). It would be interesting to examine whether Black women's cluster group membership predicts college major or disciplinary preferences (Dortch et al., 2017; Johnson, 2012; Settles et al., 2016) – might women who have a stronger attachment to their racial and gender identity also seek out courses or pursue majors that encourage them to think critically about these topics?

In addition, for Black women in the Achieved and Mixed-Status Gender Exploring groups, race and gender hassles was associated negatively with women's sense of environmental mastery. This suggests that encountering discrimination about their Black woman identity undermined how well they felt they could navigate the college setting. Environmental mastery refers to activities such as managing everyday affairs, having a sense that one can improve things they do not like in their environment, and feeling a positive sense of control over one's daily life. Encountering race and gender hassles challenged this sense of mastery for participants in the Achieved and Gender Exploring clusters, and perhaps for different reasons. Black women in the Achieved cluster reported a stronger sense of attachment, more exploration, and a stronger commitment to their identities as an African American and as a woman. For these women, experiencing daily hassles related to those identities may have lessened their sense of belonging in the college context and pushed them to question whether they were valued as students (Allen, 1992; Hurtado, 1992; Jack, 2014; McCabe, 2009). Conversely, Black women in the Mixed Status cluster reported a lower sense of attachment, less exploration, and a lower commitment to their identities as an African American. For these women, it may have been upsetting that they were being treated poorly due to identities that were not of central importance to them. Further, if they

assumed these identities would have little relevance in their college settings, it may have been jarring to be treated poorly due to their Black woman identity. Remarking on her sense of belonging at her institution [or lack thereof] and her treatment as a Black woman, one participant recalled,

“I think I began to see it was all because I was the only Black person in this all-White environment. Or the alternative, I would go to a party and then people would completely exoticify me and they would pet my hair and they would ask me all these weird questions that kind of went back to my racial identity and I felt like I was either ignored or I was a zoo animal.” (Maya)

Unlike the negative associations with self-acceptance and environmental mastery, there was a consistent exception, in that academic persistence was associated positively with race and gender hassles for women in the Achieved, Diffused, and Mixed Status-Gender Central/Exploring group. The finding may highlight that when participants perceived that they were being treated unfairly due to their identity as a Black woman, they perhaps registered it as a direct challenge to whether they belonged at the university and felt a stronger desire to work hard in the classroom. Given that the daily hassles scale measures a multitude of qualitatively different experiences (i.e., being treated rudely, being ignored or overlooked, being followed while in public spaces, and overhearing an offensive joke or comment), participants who perceived more negative treatment related to their race and gender may have been encouraged to remain persistent in the classroom as a form of resilience and success over the discriminatory challenges (e.g., Hannon et al., 2016). Across clusters, women may have considered their success as a student one way to dispel negative stereotypes about Black women.

In all, these findings suggest that future research should attend to the messages and norms within institutional contexts that are conveyed to students from historically marginalized and minoritized communities, to better understand whether students get a sense that they can maintain strong attachments to their social identities and receive support within the college context. Further, the results highlight that Black women encounter different types of discrimination experiences, and there is utility in thinking about how context-specific measures (i.e., classroom inferiorization) capture their experiences of marginalization. Finally, the associations with race and gender hassles and self-acceptance highlights the need for more research on how identity development influences the wellbeing and mental health outcomes of Black women.

Interpersonal Discrimination Experiences as Predictors of College Adjustment Outcomes

A primary objective of this study was to examine how race and gender identity profiles mitigate the effect of race and gender discrimination on Black women's academic and psychological adjustment outcomes over the first-year transition. I provided evidence that Black women in the Achieved cluster (and to a lesser extent, Black women in the Gender Exploring cluster) report more classroom racial and gender inferiorization experiences than Black women in the Diffused cluster. Also, results generally supported the idea that race and gender discrimination undermines Black women's sense of self-acceptance, but may encourage academic persistence as a way to challenge the unfair treatment. In addition, accounting for Black women's cluster group membership, the regression results indicate that daily hassle experiences undermine women's sense of academic curiosity, autonomy, and environmental mastery.

However, my findings present a mixed picture on the protective role of racial and gender identity beliefs on Black women's academic and psychological outcomes. First, my hypothesis that Black women who belonged to groups characterized by stronger attachment and more engagement (e.g., Achieved) would demonstrate better outcomes and be more protected in the context of discrimination, compared to women who belonged to groups characterized by lower attachment and less exploration (e.g., Diffused and Mixed Status-Gender Central/Exploring) was largely unsupported. For one, I did not find many significant results evidencing a protective or buffering relationship between Black women's race and gender cluster group, their discrimination experiences, and their adjustment outcomes during the first year. I found two significant interactions with self-acceptance, and in the first, Black women in the Achieved group who experienced more gender hassles reported lower self-acceptance, while Black women in the Mixed Status-Gender Central/Exploring group reported higher self-acceptance amidst more gender hassles. Also, while racial hassles was unrelated to the self-acceptance of Black women in the Achieved group, I found a negative association between racial hassles and self-acceptance for women in the Mixed Status-Gender Central/Exploring group. Upon reflection, these findings highlight a few important points.

While some studies have highlighted how centrality can play a buffering role against discrimination (e.g., Sellers et al., 2003; Chavous et al., 2008), other identity beliefs such as public regard, may play unique protective roles in the context of discrimination experiences in ways that centrality does not capture. Researchers generally suggest that when individuals with lower public regard (i.e., belief that others view African Americans less positively) experience racial discrimination, the experience is consistent with their worldview that others have a negative bias against members of their racial community (Rivas-Drake et al., 2014; Sellers et al.,

2003). Thus, compared to individuals with higher public regard who think that others generally view African Americans positively, individuals lower in public regard are more protected from the harmful effects of discrimination because their racial worldview accounts for prejudicial bias against Blacks. In the present study, I did not assess Black women's public regard, and instead, I focused on centrality, exploration, and commitment. By focusing on centrality as the sole indicator of "content," I am able to discuss how important race and gender were to Black women's self-concept, but I am unable to draw conclusions about other important content areas of Black women's race and gender identity like pride and affective connection. Prior work has illustrated that private regard – or positive feelings about one's racial group – relate to a host of adjustment and wellbeing outcomes (Hope et al., 2013; Oney, Cole, & Sellers, 2011; Settles et al., 2010). Still – conceptually – an "Achieved" identity is viewed as adaptive, as individuals are more likely to have a worldview for thinking about their social identities in the context of identity-based experiences. In future work, I will further examine how the interplay between different identity beliefs provide protection in the context of discrimination.

Overall though, the negative relationships between discrimination experiences and the study outcomes was consistent with my general prediction that race and gender discrimination would undermine Black women's adjustment to college. Prior studies note that the extent to which an identity is a salient and accessible part of an individual's self-concept influences how they interpret and respond to events (e.g., Chavous et al., 2008; Sellers et al., 2003; Shelton & Sellers, 2000). This pattern with Black women in the Achieved group is consistent with this research, in that these women reported that race and gender were highly central to their self-concept and demonstrated poorer outcomes when they encountered negative treatment related to these identities. Within the new predominantly White context, Black women in the Achieved

group may have received little positive reinforcement and support for their ideas about the importance and value of being African American women. For example, in defining how she struggled to relate to White men and White women, one woman from the qualitative sample stated,

“It’s more important to me, the intersections, because like there’s an increase in more complexities about like the issues that are at hand. It’s not just like, “Oh, this guy –was like being condescending because I’m a girl, but this guy may have been just condescending to me because I’m Black and you [White woman] don’t understand that and you don’t understand like someone being condescending to you because of race.” And if I ask you for support, you may look at me and say, “Oh, maybe it’s in your head. Or are you sure that’s why,” you know? And it is not really a support thing and it kind of isolates me period.” (Jasmine)

Earlier in this same interview, the young woman discusses how she has had to rethink what her race and gender identities mean to her due to experiences at her university that underscore the devaluation of those identities in her new context. These findings highlight that Black women’s sense of overall well-being was harmed by experiences of race and gender discrimination, and that for some women, this translated into a lower endorsement of race and gender centrality, exploration, and commitment. Future research should consider how the interplay between identity beliefs may serve as promotive or protective factors. These results suggest the importance of examining Black women’s experiences across contexts, as well as the ways that different forms of discrimination influence their academic and psychological functioning.

Limitations and Considerations

There are a few limitations worth noting with the current study, particularly in relation to the measures of racial and gender identity. The current study was among the first to examine multiple dimensions of race and gender identity concomitantly among a sample of Black college women. Still, different patterns of identity beliefs would have resulted if I had used different measures of race and gender identity. I focused on measures of identity that were available in the dataset for both race and gender to conduct “parallel” analyses, but there are other important measures of these social identities that were not captured – particularly with racial identity. The centrality subscale was drawn from the MIBI, which also includes measures of racial regard (i.e., how positively or negatively African Americans feel about their identity and how they believe others feel about African Americans). Private regard is well-established as a promotive asset for Black students’ achievement motivation (e.g., Smalls & Cooper, 2012), and public regard is considered a protective asset against discrimination in certain contexts (e.g., Sellers et al., 2003). Thus, I may have been able to tease out other nuances about how Black women’s racial identity beliefs function in the context of their college experiences if those had been included. However, I did not have similar measures for gender identity, and I had to make intentional decisions about the number of identity dimensions it was reasonable to include in the cluster profiles.

Building on the last point about lacking measures of gender identity, the items that I used for gender centrality, gender exploration, and gender commitment were adapted from the racial identity measures of centrality, exploration, and commitment. The results demonstrated that Black women think about and engage with their racial and gender identity in different ways, it remains an open question whether modifying the measures by changing the word “race” to “gender” adequately captures the identity construct. In general, this type of scale adaptation for gender is common and has demonstrated good reliability with female samples (e.g., Kiefer et al.,

2007), but there may be more empirically appropriate ways to tap into Black women's gender identity development – especially since many Black women do not disentangle their racial beliefs from their gender beliefs (Abrams, Maxwell, Pope, & Belgrave, 2014).

Additionally, the amount of variance explained in Black women's academic and psychological adjustment outcomes was low for all models. However, the amount of variance explained was similar to prior research examining the role of racial identity on achievement outcomes (e.g., Butler-Barnes et al., 2018; Chavous et al., 2008), and I did not expect to explain the majority of variance in Black women's college outcomes, but rather, to examine how identity beliefs related to different types of discrimination and indicators of adjustment.

The current study has several methodological strengths, as well, including the use of multiple indicators of racial and gender identity, the longitudinal analysis, and considering how Black women's profiles of belief related to their discrimination experiences and adjustment outcomes. By clustering multiple indicators of identity, I was able to build a more robust profile about the types of beliefs that influence adjustment, and how identity beliefs operate both in relation to one another. This was also the first study to consider centrality, exploration, and commitment together, thereby tapping into both the process and content of Black women's identity beliefs. In considering several types of discriminatory experiences, I was able to disentangle whether profiles that were characterized by stronger attachment and commitment to race and gender (Achieved) demonstrated more experiences of discrimination in those categories, compared to women who reported a weaker attachment and commitment. The findings also revealed that race and gender discrimination influence the academic and psychological outcomes of Black women in distinct ways. For example, race and gender hassles was positively associated with academic

persistence, but negatively associated with the autonomy and self-acceptance – highlighting that discrimination does not function in the same way for all measures of adjustment.

One important future direction would be to examine whether and how these identity profiles of race and gender shift over time. It may be that Diffused Black women have more race and gender-related experiences in college that instigate more exploration of these identities and encourage a stronger attachment and sense of commitment. Similarly, Exploring Black women may move from a state of active exploration to a cluster that is distinguished by either a stronger or weaker attachment and commitment. There are no studies to date that have examined race and gender identity change over time among Black college women, although investigations with Black adolescents (Chavous et al., 2008) and Black college students (Richardson et al., 2018) have highlighted how students' outcomes vary over time in relation to their racial identity beliefs. From a resilience perspective, it would also be important to consider whether beyond the first year, belonging to a certain identity profile is related to better adjustment.

Conclusions

In sum, this study empirically tested six dimensions of race and gender identity beliefs from a person-centered perspective among a longitudinal sample of Black women in college. The study revealed the heterogeneity of identity profiles when Black women enter college, in addition to extending patterns of identity beliefs found in earlier work (Jones et al., 2018) to include more components of race and gender identity. Integrating multiple dimensions of the process and content of Black women's beliefs drew attention to unique subgroups of women who differed in how their race and gender functioned as a part of their self-concept. These findings push us to think more about the factors associated with race and gender identity development among Black women, as well as how the development of certain beliefs relate to academic and

psychological adjustment processes. An important next step would be to examine how Black women's identity beliefs shift over time, and to explore how certain experiences predict identity change as women continue to engage in the college context. Researchers should continue to consider the multifaceted nature of identity among Black women, given that in comparison to an approach that examines the identities in isolation, a typology provides a useful perspective on the distinct relationships between race, gender, and women's outcomes.

Table 1. Model fit statistics for latent class analyses of racial and gender identity classes at Time 1 (n = 293)

Model	BIC (LL)	L ²	df	Bootstrap <i>p</i> value	% reduction in L ²	Maximum BVR	BLRT <i>p</i> value	Classificatio n error %
One-class	2459.46	231.26	57	--	99.89	227.23	< .001	0.01%
Two-class	2374.00	86.04	50	.004	76.49	23.65	0.01	10.18%
Three-class	2366.40	58.68	43	.56	78.10	12.91	0.20	12.50%
Four-class	2392.08	44.59	36	.15	74.21	6.86	.42	15.18%
Five-class	2417.61	30.37	29	.40	74.92	1.17	.76	19.25%

Note. BIC(LL) = Log-likelihood Bayesian information criterion. L² = Likelihood ratio chi-square, BVR = Bivariate residuals, BLRT = Bootstrap likelihood ratio test. Bold font highlight class model that best fits the data.

Figure 1. Time 1 race and gender identity profiles

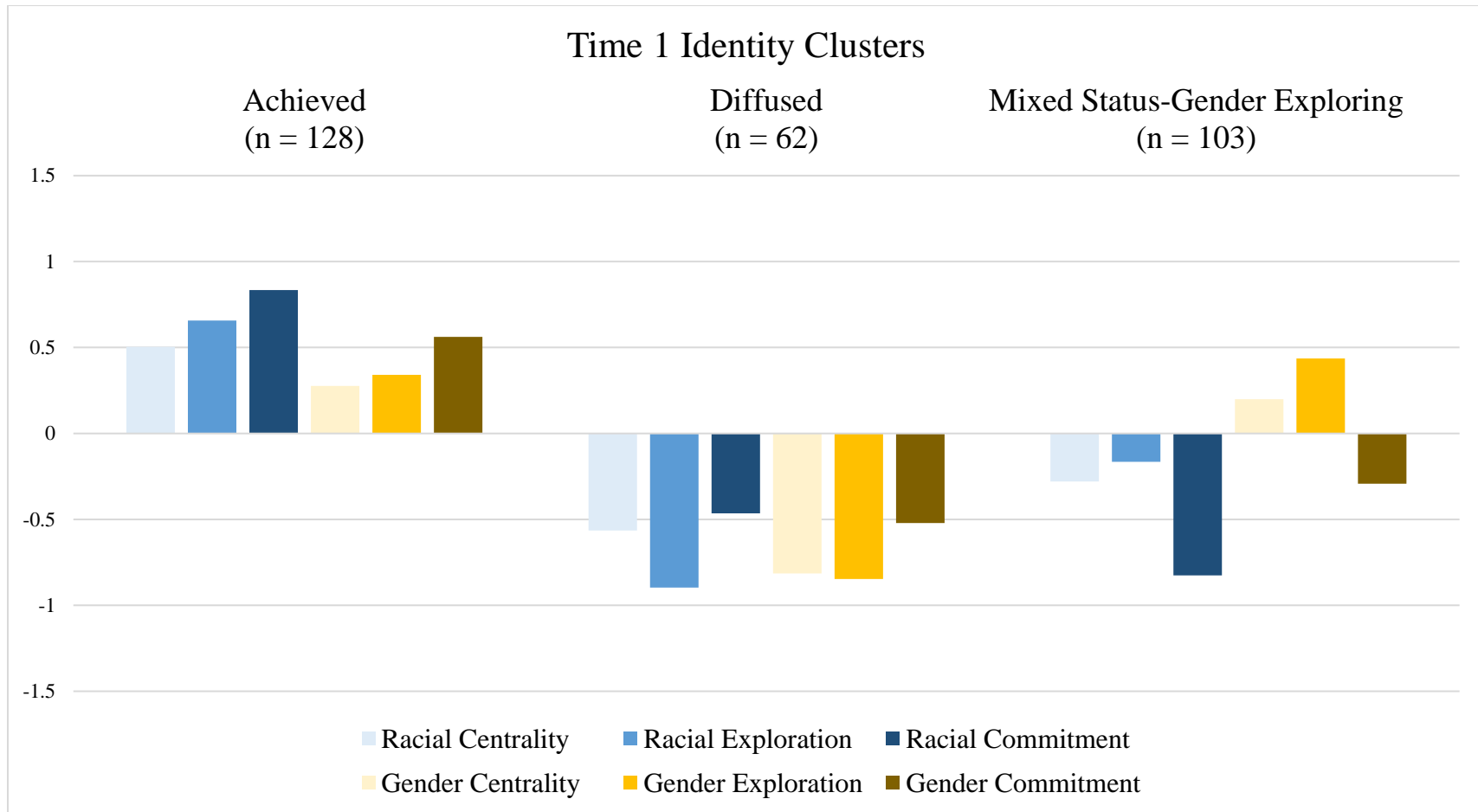


Table 2. Raw means, standardized means (and standard deviations) of identity variables for Black women's cluster group membership at Time 1

Variable	Total Sample (n = 293)	Achieved (n = 128)	Diffused (n = 62)	Mixed Status- Gender Exploring (n = 103)
<i>Raw Means</i>				
Racial Centrality	5.19 (1.38)	5.88 (1.11) ^a	4.45 (1.41) ^b	4.83 (1.23) ^b
Racial Exploration	3.03 (0.64)	3.45 (0.51) ^a	2.43 (0.46) ^b	2.91 (0.53) ^c
Racial Commitment	3.16 (0.74)	3.80 (0.32) ^a	2.86 (0.76) ^b	2.60 (0.42) ^c
Gender Centrality	3.47 (0.77)	3.67 (0.73) ^a	2.85 (0.66) ^b	3.62 (0.70) ^a
Gender Exploration	2.63 (0.75)	2.80 (0.78) ^a	1.92 (0.45) ^b	2.87 (0.60) ^a
Gender Commitment	3.18 (0.66)	3.54 (0.52) ^a	2.83 (0.67) ^b	2.98 (0.61) ^b
<i>Standardized Means</i>				
Racial Centrality	-0.01 (1.03)	0.50 (0.83) ^a	-0.56 (1.05) ^b	-0.27 (0.92) ^b
Racial Exploration	0.02 (0.97)	0.66 (0.78) ^a	-0.90 (0.70) ^b	-0.16 (0.80) ^c
Racial Commitment	-0.05 (1.03)	0.83 (0.45) ^a	-0.46 (1.06) ^b	-0.83 (0.60) ^c
Gender Centrality	0.00 (1.03)	0.28 (0.98) ^a	-0.81 (0.89) ^b	0.20 (0.94) ^a
Gender Exploration	0.11 (1.02)	0.34 (1.06) ^a	-0.85 (0.61) ^b	0.44 (0.82) ^a
Gender Commitment	0.01 (1.01)	0.56 (0.78) ^a	-0.52 (1.02) ^b	-0.29 (0.93) ^b

Note. Significant differences at the $p < .05$ level are denoted by differences in subscripts.

Table 3. Demographic characteristics by cluster at Time 1

	Achieved		Diffused		Mixed Status- Gender Central/Exploring			
	(n = 128)		(n = 62)		(n = 103)			
							Totals	
Hometown	Rural	4	Rural	0	Rural	1	Rural	5
	Small Town	30	Small Town	14	Small Town	30	Small Town	74
	Suburb	35	Suburb	18	Suburb	36	Suburban	89
	Urban Area	59	Urban Area	30	Urban Area	35	Urban Area	124
Racial Composition of Home Neighborhood	< 20%	22	< 20%	12	< 20%	25	< 20%	59
	21-40%	17	21-40%	13	21-40%	22	21-40%	52
	41-60%	14	41-60%	9	41-60%	18	41-60%	41
	61-80%	16	61-80%	11	61-80%	8	61-80%	35
	81-100%	59	81-100%	17	81-100%	30	81-100%	106
Social Class Background	Poor	8	Poor	8	Poor	5	Poor	21
	Working	23	Working	11	Working	17	Working	51
	Lower Middle	31	Lower Middle	12	Lower Middle	16	Lower Middle	59
	Middle	54	Middle	20	Middle	46	Middle	120
	Upper Middle	11	Upper Middle	10	Upper Middle	17	Upper Middle	38
	Upper	1	Upper	1	Upper	1	Upper	3

Table 4. Means and standard deviations for Time 2 outcomes by Time 1 clusters

	Total Sample (n = 293)	Achieved (n = 128)	Diffused (n = 62)	Mixed Status – Gender Exploring (n = 103)	F - statistic
<i>Interpersonal Discrimination</i>					
Racial Hassles	3.54 (4.23)	3.88 (4.24)	3.37 (4.46)	3.50 (4.53)	(2, 290) = 0.36, $p = .71$
Gender Hassles	1.10 (2.09)	0.93 (1.90)	1.14 (2.01)	1.18 (2.28)	(2, 290) = 0.49, $p = .61$
Race and Gender Hassles	3.84 (4.68)	3.88 (4.54)	2.95 (4.34)	4.43 (5.26)	(2, 290) = 1.85, $p = .16$
Classroom Racial Inferiorization	3.16 (0.74)	3.81 (0.33) ^a	2.86 (0.76) ^b	2.60 (0.43) ^c	(2,290) = 190.65, $p < .001$
Classroom Gender Inferiorization	3.35 (0.65)	3.59 (0.57) ^a	3.23 (0.65) ^b	3.16 (0.65) ^b	(2, 205) = 11.19, $p < .001$
<i>College Adjustment</i>					
Academic Competence	2.86 (0.67)	2.96 (0.62)	2.72 (0.67)	2.89 (0.66)	(2, 203) = 1.95, $p = .14$
Academic Curiosity	3.17 (0.67)	3.27 (0.69) ^a	2.92 (0.71) ^b	3.15 (0.59) ^{ab}	(2, 278) = 5.37, $p < .01$
Academic Persistence	2.13 (0.88)	2.08 (0.86)	2.03 (0.85)	2.24 (0.87)	(2, 275) = 1.36, $p = .26$
Autonomy	3.84 (0.72)	3.89 (0.76)	3.71 (0.69)	3.76 (0.66)	(2, 277) = 1.57, $p = .21$
Environmental Mastery	3.94 (0.87)	4.03 (0.82)	3.89 (0.92)	3.82 (0.89)	(2, 271) = 1.69, $p = .19$
Self-Acceptance	4.42 (1.00)	4.49 (0.95)	4.34 (1.05)	4.30 (1.01)	(2, 270) = 1.06, $p = .35$

Note. Significant differences at or below the $p < .05$ level are denoted by differences in subscripts.

Table 5. Bivariate correlations for Time 1 Achieved cluster and Time 2 outcomes

	1	2	3	4	5	6	7	8	9	10	11
1. Racial Hassles	--	.26**	-.18*	.01	.28**	.05	.16	.05	-.01	-.01	.09
2. Gender Hassles		--	.03	.01	.05	-.09	-.06	.14	-.14	-.09	-.31***
3. Race and Gender Hassles			--	-.09	.08	.16	-.14	.35***	-.11	-.27**	-.18*
4. Classroom Racial Infer.				--	-.08	-.07	.13	-.06	.14	.04	.05
5. Classroom Gender Infer.					--	.22*	.17	-.08	.12	.13	.24*
6. Academic Competence						--	.12	.12	-.06	.08	.21
7. Academic Curiosity							--	-.28**	.10	.31***	.36***
8. Academic Persistence								--	-.16	-.31***	-.16
9. Autonomy									--	.27**	.39***
10. Environmental Mastery										--	.43***
11. Self-Acceptance											--

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

Table 6. Bivariate correlations for Time 1 Diffused cluster and Time 2 outcomes

	1	2	3	4	5	6	7	8	9	10	11
1. Racial Hassles	--	.15	-.03	-.05	.33*	.07	.03	.15	-.16	-.18	-.01
2. Gender Hassles		--	.31*	-.04	-.15	.05	-.02	.23	-.08	-.26	-.25
3. Race and Gender Hassles			--	.01	-.17	.15	-.27	.65***	-.16	-.25	-.28*
4. Classroom Racial Infer.				--	.37*	.01	.23	-.20	.09	.12	.15
5. Classroom Gender Infer.					--	.11	.17	-.17	.26	.07	.28
6. Academic Competence						--	.27	-.05	-.16	-.36*	-.14
7. Academic Curiosity							--	-.44***	.07	.07	.15
8. Academic Persistence								--	-.33*	-.25	-.47***
9. Autonomy									--	.50***	.58***
10. Environ. Mastery										--	.67***
11. Self-Acceptance											--

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

Table 7. Bivariate correlations for Time 1 Mixed Status-Gender Central/Exploring cluster and Time 2 outcomes

	1	2	3	4	5	6	7	8	9	10	11
1. Racial Hassles	--	.34***	-.24	-.05	.14	-.05	-.03	.11	-.25*	.06	-.16
2. Gender Hassles		--	-.02	-.03	-.08	.09	.10	.07	-.08	.04	.13
3. Race and Gender Hassles			--	.01	-.12	-.02	-.05	.36***	.10	-.24*	-.16
4. Classroom Racial Infer.				--	.08	.07	.06	-.01	.05	-.05	-.03
5. Classroom Gender Infer.					--	.01	.37***	.01	.09	.07	.01
6. Academic Competence						--	.20	-.06	-.13	.03	-.02
7. Academic Curiosity							--	-.27**	.14	.10	.24*
8. Academic Persistence								--	.01	-.17	-.26*
9. Autonomy									--	.15	.01
10. Environ. Mastery										--	.49***
11. Self-Acceptance											--

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

Table 8. Hierarchical linear regression predicting academic competence and academic curiosity

Step 1	<u>Academic Competence</u>			<u>Academic Curiosity</u>		
	B	SE	β	B	SE	β
(Intercept)	2.81	0.11		3.10	0.11	
Household Income	0.01	0.01	-0.10	0.01	0.01	0.05
Diffused	-0.23	0.16	-0.14	-0.18	0.16	-0.11
Mixed Status – Gender Exploring	-0.01	0.15	-0.01	0.13	0.15	0.10
Racial Hassles	0.01	0.01	0.02	-0.01	0.01	-0.01
Gender Hassles	0.01	0.02	0.02	0.02	0.02	0.05
Race and Gender Hassles	0.01	0.01	0.10	-0.02	0.01	-0.12
Classroom Racial Inferiorization	0.02	0.10	0.02	0.13	0.10	0.15
Classroom Gender Inferiorization	0.12	0.08	0.12	0.24**	0.08	0.24
Model Summary	Adjusted $R^2 = .03$, $F(8, 192) = 1.72$, $p = .10$			Adjusted $R^2 = .09$, $F(8, 190) = 3.49$, $p < .001$		
Step 2						
(Intercept)	2.82	0.17		2.90	0.17	
Household Income	0.01	0.01	0.10	0.01	0.01	0.06
Diffused	-0.21	0.20	-0.13	-0.17	0.19	-0.10
Mixed Status – Gender Exploring	0.03	0.10	0.02	0.26	0.20	0.19
Racial Hassles	0.01	0.02	0.06	0.02	0.02	0.14
Gender Hassles	-0.04	0.04	-0.12	-0.05	0.04	-0.14
Race and Gender Hassles	0.02	0.02	0.16	-0.01	0.02	-0.05
Classroom Racial Inferiorization	-0.04	0.21	-0.04	0.28	0.20	0.31
Classroom Gender Inferiorization	0.22	0.13	0.22	0.18	0.13	0.18
Diffused X Racial Hassles	-0.01	0.03	-0.01	-0.02	0.03	-0.06
Diffused X Gender Hassles	0.05	0.07	0.08	0.13*	0.07	0.19
Diffused X Race and Gender Hassles	0.01	0.03	0.03	-0.06*	0.03	-0.17
Diffused X Classroom Racial Inferiorization	0.05	0.25	0.03	-0.20	0.25	-0.11
Diffused X Classroom Gender Inferiorization	-0.09	0.23	-0.04	-0.05	0.23	-0.02
Mixed Status X Racial Hassles	-0.02	0.03	-0.09	-0.04	0.03	-0.16
Mixed Status X Gender Hassles	0.08	0.06	0.15	0.09	0.06	0.18
Mixed Status X Race and Gender Hassles	-0.03	0.02	-0.12	-0.01	0.02	-0.02
Mixed Status X Classroom Racial Inferiorization	0.14	0.28	0.08	-0.12	0.28	-0.07
Mixed Status X Classroom Gender Inferiorization	-0.19	0.17	-0.12	0.16	0.17	0.10
Model Summary	Adjusted $R^2 = .01$, $F(18, 182) = 1.04$, $p = .42$			Adjusted $R^2 = .09$, $F(10, 180) = 2.11$, $p < .01$		

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

Table 9. Hierarchical linear regression predicting academic persistence and autonomy

Step 1	<u>Academic Persistence</u>			<u>Autonomy</u>		
	B	SE	β	B	SE	β
(Intercept)	2.15	0.14		3.90	0.12	
Household Income	-0.01	0.01	-0.02	-0.02*	0.01	-0.17
Diffused	-0.13	0.20	-0.06	0.06	0.17	0.04
Mixed Status – Gender Exploring	-0.03	0.19	-0.02	0.06	0.15	0.04
Racial Hassles	0.03	0.01	0.14	-0.03*	0.01	-0.16
Gender Hassles	0.01	0.03	0.02	-0.01	0.03	-0.01
Race and Gender Hassles	0.06***	0.01	0.35	-0.01	0.01	-0.08
Classroom Racial Inferiorization	-0.12	0.12	-0.10	0.15	0.10	0.16
Classroom Gender Inferiorization	-0.09	0.10	-0.07	0.16*	0.08	0.15
Model Summary	Adjusted $R^2 = .011$, $F(8, 187) = 3.45$, $p < .001$			Adjusted $R^2 = .06$, $F(8, 190) = 2.57$, $p < .01$		
Step 2						
(Intercept)	2.25	0.21		3.97	0.18	
Household Income	-0.01	0.01	-0.03	-0.02	0.01	-0.17
Diffused	-0.15	0.24	-0.07	0.04	0.21	0.02
Mixed Status – Gender Exploring	-0.10	0.25	-0.06	0.12	0.21	0.08
Racial Hassles	0.04	0.02	0.19	0.01	0.02	0.03
Gender Hassles	0.03	0.05	0.08	-0.07	0.05	-0.18
Race and Gender Hassles	0.06**	0.02	0.32	-0.03*	0.02	0-.22
Classroom Racial Inferiorization	-0.19	0.25	-0.16	0.15	0.22	0.15
Classroom Gender Inferiorization	-0.23	0.16	-0.18	0.16	0.14	0.15
Diffused X Racial Hassles	0.01	0.04	0.02	-0.05	0.03	-0.14
Diffused X Gender Hassles	-0.05	0.09	-0.06	0.13	0.07	0.18
Diffused X Race and Gender Hassles	0.05	0.04	0.12	0.01	0.03	0.02
Diffused X Classroom Racial Inferiorization	0.14	0.31	0.06	-0.13	0.27	-0.08
Diffused X Classroom Gender Inferiorization	0.06	0.28	0.02	0.22	0.24	0.09
Mixed Status X Racial Hassles	-0.03	0.03	-0.09	-0.05	0.03	-0.19
Mixed Status X Gender Hassles	-0.04	0.07	-0.06	0.08	0.06	0.16
Mixed Status X Race and Gender Hassles	-0.01	0.03	-0.05	0.04	0.02	0.18
Mixed Status X Classroom Racial Inferiorization	0.01	0.35	0.01	0.13	0.30	0.06
Mixed Status X Classroom Gender Inferiorization	0.28	0.22	0.14	-0.05	0.18	-0.03
Model Summary	Adjusted $R^2 = .09$, $F(10, 177) = 2.22$, $p < .01$			Adjusted $R^2 = .07$, $F(18, 180) = 1.82$, $p < .05$		

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

Table 10. Hierarchical linear regression predicting environmental mastery and self-acceptance

Step 1	Environmental Mastery			Self-Acceptance		
	B	SE	β	B	SE	β
(Intercept)	4.16	0.15		4.43	0.16	
Household Income	-0.015	0.01	-0.10	0.01	0.01	0.03
Diffused	-0.09	0.21	-0.04	0.03	0.24	0.01
Mixed Status – Gender Exploring	-0.01	0.20	-0.02	0.04	0.22	0.02
Racial Hassles	-0.02	0.02	-0.08	-0.03*	0.02	-0.16
Gender Hassles	-0.04	0.03	-0.08	-0.01	0.04	-0.03
Race and Gender Hassles	-0.04**	0.01	-0.23	-0.05**	0.01	-0.23
Classroom Racial Inferiorization	0.05	0.13	0.04	0.12	0.14	0.09
Classroom Gender Inferiorization	0.12	0.10	0.09	0.25*	0.11	0.18
Model Summary	Adjusted $R^2 = .05$, $F(8, 185) = 2.34$, $p < .01$			Adjusted $R^2 = .07$, $F(8, 185) = 2.70$, $p < .01$		
Step 2						
(Intercept)	4.09	0.23		4.29	0.24	
Household Income	-0.02	0.01	-0.11	0.01	0.01	0.02
Diffused	0.03	0.26	0.02	0.16	0.28	0.07
Mixed Status – Gender Exploring	-0.07	0.26	-0.04	0.08	0.28	0.04
Racial Hassles	-0.01	0.03	-0.05	0.01	0.03	0.03
Gender Hassles	-0.06	0.06	-0.14	-0.14*	0.06	-0.29
Race and Gender Hassles	-0.04	0.02	-0.22	-0.04	0.02	-0.19
Classroom Racial Inferiorization	0.10	0.27	0.09	0.23	0.29	0.18
Classroom Gender Inferiorization	0.24	0.17	0.18	0.38*	0.18	0.27
Diffused X Racial Hassles	-0.01	0.04	-0.03	-0.03	0.04	-0.07
Diffused X Gender Hassles	-0.01	0.09	-0.01	0.11	0.10	0.11
Diffused X Race and Gender Hassles	-0.01	0.04	-0.03	-0.04	0.04	-0.08
Diffused X Classroom Racial Inferiorization	0.12	0.34	0.05	-0.10	0.36	-0.04
Diffused X Classroom Gender Inferiorization	-0.28	0.31	-0.10	-0.03	0.32	-0.01
Mixed Status X Racial Hassles	-0.01	0.04	-0.01	-0.09*	0.04	-0.28
Mixed Status X Gender Hassles	0.05	0.07	0.08	0.24**	0.08	0.34
Mixed Status X Race and Gender Hassles	0.01	0.03	0.01	-0.01	0.03	-0.05
Mixed Status X Classroom Racial Inferiorization	-0.29	0.37	-0.12	-0.22	0.39	-0.08
Mixed Status X Classroom Gender Inferiorization	-0.16	0.23	-0.08	-0.32	0.24	-0.14
Model Summary	Adjusted $R^2 = .02$, $F(18, 175) = 1.24$, $p = .23$			Adjusted $R^2 = .10$, $F(18, 175) = 2.24$, $p < .01$		

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

Figure 2. Interaction plot: Predicting Black women's self-acceptance in context of racial hassles by identity clusters

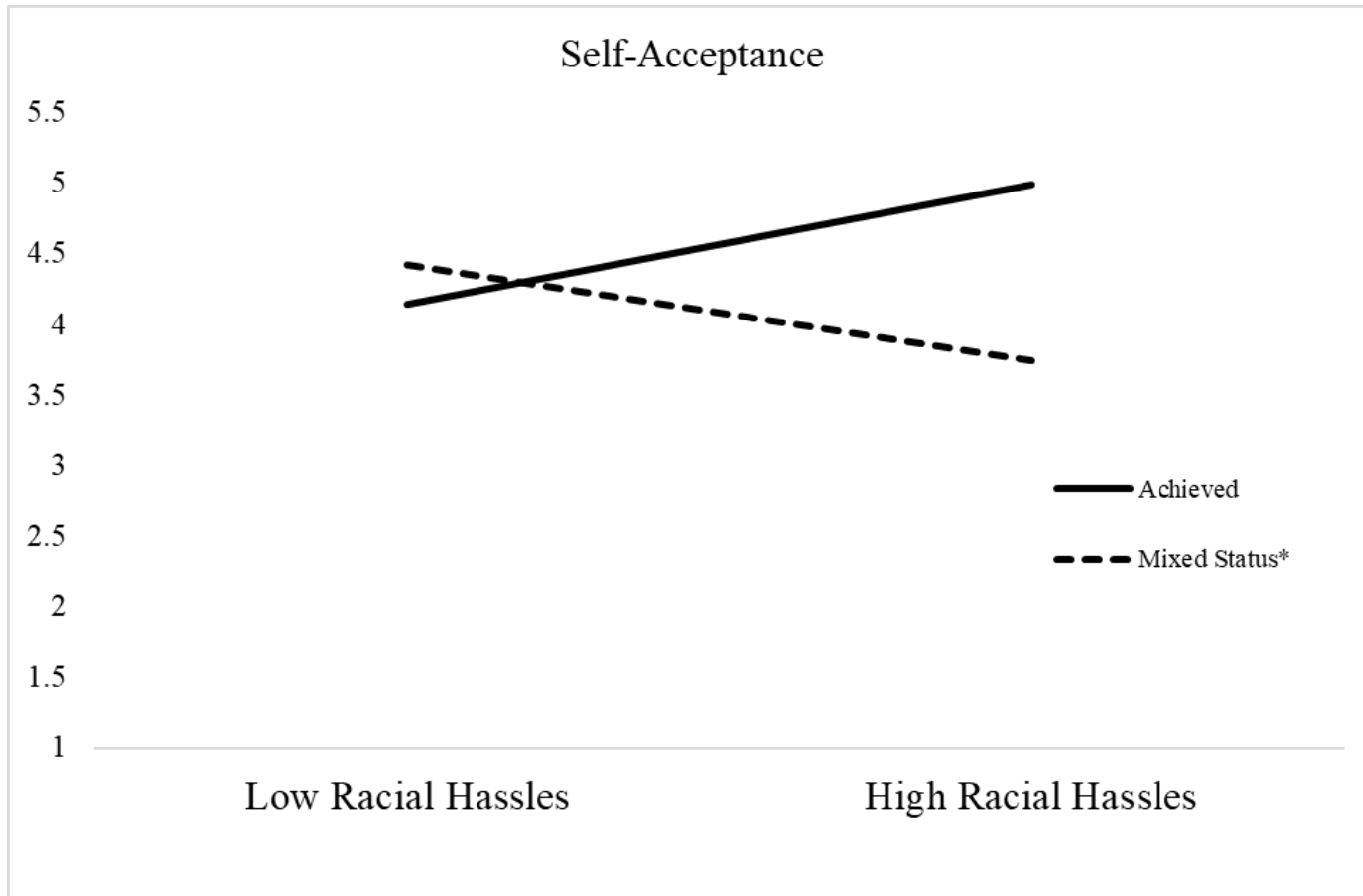
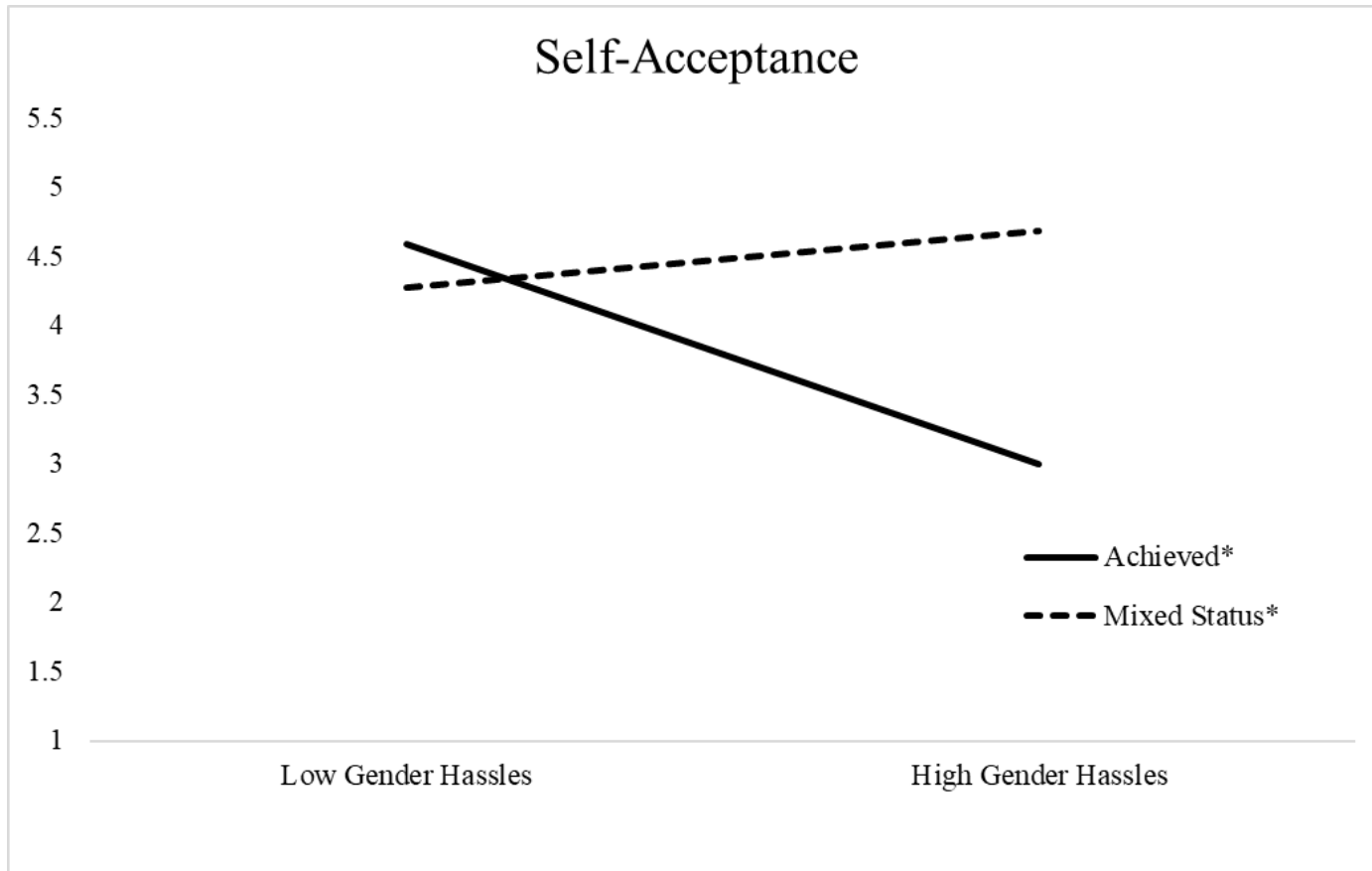


Figure 3. Interaction plot: Predicting self-acceptance in context of gender hassles by identity clusters



Chapter Four: Racial and Gender Discrimination as Predictors of Black College Women's Racial and Gender Identity Change over Time using Multinomial Logistic Regression

The Current Study

The primary aim of this study was to explore the ways in which the content of Black women's racial and gender identity beliefs changed or remained the same over time and assess how this movement over time was driven by experiences of race and gender discrimination. Drawing from three Times of the longitudinal CASIS data set, the current investigation represents one of the first to examine multidimensional change over time in Black women's racial and gender identity profiles. Importantly, the study also mapped the pathways of change among women to note if there were predictable patterns of identity change, as suggested by prior identity status models (i.e., Phinney, 1992), and considered if discrimination experiences related to their race and gender identity predicted subsequent change or stability in beliefs about that identity.

The first research question assessed was: (RQ1) What patterns of cluster change emerge in Black women's racial and gender identity beliefs over time – from the fall of their first year to the spring of their first year (Time 1 to Time 2), and from the spring of the first year to the spring

of their junior year (Time 2 to Time 3)⁵? Based on prior scholarship, I expected that a significant number of Black women would remain stable in their cluster group membership over time, particularly women who are in clusters that correspond with higher levels of race and gender centrality, exploration, and commitment (Achieved) (e.g., Richardson et al., 2018). Conversely, I expected that (2) Black women who initially indicated that race and gender were of little importance to their self-concept (Diffused), would later report that race and gender had become more central to their self-concept over time, and that Black women in cluster groups characterized by lower levels of race and gender exploration and commitment would shift into clusters that corresponded to more exploration and attachment to those identities. I did not have specific hypotheses about the movement of Black women in the Exploring group, who were actively exploring but reported lower attachment to their race and gender identities. For both the Diffused and Exploring groups, I thought that changes in their identity beliefs would occur as they adjusted to their status as racialized gender minorities in the surrounding predominantly White college setting. For women in the Exploring group, I did not expect them to remain in the transitory stage of “high exploration but low commitment,” but instead, that their active exploration would either result in a stronger or weaker sense of attachment, and a higher level of resolution. For women in the Diffused group, it is possible that they maintain their generally lower sense of exploration, centrality, and commitment, but evidence suggests that attending a PWI encourages identity shifts among Black students who initially report little attachment to their racial identity.

⁵ I decided to use Wave 4 data from students’ junior year as a way to maximize the number of participants (we lost a significant number of women (n = 53) if we used senior year data. Junior data allowed me to consider change as far out as possible (i.e., women had declared majors and been in college 3 years) without losing too much of the sample.

For example, Chavous and colleagues (2018) found that over the first-year transition, many African American college students remained stable in their racial centrality and regard beliefs, especially those who initially reported higher levels of racial centrality and private/public regard. However, there were also cluster changes in which students who initially reported lower levels of endorsement later indicated higher levels of centrality and regard beliefs, and vice versa. Thus, for Black women who initially reported higher levels of racial and gender centrality, exploration, and commitment, I think these women may have experiences in the surrounding college context that offer them opportunities to reexamine and refine their thinking around race and gender, but I do not expect either of these social identities to become less central to their self-concept. For women who have given little thought to their racial background prior to college, especially women from predominantly Black neighborhoods and high schools, the college transition to a majority White institution may encourage a process of identity exploration and a stronger sense of connection and commitment to their racial group membership. Among some of these women, I expected that thinking more about their status as racial minorities will encourage similar thinking and exploration on their gender identity, consistent with scholarship on Black women's "double jeopardy" status (e.g., Jones et al., 2018; King, 1988). Alternately, it is possible that Black women's racial group membership may be more salient in a PWI context than their gender group membership, thus corresponding to shifts in racial identity beliefs but little change or decreased attention to gender identity. In a prior study with African American boys, adolescents' levels of racial centrality increased over time, while gender centrality decreased (Rogers, Scott, & Way, 2015).

Finally, I did not have specific hypotheses regarding whether some Black women would shift from clusters that prioritized one social identity over the other—e.g., changing from high

race central & low gender central → low race central and high gender central. More recently, Jones and colleagues (2018) found that some Black women's constructions identity fore fronted their racial identity compared to their gender identity (Race Progressive), while another group of women rated their gender identity as more central to their self-concept than their racial identity (Gender Expressive). While the Gender Expressive group represented a minority of the overall sample, discussions from women in this cluster illustrated that this group felt a strong allegiance toward womanhood and more traditional values associated with femininity (i.e., beauty and nurturance). Still, women in the Gender Expressive group tended to specifically discuss caretaking and nurturing members from within their racial community (i.e., Black men and Black children), suggesting that the centrality of their gender identity as a woman was still rooted in a sense of commitment to the Black community. The present study built upon this work by exploring change over time in three dimensions of Black women's race and gender identity beliefs and offered the opportunity to see whether the clusters that emerged over time were similar or if new cluster typologies emerged.

The second research question (RQ2) involves exploring Black women's movement over time to identify the various pathways and ascertain the most common and least frequent patterns of movement. For example, prior work suggests that the Black women for whom race and gender were a central part of their identity at Time 1, would continue to exhibit a strong attachment to those identities over time (e.g., Richardson et al., 2018). Also, the multidimensionality of the cluster groups merit attention when thinking about change over time. My earlier hypotheses generally predict that more women will move to a state of greater or lesser attachment and commitment to their race and gender identities, partially in response to discrimination experiences. However, I would not fully expect this type of linear change over time (all decrease,

or all increase across identity categories). It is possible that Black women will report less race and gender exploration over time regardless of their initial state, after they have adjusted to the college environment and formed a clear sense of commitment to an identity (high or low). Also, an Achieved or Diffused group may not emerge over time in the same manner as Time 1 if Black women's beliefs around race and gender diverge. I would expect that Black women would draw on their social identities to form relationships and build community, but within the PWI context, this may happen more with race than gender.

The final research question in the current study was: (RQ3) In what ways do experiences of race, gender, and race and gender discrimination at Time 2 and Time 3 predict change or stability in Black women's cluster group membership over time? Drawing on social identity and discrimination scholarship, I expected that more experiences of interpersonal discrimination in a category (such as race) would relate to identity change over time in that category, particularly among women who reported lower on indices of centrality, exploration, and commitment at Time 1 in that category (Banks et al., 2007; Burrow et al., 2009; Chae et al., 2017; Jones et al., 2013). While these studies focus on how racial identity beliefs (such as racial pride and awareness of racism) modify the deleterious influence of discrimination experiences, I believe that experiences of discrimination can alter the nature of individuals' identity beliefs. Prior work suggests that individuals respond to identity threat (discrimination) in various ways, which may include finding out more about an identity or forming a stronger group attachment, or alternately, distancing oneself from that identity as a self-protective coping mechanism (e.g., Richardson et al., 2018; Seaton, Yip, Morgan-Lopez, & Sellers, 2012; Sellers et al., 1998). While the presumption is that discrimination experiences encourages individuals to form a stronger attachment to an identity or engage in more exploration, moving to an identity profile with a

lower attachment/less exploration may be another manifestation of “identity development,” as individuals reassess how their connections to a social identity functions in their daily experiences.

For example, women in an Achieved cluster may not display changes in their identity beliefs in response to experiences of discrimination. Drawing from the findings of prior research, these women are already using their knowledge of how race and gender operate in society for marginalized groups to process their experiences (Chae et al., 2017; Sellers et al., 2003), so discrimination experiences may affirm their worldview rather than change it. On the other hand, discrimination experiences that draw attention to race and gender may push participants to reevaluate their attitudes and beliefs if they’d engaged in little prior exploration of those identities or felt little attachment. Thus, Black women in a lower race central, exploration, or commitment cluster group (Diffused) who encountered more racial discrimination may shift into a higher race central, exploration, or commitment cluster group (Achieved), or they may distance themselves from the stigmatized group and deemphasize group affiliation as one way to cope (e.g., Fordham, 1988). Finally, I was especially interested in assessing how women in the Exploring cluster group would fare over time. From the Time 1 clusters, I interpreted the Exploring group as a transitory state that would be the most likely to exhibit change over time – either demonstrating a significant increase or decrease in attachment and commitment. While I expected women in the Achieved group to largely remain in the Achieved group, and for women in the Diffused group to either remain unattached or move towards an “achieved” profile, women in the Exploring group represent a juncture – in the context of discrimination, will Black women who are actively thinking about their race and gender identities form a stronger attachment to said identities or dissociate from them?

Method

Overview of Study Measures

Demographic Information

Respondents reported several items that were related to their personal backgrounds, including race and ethnic identification, gender, social class status, sexual orientation, household income prior to college, hometown description, and racial composition of students' prior neighborhood and high school (see Appendix A).

Racial & Gender Identity Beliefs

Racial Centrality. The racial identity items used to assess racial centrality in this data set were drawn from the Multidimensional Inventory of Black Identity (MIBI; Sellers et al., 1997) (see Appendix B). The MIBI measures different racial identity attitudes among African Americans regarding the significance of race in how they define themselves (i.e., centrality) and the qualitative meanings they attach to membership in their racial group (i.e., private regard and public regard). The current study focuses on racial centrality, which refers to the extent to which race forms a core part of an individual's self-concept. The subscale includes three items (e.g., "Being a member of my racial/ethnic group is an important reflection of who I am" and "I have a strong sense of belonging with other people from my racial/ethnic group."). Participants responded on a 1 to 7 Likert-type scale indicating 1 = strongly disagree to 7 = strongly agree, and items were recoded such that higher scores indicated higher racial centrality. Interrater reliability was good at Time 1 ($\alpha = .79$), Time 2 ($\alpha = .84$), and Time 3 ($\alpha = .90$).

Gender Centrality. The gender identity scale used in this data set were items drawn from Luhtanen & Crocker's (1992) scale on collective self-esteem and was intended to assess the extent to which an individual defines his/herself according to gender (see Appendix B). Items

from this modified scale have been used in other studies (e.g., Kiefer et al., 2007) as an indicator of how central being a woman is to individuals' self-concept, and in the current study, "gender" was used in the place of "being a woman." The current study used four items to measure gender centrality among participants, such as "Being a member of my gender is an important reflection of who I am," and "Overall, my gender has very little to do with how I feel about myself (reverse-coded)". Participants responded on a 1 to 5 Likert-type scale indicating 1 = strongly disagree to 5 = strongly agree. In calculating scale means, items were recoded such that higher scores indicated higher gender centrality. Interrater reliability was okay at Time 1 ($\alpha = .56$), Time 2 ($\alpha = .57$), and good at Time 3 ($\alpha = .92$).

Racial Identity Exploration & Commitment. The racial identity exploration and commitment items were drawn from the multi-group ethnic identity measure (MEIM; Phinney, 1992) to measure the extent to which individuals report actively engaging with the meaning and social implications of their racial/ethnic group membership (e.g., *exploration*, "I have spent time trying to find out more about my own racial/ethnic group, such as history, traditions, and customs"), as well as individuals' sense of belonging or attachment to their racial/ethnic group (e.g., *commitment*, "I have a clear sense of what my racial group membership means to me") (see Appendix C). Six items were used in the current study, four to assess participants' racial/ethnic exploration and two to measure participants' racial/ethnic commitment. Respondents answered on a 1 to 4 Likert-type scale ranging from 1 = strongly disagree to 4 = strongly agree. In calculating scale means, items were recoded such that higher scores indicated more racial/ethnic identity exploration and a stronger sense of racial/ethnic identity commitment. For racial exploration, interrater reliability was okay at Time 1 ($\alpha = .69$), Time 2 ($\alpha = .76$), and good at

Time 3 ($\alpha = .95$). For racial commitment, Interrater reliability was okay at Time 1 ($\alpha = .63$), Time 2 ($\alpha = .66$), and good at Time 3 ($\alpha = .60$).

Gender Identity Exploration & Commitment. The gender identity exploration and commitment items were adapted from the multi-group ethnic identity measure (Phinney, 1992), which was originally intended to measure the extent to which individuals report engaging actively with the meaning and social implications of their racial/ethnic group membership (e.g., “I think a lot about how my life will be affected by my racial/ethnic group membership.”). Items were amended such that “race” was replaced with “gender” (e.g., “I think a lot about how about my life will be affected by my gender” (see Appendix C). Six items were used in the current study, four to assess participants’ gender exploration and two to measure participants’ sense of gender identity commitment. Respondents answered on a 1 to 4 Likert-type scale ranging from, 1 = strongly disagree to 4 = strongly agree. Items included (e.g., *exploration*, “I really have not spent a lot of time trying to learn more about gender issues” (reverse-coded) and (e.g., *commitment*, “I have a clear sense of what my gender membership means to me.”). In calculating scale means, items were recoded such that higher scores indicated more gender identity exploration and a stronger sense of gender identity commitment. For gender exploration, interrater reliability was good at Time 1 ($\alpha = .75$), Time 2 ($\alpha = .78$), and Time 4 ($\alpha = .76$). For gender commitment, interrater reliability was okay at Time 1 ($\alpha = .56$), Time 2 ($\alpha = .65$), and Time 4 ($\alpha = .60$).

Racial & Gender Discrimination Experiences

Daily Hassles. Black women reported whether they had experienced discrimination related to race, gender, or race and gender at least one in the past year (see Appendix D). We used a modified version of the Daily Hassles scale (Holm & Holyrod, 1992), which included the

option to report racial hassles, gender hassles, and race and gender hassles, with response scales of: 1 (*because of your race*), 2 (*because of your gender*), 3 (*because of both your race and gender*), 4 (*happened for some other reason*), and 5 (*did not happen*). The fifteen item scale statements were preceded by, “You can check more than one box for each event, as a particular event can happen multiple times or multiple events can occur for the same reason. Please indicate whether you have experienced...” with sample experiences such as “Being ignored or overlooked,” Others reacting to you as if they were afraid or intimidated,” and “Being insulted, called a name, or harassed.” Frequency counts were conducted for racial hassles, gender hassles, and race and gender hassles. To verify that students who reported none of these hassles had not skipped the items, we only included students who checked “happened for some other reason” or “did not happen,” indicating that they read and chose a response item, even if they did not experience a race, gender, or race and gender hassle. The present study focused on Black women’s experiences with race and gender hassles as an indicator of interpersonal discrimination.

Classroom Racial & Gender Inferiorization. Black women also reported whether they had perceived interpersonal discrimination related to race or gender within the classroom, operationalized as “classroom racial inferiorization” and “classroom gender inferiorization” (see Appendix E). Each scale included six items from a study by Gomez & Trierweiler (1999) on cross-group discrimination. Participants were asked to think about experiences in their classes, particularly those related to their major or intended major. Following the stem: “In your classes, how often,” respondents indicated how frequently from 1 = almost never to 5 = very often, they felt discriminated against due to their racial or gender identity. Items for race included, “...how often did professors call on you less than others because of your race/ethnicity?” and “have you

heard your racial/ethnic group referred to in a derogatory way?” Gender inferiorization included the same six items, but “race” was replaced with “gender,” (e.g., “...how often has fears of representing your gender group in a negative way discouraged you from participating in class?” and “did professors grade or evaluate your work more harshly than others because of your gender?”). Items were coded such that higher scores indicated a stronger sense of unfair treatment in the classroom from professors due to race and gender. At Time 2, interrater reliability was good for racial inferiorization at ($\alpha = .82$) and gender inferiorization at ($\alpha = .90$). At Time 4, interrater reliability was good for racial inferiorization at ($\alpha = .92$) and gender inferiorization at ($\alpha = .98$).

Indicators of College Adjustment

Academic Engagement. Academic engagement was assessed after women’s first year of college using items from Wellborn and colleagues’ student engagement scale (Skinner, Wellborn, & Connell, 1990; Skinner, Kindermann, & Furrer, 2009) (see Appendix F). The adapted scale has been utilized reliably in previous research with African American participants (Neblett, Philip, Cogburn, & Sellers, 2006; Smalls et al., 2007). The current study focused on two subscales within the measure, academic curiosity and academic persistence. Eight items were utilized to assess academic curiosity, which refers to the extent to which students show interest in new course material and learning (e.g., “I work hard when we start something new in class”). Six items were used to gauge academic persistence, or the extent that students report sustained academic effort in the face of a challenge (e.g., “If I can’t get a problem right the first time, I keep trying”). For each subscale, response items ranged from 1 = not true of me at all to 5 = very true of me. Items were coded so that higher scores indicated more academic curiosity and persistence. At Time 2, interrater reliability was good for academic curiosity at ($\alpha = .68$), and

academic persistence at ($\alpha = .77$). At Time 3, interrater reliability was good for academic curiosity at ($\alpha = .81$), and academic persistence at ($\alpha = .74$).

Academic College Competence. Black women's sense of personal, social, and academic competence in college was assessed using a modified version of Kuperminc's (1994) measure of social competence (see Appendix G). The fifteen items tapped into participants' perceptions of their academic efficacy, social problem-solving effectiveness, and sense of personal growth compared to other college students. Participants responded on a 1-5 scale ranging from bottom 10% (much less than the average college student) to top 10% (much more than the average college student) with the preceding statement, "Below are a list of statements describing activities, goals, and abilities." Using the scale provided, please rate how well you feel that you do each of the following things compared to other college students at [University X]. Six items tapped into academic competence, such as "doing my schoolwork quickly and efficiently" and "doing well in math and science." The subscale was coded such that higher scores indicated a stronger sense of academic competence in college. Interrater reliability was good at Time 2 ($\alpha = .88$) and Time 3 ($\alpha = .91$).

Psychological Well-Being. The present study included three subscales from the 18-item Psychological Well-Being Scale developed by Ryff (1995), which has been used to assess dimensions of participants' overall psychological adjustment to college life (see Appendix H). Given this study's focus on Black women's sense of emotional well-being and efficacy in managing college responsibilities, I focused on three subscales within the overall measure: autonomy, environmental mastery, and self-acceptance.

Autonomy examined women's ability to make decisions for themselves without excessive concern regarding external support for those decisions with four items (e.g., "My decisions are

not usually influenced by what everyone else is doing.”) Interrater reliability was good at Time 2 ($\alpha = .72$) and Time 3 ($\alpha = .73$)

Environmental Mastery assessed participants’ sense of how well they were able to navigate the institutional environment to suit their personal needs and value with four items (e.g., “I am quite good at managing the responsibilities of my daily life.”) Interrater reliability was good at Time 2 ($\alpha = .71$) and Time 3 ($\alpha = .76$)

Self-acceptance included four items and referred to the extent to which respondents valued themselves and felt confident about who they were (e.g., “For the most part, I am proud of who I am.”) For each subscale, responses ranged from 1 (strongly disagree) to 6 (strongly agree), and items were coded such that higher scores indicated better adjustment on each subscale. Interrater reliability was good at Time 2 ($\alpha = .74$) and Time 3 ($\alpha = .75$)

Study 2 Participants

This study uses data from participants in the College Academic and Social Identities Study (CASIS), a longitudinal examination of Black college students’ interpersonal and contextual experiences of stigma and college adjustment. The data come from a subsample of Black women at three time points: the beginning of their first semester of college (Time 1 – fall), the end of their first year of college (Time 2 – spring), and the end of their junior year of college (Time 3 – spring). The first Time of data collection (fall) did not include all measures of discrimination and adjustment (classroom inferiorization and academic engagement) since the students had just entered the college environment, but all measures were included at Time 2 and Time 3. The study had relatively high response and retention rates with 65% of the original sample of Black women ($n = 501$) completing the follow-up survey at Time 2 ($n = 325$). The current study includes women who completed the survey at the additional third time point (Time

3 – spring of junior year, n = 235, 47%), given the longitudinal focus of the second study in this dissertation. Compared to the overall sample of women who only completed Time 1 data, women in the current study did not differ in the description of their hometowns, family household income, racial composition of their neighborhood, or social class background at Time 2 or Time 3.

The Black women in the sample for Study 2 represented a subsample of the women from Study 1. Most were born in the United States (97%), although some of the women were born in other countries such as Costa Rica, France, Germany, Ghana, Zimbabwe, and Haiti (3%). Only one woman reported spending most of her time in another country (Ghana), while the rest of the sample indicated that they had spent most of their upbringing in the U.S. None of the women in this sample reported being an international student, but 37% of respondents left this question blank. The majority were from urban/large metropolitan (39%) or suburban areas (32%), while a smaller percent reported being from small towns (27%) and rural areas (2%). The women's racial composition of their home neighborhoods ranged from <20% Black (18%), 21-40% Black (20%), 41-60% Black (16%), 61-80% Black (13%), and >81% Black (32%). The women's household income ranged from Below <35K (29%), 35K-<70K (36%), 70K-<105K (16%), 105K-<140K (10%), 140K-<175K (2%), and 175K+ (5%). In describing their social class background, twenty-four percent of the women described themselves as poor or working class, a larger group considered themselves lower-middle class to middle class (44%), and a small group of women considered themselves upper-middle to upper class (12%). Four percent of the sample described themselves as bisexual or lesbian, one woman described herself as "other," and the remaining ninety-four percent identified as heterosexual. In addition, eleven of the women in the current sample also completed semi-structured interviews on their academic and social identities

as Black students attending PWIs. While the present dissertation is not a mixed methods investigation, I will include a few quotations from these women that illustrate significant meaning-making around their race and gender identity during their time in college.⁶

Study 2 Analytic Strategy

Similar to Study 1, I used latent class analyses (LCA) to capture social identity change among Black college women over time. In the present study, I used LCA to create race and gender cluster profiles at Time 2 and Time 3, and then conducted a series of descriptive and bivariate correlation analyses in SPSS Version 25 to examine how cluster group profiles changed over time, and the ways in which cluster group membership related to experiences of discrimination and college adjustment at Time 2 and Time 3. I also examined the pathways of identity change across the sample and used multinomial logistic regression to examine the predictive relationship between discrimination experiences and cluster stability or movement over time.

For the first research question (RQ1), I used latent profile analysis to generate cluster groups based on Black women's reports of race and gender centrality, exploration, and commitment at Time 2 and Time 3. To determine the optimal number of latent groups, I used Latent Gold Version 5.1 (Vermunt et al., 2016) to specify a series of models with one to five classes based on theoretical and empirical considerations. Like in Study 1, I assessed the

⁶ Future research in this area should include a mixed methods study of identity development (e.g., Jones & Day, 2017) that integrates a person-centered approach and qualitative approach to explore how Black women discuss the multidimensionality of their identities. Qualitative methods can provide an in-depth exploration of Black women's narratives on how their beliefs have shifted over time. In particular, an integrated mixed methods approach could more accurately capture the significant contextual experiences that influenced how Black women think about their race and gender identities. Another approach might include a daily diary study that examines the salience and significance of Black women's race and gender identities over a set period of time.

resulting suggested models according to several statistical and conceptual criteria and determined the best-fitting model based on indices such as the BIC value, the bootstrap p value, and the overall parsimoniousness of the model (fewer number of clusters) (Nylund et al., 2007). I ensured that the model solutions at Time 2 and Time 3 followed the assumption of local independence and did not include any bivariate residuals above 3.84. Finally, to compare model fit between models with different number of classes, I compared the bootstrap likelihood ratio test, which provides a p value to show whether the model fit improves with an additional class (Nylund et al., 2007).

For Time 2, the 3-class model was best fitting, with a relatively small BIC compared to other models (1965.93), a nonsignificant bootstrap p value (.08), a substantial reduction in L^2 (77.47%) as compared to the baseline model and adequate bivariate residuals (<3.84). For Time 3, the 3-class model was best fitting, with a lower BIC compared to other models (1881.19), a nonsignificant p value (.054), a substantial reduction in L^2 (89.43%) and adequate bivariate residuals (<3.84). A comparison of the 3-class model and the 2-class model using a comparison bootstrap method different test was significant ($p < .05$), indicating the 3-class model was unique compared to the 2-class model. The 3-class model did not differ significantly from the 4-class model ($p = .08$); thus, for parsimony, I adopted the 3-class mode.

After selecting the best-fitting and most parsimonious model based on these indices for Time 2 and Time 3, Black women were assigned to latent classes based on the highest posterior probability of membership as indicated by the LCA model (Heinen, 1996). Table 15 and 16 provide the demographic profiles of Black women in each cluster group at Time 2 and Time 3. In addition, I created a table that highlight the means and standard deviations on the identity variables by cluster for women at each Time, including tables that compared the descriptive

statistics of women who fell into the same cluster category over time (i.e., Achieved women at Time 1, Time 2, and Time 3).

For the second research question (RQ2), I created codes to examine the change in latent class membership over time (from women's first year to their junior year). Each woman was assigned a code based on her cluster group membership at each Time, with a resulting three-digit alpha code (e.g., AAA) that was used to categorize cluster movement (see Table 19). Women who were missing a cluster group membership at any Time point were coded as "0 for missing," and were not included in the "Movement Into" analyses unless they had a cluster assignment for both time points under study (e.g., for "Movement Into" from Time 2 to Time 3, women were only included if they had an assigned cluster at both Times, even though there were some women who were missing a cluster assignment at Time 2 but had one at Time 3).⁷ The resulting table demonstrated all identity movement pathways among Black women in the sample, including those that were most common and least common.

Finally, after determining each latent class solution and conducting the descriptive analyses, I examined whether race and gender-related contextual experiences of discrimination distinguished cluster membership at Time 2 and Time 3 using multinomial logistic regression (RQ3). This approach was appropriate for my goal of describing and testing hypotheses about predictive relationships between multiple continuous explanatory variables (race and gender discrimination) and my latent categorical-dependent variables (identity profiles) (Long & Freese, 2001; Richardson et al., 2018). Time 1 household income was included as a covariate. For Time

⁷ Although these women did "move into" a cluster at Wave 4, I would not be able to chart movement from a Time 2 cluster assignment. These women represented participants who completed the overall survey but left some of the racial or gender identity measures empty (From Time 1 to Time 2, this included n = 29, 12% of the sample; from Time 2 to Wave 4, this included n = 21, 8% of the sample).

2 “Movement Into,” the outcome variable was cluster group membership at Time 2, and the Time 2 discrimination indicators were included as covariates. For Time 3 “Movement Into,” the outcome variable was cluster group membership at Time 3, and both Time 2 and Time 3 discrimination indicators were included as covariates. This approach allowed me to consider the extent to which Black women’s contextual experiences of discrimination influenced their movement into unique race and gender identity clusters over time.

Results

Black Women’s Race and Gender Identity Profiles over Time

At each time point, the clusters represent divergent classes of beliefs in relation to the overall sample means on these indicators. Table 12 (Time 1), Table 14 (Time 2) and Table 16 (Time 3) provide a summary of raw means and standard deviations, as well as standardized means for the race and gender identity variables for the total sample. The racial identity variables were on a 1 to 7 scale, while the gender identity variables were on a 1 to 5 scale, so I draw on the standardized means to generalize across the sample.

Overall at Time 1, Black women reported higher gender centrality ($M = 3.50$, $SD = 0.78$) than racial centrality ($M = 5.13$, $SD = 1.38$). They reported higher gender exploration ($M = 2.65$, $SD = 0.75$) than racial exploration ($M = 3.03$, $SD = 0.64$), as well as higher gender commitment ($M = 3.17$, $SD = 0.69$) relative to racial commitment ($M = 3.15$, $SD = 0.74$). At Time 2, the standardized scores reflect relatively equal racial centrality ($M = 5.13$, $SD = 1.35$) and gender centrality ($M = 3.64$, $SD = 1.00$), similar levels of racial exploration ($M = 3.08$, $SD = 0.65$) and gender exploration ($M = 2.69$, $SD = 0.76$), and higher gender commitment ($M = 3.17$, $SD = 0.66$) relative to racial commitment ($M = 3.16$, $SD = 0.72$). Finally, at Time 3, Black women reported similar levels of racial centrality ($M = 5.50$, $SD = 1.39$) and gender centrality ($M = 2.65$, $SD =$

1.19) and about the same racial exploration ($M = 3.27$, $SD = 0.62$) and gender exploration ($M = 2.86$, $SD = 0.67$). The sample also reported similar levels of racial commitment ($M = 3.35$, $SD = 0.65$) and gender commitment ($M = 3.27$, $SD = 0.62$). Again, given the scale differences for the race and gender indicators, these mean comparisons are based on comparisons of the standardized means.

In response to RQ1 regarding the identity patterns of race and gender beliefs that emerge over time among Black college women, the findings revealed that the 3-cluster solutions were the best fitting and most parsimonious models across the three time points. The patterns of race and gender identity beliefs in two clusters of each set looked similar at the three time points, so I termed the clusters “Achieved” and “Diffused.” Over time, Black women in the Achieved clusters tended to report average-to-higher on all six indicators of race and gender identity and Black women in the Diffused clusters reported lower on all six indicators of race and gender identity, compared to women in the other clusters. The third cluster in each set displayed more variation in Black women’s race and gender identity beliefs, so I labeled the third profile group at each time point “Mixed Status,” with a more specific additional description based on the indicators that were higher within the cluster (Time 1: Gender Exploring, Time 2: Race and Gender Exploring, and Time 3: Race Central/Committed).

Like Study 1, the clusters are graphically depicted using the standardized means of each race and gender identity indicator: racial centrality, racial exploration, and racial commitment in shades of blue, and gender centrality, gender exploration, and gender commitment in shades of yellow (Figures 4, 5 and 6). Both standardized means and raw means for the race and gender identity measures for each cluster are provided in Table 12 (Time 1), Table 14 (Time 2) and Table 16 (Time 3). Chi-square analyses indicated that there were not significant differences in

the demographic variables (hometown, racial composition of home neighborhood, and social class background) by cluster at Time 2 or Time 3.

Time 1 Profiles

The largest cluster of Black women ($n = 86$, 37%), labeled Achieved, was above the sample mean across all six identity measures. More specifically, these women reported significantly higher racial centrality ($M = 5.82$, $SD = 1.03$), racial exploration ($M = 3.50$, $SD = 0.47$), and racial commitment ($M = 3.85$, $SD = 0.23$) than women in the other two clusters. They also reported significantly higher gender commitment ($M = 3.58$, $SD = 0.50$) than women in the other two clusters, and a stronger sense of gender centrality ($M = 3.67$, $SD = 0.73$) and more gender exploration ($M = 2.84$, $SD = 0.75$) than women in the Diffused cluster. Finally, looking at variation within this cluster group, Black women reported a stronger sense of attachment, had engaged in more exploration, and reported a stronger sense of commitment to their racial identity compared to their gender identity.

The next largest proportion of Black women ($n = 68$, 29%), labeled Diffused, reported lower averages than the sample mean across all race and gender identity measures – the opposite pattern compared to women in the Achieved cluster. These women reported significantly lower racial centrality ($M = 4.38$, $SD = 1.36$), racial exploration ($M = 2.52$, $SD = 0.51$), gender centrality ($M = 2.90$, $SD = 0.62$), gender exploration ($M = 2.22$, $SD = 0.65$), and gender commitment ($M = 2.70$, $SD = 0.62$) than women in the other cluster groups. Black women in the Diffused group were not actively engaging in thinking about their identities (i.e., exploration) in a similar manner as Black women in the Achieved cluster. Within the cluster, Black women were engaging in more gender exploration compared to racial exploration but reported a stronger

attachment to their racial identity than their gender identity. Finally, their sense of commitment to both their racial and gender identities were low.

The third cluster of Black women at Time 1 were labeled Mixed Status-Gender Central/Exploring ($n = 59$, 25%), and included more within-cluster variation than the first two profile groups. Women in the Gender Exploring group tended to report means that fell between the mean reported by women in the Achieved and Diffused groups. This was true for racial centrality ($M = 5.05$, $SD = 1.23$) racial exploration ($M = 2.98$, $SD = 0.53$), and gender commitment ($M = 3.16$, $SD = 0.65$). Women reported a similarly low sense of racial commitment ($M = 2.70$, $SD = 0.42$) as women in the Diffused group, but the highest level of gender centrality ($M = 3.94$, $SD = 0.60$) and gender exploration ($M = 2.90$, $SD = 0.68$). Overall, women in this third cluster group seemed to be thinking about what their gender identity means to them and felt a much stronger sense of attachment and commitment to their gender identity compared to their racial identity.

Time 2 Profiles

At Time 2, the following spring of participants' first year of college, the largest cluster of Black women ($n = 93$, 39%), labeled Diffused, reported lower averages than the sample means across all race and gender identity measures – like the Diffused cluster at Time 1. Women in this cluster reported significantly lower on racial exploration ($M = 2.60$, $SD = 0.40$), racial commitment, ($M = 2.63$, $SD = 0.63$), and gender exploration ($M = 2.54$, $SD = 0.70$) than women in the other two clusters. They also reported a lower sense of racial centrality ($M = 4.34$, $SD = 1.21$) and gender commitment ($M = 2.83$, $SD = 0.60$) than women in the Achieved cluster. Unlike at Time 1, all three clusters groups reported similar levels of gender centrality. Within the group, women reported more engagement with their gender identity relative to their racial

identity, which was similar to the findings in the Diffused group at Time 1. However, the Time 2 Diffused cluster had higher gender centrality and exploration relative to other variables (less than .5 SD below mean, compared to 1 SD or more below the mean for the Time 1 Diffused cluster). Thus, Black women in the Diffused group were engaging in more gender exploration and felt a stronger attachment to their gender at Time 2 compared to Black women in the Diffused group at Time 1.

The second largest group of Black women at Time 2 ($n = 92$, 39%), labeled Achieved, reported averages above the sample means across all six identity measures – like the Achieved cluster at Time 1. More specifically, these women reported significantly higher racial commitment ($M = 3.68$, $SD = 0.48$) than women in the other two groups, as well as higher racial centrality ($M = 6.02$, $SD = 0.87$), racial exploration ($M = 3.45$, $SD = 0.55$), and gender commitment ($M = 3.60$, $SD = 0.52$) than women in the Diffused cluster. Unlike at Time 1, Black women in Achieved cluster did not report the highest level of gender exploration ($M = 2.74$, $SD = 0.84$), suggesting that Black women in this cluster were engaging in less gender exploration than Black women in the Achieved cluster at Time 1. Within the cluster, the women were actively exploring the meanings attached to both their race and gender identity (gender more so than race, $M = 0.71$, $SD = 1.11$ and $M = 0.57$, $SD = 0.85$, respectively) and reported comparative levels of commitment (race, $M = 0.72$, $SD = 0.77$; gender, $M = 0.65$, $SD = 0.77$), but they indicated that race was a more central component of their identity compared to gender ($M = 0.63$, $SD = 0.65$, $M = 0.12$, $SD = 1.08$, respectively).

Finally, the smallest cluster of Black women at Time 2 ($n = 20$, 9%), labeled Mixed Status-Race and Gender Exploring, illustrated significantly more within-cluster variation than the first two profiles, and also looked conceptually distinct from the Mixed Status cluster at Time

1. Their label focused on “exploration” because they reported significantly more racial exploration ($M = 3.65$, $SD = 0.35$) and gender exploration ($M = 3.23$, $SD = 0.44$) than women in the other two clusters at Time 2. The other means fell in between the averages of the Achieved and Diffused clusters, such as the racial centrality score ($M = 4.88$, $SD = 1.33$) and their sense of racial commitment ($M = 3.18$, $SD = 0.71$), which were higher than women in the Diffused group, but lower than women in the Achieved group. Within the cluster, this small group of women were actively thinking about their race and gender identity, combined with an average ($M = 0.01$, $SD = 1.00$) commitment to their racial identity, as well as a lower commitment to their gender identity ($M = -0.47$, $SD = 0.88$). Finally, Black women in this group reported below average on race and gender centrality ($M = -0.21$, $SD = 0.98$ and $M = -0.25$, $SD = 0.83$, respectively).

Time 3 Profiles

At Time 3, the spring of participants’ junior year of college, the largest group of women were in the Achieved cluster ($n = 98$, 42%), which corresponded with average-to-higher levels of race and gender centrality, exploration, and commitment compared to the sample mean. These women reported significantly higher racial exploration ($M = 3.84$, $SD = .019$) and gender commitment ($M = 3.84$, $SD = 0.19$) than women in the other two clusters, as well as higher racial centrality ($M = 6.16$, $SD = 1.12$), racial commitment ($M = 3.76$, $SD = 0.40$), and gender exploration ($M = 3.04$, $SD = .069$) than women in the Diffused group. Similar to the findings at Time 2, there were not significant differences in women’s reports of gender centrality. Within the Achieved cluster at Time 3, women reported that race was more central to their self-concept than gender ($M = 0.44$, $SD = 0.80$ and $M = -0.08$, $SD = 1.05$), which was similar to Time 2. They also indicated higher racial exploration compared to gender exploration ($M = 0.94$, $SD = 0.32$ and $M = 0.26$, $SD = 1.01$). Contrary to this, these women reported a stronger sense of clarity

about their gender than their race ($M = 0.94$, $SD = 0.32$ and $M = 0.60$, $SD = 0.61$), which aligns well with their ongoing process of racial exploration and perhaps represents a sense of resolution about what their gender identity means to them.

The second largest cluster group at Time 3 was the Diffused group ($n = 80$, 34%), which showed lower-than-average race and gender centrality, exploration, and commitment relative to the other two clusters and the sample means. Women in this group reported significantly lower racial centrality ($M = 4.40$, $SD = 1.30$), racial commitment ($M = 2.73$, $SD = 0.53$), and gender commitment ($M = 2.69$, $SD = 0.44$) than women in the other two groups. They also reported lower racial exploration ($M = 2.69$, $SD = 0.44$) and gender exploration ($M = 2.68$, $SD = 0.59$) than women in the Achieved cluster. Within the cluster, these women seemed relatively disengaged from thinking about their race and gender identity, but they reported more gender exploration ($M = -0.27$, $SD = 0.86$) than racial exploration ($M = -0.95$, $SD = 0.73$). Similar to Time 1 and Time 2, Black women in the Diffused cluster reported a stronger sense of attachment to their gender identity than their racial identity ($M = 0.57$, $SD = 0.98$ and $M = -0.81$, $SD = 0.93$). Finally, their levels of racial commitment ($M = -0.97$, $SD = 0.80$) and gender commitment ($M = -0.95$, $SD = -0.73$) indicated that women in the Diffused group at Time 3 had a weak sense of clarity about the meaning of these identities to their self-concepts.

Finally, the third largest group at Time 3 ($n = 41$, 17%) was the Mixed Status-Race Central Commitment group, which showed a unique type of within-group variation like the other two Mixed Status groups at Time 1 and Time 2. At Time 3, these women reported similar levels of racial centrality ($M = 6.12$, $SD = 0.65$) and racial commitment ($M = 3.61$, $SD = 0.36$) to women in the Achieved group -- suggesting that race was an important part of their identity. Compared to women in the Diffused group, they reported significantly more racial exploration

($M = 3.07$, $SD = 0.28$), but similarly low levels of gender exploration ($M = 2.74$, $SD = 0.69$).

Finally, their gender commitment ($M = 3.07$, $SD = 0.28$) fell in between women in the Diffused and Achieved group and was significantly distinct from both. Within the cluster, Black women in the Race Central and Commitment cluster reported higher racial centrality than gender centrality ($M = 0.42$, $SD = 0.47$ and $M = -0.03$, $SD = 1.04$), below average levels of racial and gender exploration ($M = -0.32$, $SD = 0.46$ and $M = -0.17$, $SD = 1.01$), and a stronger sense of racial commitment compared to gender commitment ($M = 0.38$, $SD = 0.55$ and $M = -0.32$, $SD = 0.46$).

Profile Group Comparison across Time

First, although the Achieved and Diffused groups were labeled similarly at each time, it is important to note that the sample sizes changed in each of the groups at each wave, and that the Mixed Status groups represented conceptually distinct identity beliefs. At Time 1, the Achieved cluster was the largest group with $n = 86$, the second largest group at Time 2 with $n = 92$, and the largest group again at Time 3 with $n = 98$, and over time, there was general consistency in that a large group of Black women reported average-to-high levels of race and gender centrality, exploration, and commitment relative to the sample means and other clusters. Regarding women in the Diffused cluster, they made up the second largest cluster at Time 1 with $n = 68$, the largest group at Time 2 with $n = 93$, and the second largest cluster again at Time 3 with $n = 80$. Similar (but opposite) to the pattern with women in the Achieved clusters, a good sum of Black women in the sample reported lower-than-average levels of race and gender centrality, exploration, and commitment at each time point. Finally, the smallest set of clusters at Time 1, Time 2, and Time 3, revealed the greatest shifts in sample size, as well as the most distinctiveness in race and gender identity beliefs. At Time 1, this group of women was at $n = 59$, which dropped to $n = 20$ at Time 2, but increased to $n = 41$ by Time 3. The patterns of identity beliefs also fluctuated over

time, suggesting that this group was statistically distinct enough from the other groups to be categorized as its own cluster – but also very different at each time point. For example, at Time 1, this Mixed Status cluster was characterized by higher scores on gender exploration; at Time 2, the scores on race and gender exploration were higher than the means for women in the other clusters; and at Time 3, Black women in this group illustrated a significantly stronger attachment and commitment to their racial identity. Unlike at Time 2, by Time 3, the levels of racial and gender exploration were below the sample mean ($M = -0.32$, $SD = 0.46$) and ($M = -0.17$, $SD = 1.01$), respectively.

Second, I labeled the clusters based on their relationships to one another on the standardized scores, but it is also important to consider within-group change over time in these clusters (see Table 18). For example, while women in the Achieved cluster at Time 1, Time 2, and Time 3 reported higher than average on the indicators of race and gender compared to the sample means and the other clusters – how did “higher than average” shift over time? The results highlight significant variation within the groups. For instance, a general pattern emerged among the means in the Achieved clusters over time, in that from Time 1 to Time 3, Black women in this group increased significantly in their sense of: (1) racial centrality (Time 1, $M = 5.82$ to Time 3, $M = 6.16$), racial exploration (Time 1, $M = 3.50$ to Time 3, $M = 3.84$), and gender commitment (Time 1, $M = 3.58$ to Time 3, $M = 3.84$). Conversely, gender centrality significantly dropped in this group from Time 1 to Time 3 ($M = 3.67$ to $M = 2.57$, respectively), and although racial commitment dropped from Time 1 to Time 2 ($M = 3.85$ to $M = 3.68$), it increased again to $M = 3.76$ by Time 3.

A similar “increase over time” pattern emerged among the means in the Diffused clusters, but only for racial exploration (Time 1, $M = 2.52$ to Time 3, $M = 2.69$) and gender exploration

(Time 1, $M = 2.22$ to Time 3, $M = 2.68$). The means for gender centrality significantly increased from Time 1 ($M = 2.90$) to Time 2 ($M = 3.54$), but then decreased again by Time 3 ($M = 2.90$). On the other indices (racial centrality, racial commitment, and gender commitment), the means in the Diffused clusters remained comparably low over time. Thus, we see a trending pattern of increased exploration among women in the Diffused clusters, but they are still engaging in much less racial and gender exploration compared to women in the Achieved and Mixed Status clusters.

Finally, the means in the set of Mixed Status clusters did not reveal a single pattern and were labeled to appropriately showcase the emergent features at each time point. For example, gender centrality was markedly higher at Time 1 ($M = 3.94$) than at Time 3 ($M = 2.63$). At Time 2, the racial exploration ($M = 3.65$) and gender exploration ($M = 3.23$) means were higher than they were at either of the other two time points, so the cluster was aptly designed the “Mixed Status-Race and Gender Exploring” cluster. Finally, racial centrality increased from Time 1 ($M = 5.05$) to Time 3 ($M = 6.12$), as did racial commitment (Time 1, $M = 2.70$; Time 3, $M = 3.61$), and the cluster label for the third time point was Race Central/Committed. In all, the comparisons within and between-groups across Times with the multiple indicators for race and gender, demonstrate that the identity development of Black women continues to shift over time. The next portion of this study mapped *how* these shifts over time occurred.

Mapping Identity Change over Time

In response to RQ2 regarding how Black women’s identity beliefs and cluster group membership changed over time, there were forty-five different pathways of identity shifts in the present sample of Black women. This includes the women who were missing a cluster assignment at one of the time points but completed the survey at two other time points so that

their movement could be mapped across time (see Table 19). The data were coded by women's cluster assignment at each time point (Time 1, Time 2, and Time 3), such that each participant had a 3-digit alphanumeric code (e.g., ADA = Achieved at Time 1, Diffused at Time 2, and Achieved at Time 3). The smallest populated pathways ($n = 1$ or $n = 2$) tended to be those where women were missing a cluster assignment at a Time point, such as DA0 or DD0. This type of pathway accounted for $n = 22$, 9% of the sample.

There were also three pathways (AED, EED, DEA) that only included a single participant; in each case, these women moved into a Mixed Status cluster at Time 2 and then migrated to either an Achieved or Diffused cluster by Time 3. The two largest pathways included women who were categorized as Achieved across all three time points ($n = 25$, 11%) or categorized as Diffused across the three time points ($n = 22$, 9%). There were not any women who remained in a Mixed Status cluster across the three time points.

To chart cluster movement over time, I focused on how many women moved into a group at Time 2 and Time 3. I divided the sample into four groups to chart "Movement into" a cluster at each time point: Stayed the Same (women who stayed in Achieved or Diffused clusters), Movement into Achieved, Movement into Diffused, and Movement into Mixed Status - Race and Gender Exploring (Time 2) or Race Central/Committed (Time 3). Overall, the largest number of women stayed in the same cluster as the previous time point (Time 1: $n = 83$ and Time 2: $n = 95$). From Time 1 to Time 2, the next largest sum of women moved into the Diffused cluster ($n = 50$), followed by movement into the Achieved cluster ($n = 35$), and finally, movement into the Race & Gender Exploring ($n = 20$). From Time 2 to Time 3, the second largest sum of women moved into the Achieved cluster ($n = 43$), followed by movement into the

Diffused cluster (n = 34), and finally, movement into the Race Central/Committed cluster (n = 34).

Interpersonal Discrimination Experiences and Black Women's Identity Clusters

The present study focused on examining how contextual experiences of discrimination related to racial and gender identity change among Black women over time. Thus, I conducted a series of ANOVAs to examine whether differences in discrimination experiences emerged among women who either stayed in the same cluster (from Time 1 to Time 2 and from Time 2 to Time 3) or “moved into” a different cluster (Achieved, Diffused, and Mixed Status) from the previous time point (see Table 20, 21, and 22 for full means and standard deviations).

From Time 1 to Time 2, women who moved into the Mixed Status-Race and Gender Exploring cluster (M = 6.20, SD = 5.38) reported significantly more race and gender hassles than women who moved in the Achieved cluster (M = 2.43, SD = 3.54). There were not significant differences in cluster movement with racial hassles gender hassles, or either of the classroom inferiorization measures.

To examine the influence of discrimination experiences on movement from Time 2 to Time 3, I examined both Time 2 and Time 3 outcomes. Regarding Time 2 outcomes, Black women who moved into the Mixed Status-Race Central/Committed cluster by Time 3 had experienced more classroom gender inferiorization experiences at Time 2 (M = 3.69, SD = 0.25) than women who had moved into the Diffused cluster (M = 2.87, SD = 0.56). Regarding Time 3 outcomes, Black women who moved into the Diffused cluster at Time 3 had experienced more classroom racial inferiorization experiences (M = 3.50, SD = 0.49) than women who had moved into the Achieved cluster at Time 3 (M = 2.84, SD = 0.59). There were not significant

differences in cluster movement with the daily hassle measures for movement from Time 2 to Time 3.

College Adjustment Outcomes and Black Women's Identity Clusters

This study also focused on examining how racial and gender identity change over time related to Black women's academic and psychological adjustment outcomes. Thus, I conducted a series of ANOVAs to examine whether differences in adjustment outcomes emerged among women who either stayed in the same cluster (from Time 1 to Time 2 and from Time 2 to Time 3) or "moved into" a different cluster (Achieved, Diffused, and Exploring) from the previous time point (see Table 20, 21, and 22 for full means and standard deviations).

Overall, the only indicators that revealed significant differences by cluster movement was academic curiosity and academic persistence. From Time 1 to Time 2, those who moved into the Diffused cluster ($M = 2.90$, $SD = 0.58$) and the Mixed Status-Race and Gender Exploring cluster ($M = 2.85$, $SD = 0.59$), reported significantly lower academic curiosity than women who moved into the Achieved cluster ($M = 3.54$, $SD = 0.62$). From Time 1 to Time 2, women who moved into the Achieved cluster reported lower academic persistence ($M = 1.78$, $SD = 0.74$) than Black women who moved into the Race and Gender Exploring cluster ($M = 2.53$, $SD = 0.89$).

From Time 2 to Time 3, this pattern reversed and women who moved into the Diffused cluster by Time 3 reported significantly higher academic curiosity than women who moved into Achieved cluster ($M = 3.44$, $SD = 0.62$ and $M = 2.92$, $SD = 0.65$, respectively). There were no significant differences in academic or psychological adjustment by cluster movement for Time 3 outcomes.

Black Women's Change Clusters and Interpersonal Discrimination Experiences

Time 1 to Time 2

Using multinomial logistic regression, I examined how race and gender discrimination experiences predicted cluster membership stability and change by considering whether Black women stayed the same or moved into a different cluster at Time 2 and Time 3. At Time 2, the final model was statistically significant [$X^2(n = 235) = 58.04, p < .001$] (see Table 23). Black women who stayed the same from Time 1 to Time 2 (in the Achieved and Diffused clusters) served as the reference group.

Movement into the Achieved cluster at Time 2 was distinguished by household income, race and gender hassles, classroom racial inferiorization experiences, and classroom gender inferiorization experiences. Movement into the Achieved cluster related to having a higher household income, fewer race and gender hassles and classroom racial inferiorization experiences, but more classroom gender inferiorization experiences than Black women who stayed in the same cluster from Time 1 to Time 2. A one-unit increase in household income and classroom gender inferiorization experiences related to a 0.09 increase and 1.52 increase in the relative log odds of moving into the Achieved cluster at Time 2. In addition, a one-unit increase in race and gender hassles and classroom racial inferiorization experiences related to a 0.13 decrease and a 1.45 decrease in the relative log odds of moving into the Achieved cluster, respectively, compared to remaining the same cluster as Time 1.

Movement into the Diffused cluster at Time 2 was distinguished by racial hassles. Specifically, movement into the Diffused cluster related to having fewer racial hassles than Black women who stayed in the same cluster from Time 1 to Time 2. A one-unit increase in racial hassles was related to a 0.13 decrease in the relative log odds of moving into the Diffused cluster.

Finally, movement into the Race and Gender Exploring cluster was distinguished by classroom racial inferiorization experiences. Black women were more likely to move into the Race and Gender Exploring cluster rather than stay in the same cluster if they encountered more classroom racial inferiorization. A one-unit increase in classroom racial inferiorization was related to a 0.78 decrease in the relative log odds of moving into the Race and Gender Exploring cluster at Time 2 rather than staying in the same cluster from Time 1.

Time 2 to Time 3

At Time 3, the final model was statistically significant [$X^2(n = 235) = 136.55, p < .001$] (see Table 24 and 25). Black women who stayed the same (in the Achieved and Diffused clusters) from Time 2 to Time 3 served as the reference group, and I included interpersonal discrimination experiences at Time 2 and Time 3 as factors in the final model.

Regarding Time 2 outcomes, movement into the Achieved cluster at Time 3 was distinguished by classroom racial and classroom gender inferiorization experiences. Having fewer racial inferiorization experiences but more gender inferiorization experiences at Time 2 related to moving into the Achieved cluster at Time 3 compared to staying in the same cluster from Time 2. A one-unit increase in classroom racial inferiorization and gender inferiorization related to a .66 decrease and 3.31 increase, respectively, in the relative log odds of moving into the Achieved cluster compared to staying in the same cluster. Classroom gender inferiorization at Time 2 also related to moving into the Diffused cluster and the Race Central/Committed cluster at Time 3. Membership in the Diffused cluster related to having fewer classroom gender inferiorization experiences at Time 2, while membership in the Exploring cluster related to having more inferiorization experiences related to gender at Time 2. A one-unit increase in classroom gender inferiorization related to a 1.99 decrease and 1.92 increase in the relative log

odds of moving into the Diffused and Race Central/Committed clusters, respectively, versus staying in the same cluster group as Time 2.

Regarding Time 3 outcomes, moving into the Achieved cluster at Time 3 was distinguished by classroom racial inferiorization experiences and classroom gender inferiorization experiences. Having fewer classroom racial inferiorization experiences, but more classroom gender inferiorization experiences related moving into the Achieved cluster at Time 3 rather than staying in the same cluster as Time 2. Specifically, a one-unit increase in classroom racial inferiorization experiences related to a 2.00 decrease in the relative log odds of moving into the Achieved cluster at Time 3, and a one-unit increase in classroom gender inferiorization experiences related to a 0.82 increase in the relative log odds of moving into the Achieved cluster at Time 3 compared to staying in the same cluster group as Time 2. Finally, movement into the Diffused cluster at Time 3 was distinguished by classroom racial inferiorization experiences, such that having more racial inferiorization experiences was associated with a greater likelihood of moving into the Diffused cluster compared to staying in the same cluster as Time 2. A one-unit increase in classroom racial inferiorization experiences related to a 2.33 increase in the relative log odds of moving into the Diffused cluster at Time 3.

Discussion

The present study examined the ways in which the content of Black women's race and gender identity profiles changed over time, and the extent to which interpersonal discrimination experiences influenced shifts in identity beliefs. Building on prior literature (e.g., Jones et al., 2018; Richardson et al., 2018), this study was one of the first to consider how multiple indicators of race and gender identity changed over time in response to interpersonal discrimination. The investigation closely analyzed pathways of change among the sample and assessed how

movement into different race and gender identity profiles related to Black women's academic and psychological outcomes over time. In addition to identity belief change, the findings also highlighted important considerations for identity stability over time. A significant portion of the women remained in either the Achieved or Diffused cluster from Time 1 to Time 3, perhaps because the women were having experiences that reinforced or aligned with their initial endorsement of centrality, exploration, and commitment. Racial centrality is generally regarded as an identity belief that stays relatively stable over time; the present study found both high and low stability in Black women's centrality beliefs. Future studies might consider what types of experiences support stable identity beliefs among college students, insofar as these beliefs are adaptive for academic achievement and psychological wellbeing.

Regarding the first research question on the stability and changes in Black women's cluster profiles, latent class analyses revealed three distinct and meaningful groups of Black women based on the six indicators of race and gender identity at each of the three points. At Time 2 and Time 3, two of the three cluster profiles were very similar to the Achieved and Diffused groups presented at Time 1, while the third and smallest cluster group at each time point revealed more within-group variation and was labeled according to defining features of the Mixed Status group (i.e., Gender Central/Exploring, Race and Gender Exploring, and Race Central/Committed). In utilizing this multidimensional, longitudinal approach, I highlighted how race and gender identity beliefs functioned in relation to one another, how they varied between subgroups of Black women, and how Black women's beliefs remained qualitatively similar or different over time.

The findings highlight that while some Black women remained largely consistent in their race and gender identity beliefs from the first year to the third year of college, most of the

women demonstrated significant fluctuation in how much they were exploring their attachment and commitment to their race and gender identity during their time in college. The clusters also demonstrated that Black women did not devote the same significance or attention to their race and gender identities, and that this was related to some of the contextual experiences they were having in academic spaces and in the broader campus setting. Descriptive analyses revealed that the groups did not vary from one another in self-perceived social class status, household income, or racial demographics of their prior neighborhood at either of the three time points. While this is consistent with prior literature (e.g., Hurd et al., 2012), this finding also highlights the need for more research on how to disentangle the ways that race, and social class intersect in Black populations. For example, other work reveals that predominantly Black schools and neighborhoods promote racial and cultural pride and high centrality among Black student populations (e.g., Byrd & Chavous, 2009; Gay, 2004; Richardson et al., 2018). I did not find any significant effects of this nature, such as Black women from predominantly Black neighborhoods being more likely to be in the Achieved clusters or Black women from majority White neighborhoods being overrepresented in the Diffused clusters. Alternately, the non-significant result demonstrates that similar patterns of identity development emerge among Black women from socioeconomically diverse and racially diverse home communities.

Latent Classes of Identity Beliefs among Black Women

At each time point, three distinct clusters of identity beliefs emerged among the Black women related to their levels of centrality, exploration, and commitment. The Achieved clusters reported race and gender identity averages that were at or above the sample mean on all six indicators, while the Diffused clusters reported lower-than-average race and gender centrality, exploration, and commitment compared to women in the other clusters. While there was

between-group variation over time, overall, Black women in the Achieved and Diffused clusters maintained the higher and lower pattern, respectively. The smaller, third cluster at each time point – labeled Mixed Status – showed greater variation than the other sets of clusters. At Time 1, the Mixed Status cluster demonstrated significantly higher gender centrality and exploration; at Time 2, the Mixed Status cluster reported higher levels of race and gender exploration, and at Time 3, women in the Mixed Status cluster showed higher levels of racial centrality and commitment compared to the other clusters. In general, I considered the Mixed Status clusters a transitory position that women occupied during higher levels of exploration and lower levels of commitment – although the social identity of focus varied at each of the time points, and the clusters were comprised of different groups of women. While the Achieved and Diffused clusters had a portion of women (10-15%) who remained stable over time, there were not any women who stayed in the Mixed Status clusters consistently.

Overall, the cluster groupings partially confirmed my initial hypotheses about the types of clusters that would emerge over time in the sample. First, the Achieved cluster group was the largest or second-largest cluster group across all three time points. Thus, at each time, a significant number of Black women felt that race and gender were central to their self-concept and were actively engaging in identity exploration in a way that corresponded to a strong sense of commitment. However, I also predicted that women in the Diffused cluster at Time 1 would be more likely to migrate into the Achieved cluster by Time 2 and Time 3 based on the idea that the PWI context would make race and gender more central and relevant to Black women's self-concept. While my path mapping indicated that some women did transition from a Diffused cluster to an Achieved cluster, the archetypal “Diffused cluster” was the second-largest to largest cluster group over time. Thus, at all three time points, including Time 3 (junior year), a

considerable sum of Black women felt less attached to their race and gender identity, and were not actively thinking about or forming a strong attachment to these identities.

Prior research shows that Black students who report lower racial centrality may have more close White friendships and acquaintances in ways that align with their lower sense of racial centrality and make race a less salient identity over time (Richardson et al., 2018). It is possible that in much the same way, Black women who enter college and place less importance on their race and gender identity capitalize on intergroup interactions that affirm these beliefs. Compared to considering the salience of race in PWI contexts, there is a dearth of research on how women's gender identity is made salient in college contexts that have a relatively equal proportion of men and women. While stereotype threat literature focuses on gender identity salience in STEM contexts, including among women of color (e.g., Johnson, 2001, 2012; LaCosse, Sekaquaptewa, & Bennett, 2016), there is little scholarship on the extent to which Black women's gender identities play a role in their everyday academic and social interactions. Since most of the identity and discrimination literature with Black college students focuses on the effects of race (e.g., Strayhorn, 2013), we have little understanding of how gender operates for Black college women (King, 2003).

Regarding the Mixed Status groups, I anticipated that they would move into the Achieved or Diffused clusters by Time 3 and form a stronger sense of resolution (high or low) about their race and gender identity. This hypothesis was somewhat true. Over time, the nature of the Mixed Status group shifted in such a way that by Time 3, Black women within the group reported a stronger sense of attachment and commitment to their racial identity, but a low sense of commitment to their gender identity. By Time 3, women in the Race Central/Committed group also reported less racial and gender exploration, suggesting that the clarity they had about the

meaning of their racial identity may have lessened their need for active exploration of this social identity. Overall, there was a steady stream of women in the Mixed Status groups, challenging the idea that as Black women progress through college, they arrive at a finalized state of identity formation. Also, there were several women who were in an Achieved cluster at Time 1, and then moved into a Diffused or a Mixed Status cluster, which negates the idea that once women reach an “Achieved” status, their identity exploration is complete (for review, see Phinney & Ong, 2007). Instead, the fluctuation within and across all three clusters over time highlights the ongoing nature and renegotiation of identity development among Black women, which deserves further attention in developmental literature.

The longitudinal analysis with the person-oriented approach allowed me to consider variation within the cluster groups, which were labeled the same way over time, i.e., qualitative differences in the Achieved, Diffused, and Mixed Status clusters over time. One critique of latent cluster approaches is that they divide the sample group means in such a way that you tend to end up with a “high,” “low,” and “middle” cluster, and in this case, the Achieved clusters represent “high,” the Diffused clusters represent “low,” and the Mixed Status clusters represent “middle.” However, the multidimensional component of the study challenges this methodological critique a bit and highlights the utility of considering more than one identity indicator in thinking about individuals’ identity belief systems.

For example, the Achieved and Diffused clusters demonstrated significant variation over time in the nature of the “high” and “low” responses. Black women in the Achieved clusters reported significantly higher racial centrality, racial exploration, and gender commitment by junior year compared to the first year. A cross-sectional analysis would have demonstrated that these women reported higher on these indicators than Black women in other clusters at one time

point, but the longitudinal approach illustrates that women with a secure attachment at the beginning of college can evolve a deeper understanding and commitment to their race and gender identities. In addition, Black women in the Achieved cluster at Time 1 reported more exploration around their gender identity than Black women in the Achieved cluster at Time 3. In combination with the higher gender commitment at Time 3, this aligns with identity status literature about how identity exploration contributes to a greater sense of identity resolution (and perhaps less exploration). Within the Diffused clusters, women increased over time in their levels of racial and gender exploration, while centrality and commitment to both identities remained low. In this case, I wonder if the greater exploration of race and gender at Time 3 will result in a stronger sense of centrality or commitment as time continues, or an increased resolve that their race and gender identities are not central to their self-concept. Finally, the Mixed Status profiles demonstrate that, while these women did report in-the-middle averages relative to the other clusters on some indicators (i.e., gender commitment at Time 3), they also reported higher on other indicators (i.e., racial and gender exploration at Time 2) compared to women in the Achieved cluster. Thus, measuring multiple indicators of race and gender identity beliefs revealed that women were not uniformly “high, medium, or low,” but instead, that centrality, exploration, and commitment operated in unique ways over time.

Mapping Identity Change over Time

Regarding RQ2 and the various pathways of movement among Black women from Time 1 to Time 3, there were over forty different pathways of identity stability and change. This included pathways that included a single woman, such as EED – Mixed Status-Gender Central/Exploring/Central to Mixed Status-Race and Gender Exploring to Diffused, as well as pathways with over ten women, such as ADA – Achieved to Diffused to Achieved. This

variation in pathway movement challenges prior literature suggesting that identity change happens in a linear fashion (Marcia, 1980; Phinney, 1990) and should also encourage more research on the ways that contextual experiences encourage identity change in nonlinear ways (Seaton et al., 2006; Yip et al., 2006). Further, the number of pathways in the sample highlights the heterogeneity in how Black women develop their belief systems on race and gender identity, an understudied area of research (Settles, 2004, 2006).

The two largest categories of path movement were AAA – Achieved to Achieved to Achieved and DDD – Diffused to Diffused to Diffused; both categories included about 11% of the overall sample. Importantly, the size of these cluster groups in relation to the beliefs represented in these clusters (maintaining a stronger or weaker sense of centrality, exploration, and commitment to race and gender) draws attention to the idea that some individuals enter college with very strong belief systems that stay relatively intact throughout college (Richardson et al., 2018). In the present study, this included women who identified strongly with being Black and a woman (Achieved), as well as women who felt more detached from these two identities (Diffused). This could mean that these women entered college and had experiences – or sought out spaces – that affirmed their initial beliefs – but do these “affirming” experiences and spaces look different for women in the Achieved clusters versus women in the Diffused clusters? Some work suggests that Black women with an “Achieved” belief system might be more likely to seek out peer groups and organizations that support their identities (i.e., same-race spaces or groups designed for Black women; Museus, 2008; Ong et al., 2018). For example, a woman from the qualitative sample stated that she felt the strongest sense of belonging among other Black students and the least sense of belonging among upper-income White students. She said,

“With people that look like me. And the least sense of belonging with people that are like the students I went to high school with, so most of 'em racially identify as White, and their parents are making maybe \$250,000.00 a year or more – no, let's say \$100,000.00 or more. [With Black students], it's just more of an understanding, I feel like –yeah, I understand you're struggling, 'cause I feel the same pain, and I go through it too, so then you talk about it, and like even going to parties. Like, during my freshman year, I lived on a mostly White floor. Even going to the parties, I would go with them to just felt awkward. I don't know. It was different, yeah.” (Tia)

Later in her interview, she confirms that she surrounds herself with Black students in social settings, although she is usually one of the only Black students in her courses.

On the other hand, were Black women in the Diffused cluster group more likely to have interracial friendships and maintain less of an affiliation with Black or Black woman organizations on campus, thereby reinforcing their earlier beliefs that race and gender were of little importance to their self-concept? Some racial identity models suggest that interracial interactions and being situated in a predominantly White context increases the likelihood that Black students encounter racial discrimination or situations that make race highly salient (McCabe, 2009), and the general assumption is that such experiences contributes to higher racial centrality or more awareness of your racial background (Sellers et al., 2003). However, the stable group of Diffused women pushes us to think more about how Black women find community in predominantly White institutional spaces. The types of contextual experiences in college that contribute to this stability over time, for women with both “Achieved” and “Diffused” belief systems, remains an open question and an important area for future research.

The small, but growing body of research on Black college women at PWIs tends to focus on the interpersonal and institutional challenges that these women face on campus (e.g., Frazier, 2012; Hannon et al., 2016). Recent qualitative examples highlight how Black women feel marginalized at PWIs and how they draw on social support from other Black women or faculty of color to help validate their experiences and encourage their persistence (Henry et al., 2012; Johnson, 2011; Ong et al., 2018; Shahid et al., 2018). These narratives and this broader program of research are important in that they challenge institutions to find better ways to support Black women, but they may also overlook the experiences of Black women who do not consider their race and gender identities important frameworks for understanding their college experiences, such as the stable group of Diffused women in this study. I am not suggesting that these women are not represented in samples of Black college woman (since they were a consistently large group of women in my sample) but I do think we lack an empirical understanding of how Black women who are not strongly tied to their identity as Black women, function within institutional environments that have a generational history of devaluing and excluding Black women. It is possible that Black women in the Diffused clusters feel a general sense of belonging at the university because they were admitted as a student. Upon entry, these women may seek out community through social organizations that align with their general likes and passions, which may not involve seeking out students who share the same racial and/or gender background but few common interests.

Amidst the growing literature suggesting that a strong and positive attachment to one's racial identity is a promotive cultural asset for African Americans (Spencer et al., 2001; Stewart, 2008; Swanson et al., 2002; Walton et al., 2007), the general pattern is that students with lower centrality or a lower sense of commitment show poorer outcomes (Seaton et al., 2006). However,

I generally found no differences between women in the Achieved clusters compared to women in the Diffused or Mixed Status clusters, on the academic and psychological indicators (academic curiosity being the exception). Does this mean that Black women's race and gender identities were not an important asset for their adjustment to college at a PWI? Or that Black women in the Diffused clusters found other sources of support that facilitated their adjustment in much the same way that women from the Achieved cluster drew on their social identities? In all, the consistency over time in the existence of the Diffused clusters suggest that we need more work on what it means to belong to a socially minoritized group within an environment but maintain a low sense of allegiance to that group. Some scholarship suggests that individuals with a "Diffused profile" have a weak sense of connection to their group identities because they want to distance themselves from the stigma attached to that identity (Harris et al., 2010), but given that these women were teenagers during the election of President Obama and the rise of "postracial" era— I wonder if this profile may represent Black women who report a low sense of centrality, exploration, or commitment because they've adopted a postracial or color-blind stance (Johnston, Pizzolato, & Kanny, 2015) that makes their "Black" and "woman" categories seem like less critical parts of who they are? It would be interesting to consider whether these women also had high self-efficacy and high racial public regard, further suggesting they had a worldview that included a strong sense of confidence in their abilities and the belief that the world perceives their racial group in a positive way. Another understudied area of research is whether some Black women in the Diffused group reported a lower sense of attachment or commitment to their identity because they had strained relationships with other students within the Black community. While most literature focuses on tension or mistrust in interracial interactions on campus (e.g., Upton et al., 2012; West et al., 2010; Winkle-Wagner, 2015), it is also worth considering

whether some of these women's connection to their racial and gender community was strained within the PWI setting. For example, one young woman stated,

“I think I deal isolation within my own race sometimes. Like not to stereotype, but most of my life I've had strife with other Black girls, just for like, oh, if you think you're stuck up and you talk a certain way and things like that so I always had like this anxiety going into like a group of Black girls. I felt like sometimes I was isolated from within my race because of the way that my demeanor portrays me as far as like, “Oh, like she must be an honor roll student, or she must come from this area and she's not from Detroit,” or whatever. And then I'm like, “Oh, I am from Detroit and I still talk like this – and I am one of you.” I feel like a lot of times we do that, “You haven't been through the same thing as me,” thing when we see people and because of their demeanors and then you don't get a chance to actually meet them. They already put you outside the box and I feel like that happened a lot as far as isolation. Like I can't hang out with these people because I'm too Black and I can't hang out with these people because they consider me too White. You know what I'm saying? So I felt isolated as far as like I'm in this gray area sometimes.” (Jasmine)

A prominent issue for Black women at a PWI is that there is not a critical mass (e.g., John, 1999) of other Black students for academic and social relationships, which may create a limited version of the “type” of Black woman that is accepted within the college context. Black women at HBCUs may struggle with this issue less because most of the student body are other Black students who have an array of diverse interests, and there is less of a need to “stick together” with the few other Black women on campus (Van Camp et al., 2010).

Finally, it is also important to examine the qualitative nature of the other identity change pathways, especially those that may run contrary to social identity and developmental literature. For example, about 7% of the sample moved from the Achieved cluster at Time 1 into the Diffused cluster at Time 3, and 9% percent of the sample moved from the Mixed Status-Gender Central/Exploring/Central cluster at Time 1 and ended up in the Diffused cluster by Time 3. As mentioned before, there is little research explaining why Black women would decide that their race and gender identities matter very little to them after a period of active exploration and engagement. Is it that they are coping with experiences of discrimination by deemphasizing their race and gender identities? Is it that they have decided to adopt a more humanistic ideology that emphasizes their human similarities with other people, over the distinctiveness of their race and gender group memberships? Most developmental identity literature suggests that after actively thinking about and exploring the meanings attached to a social identity, individuals tend to form a stronger sense of attachment and resolution (Cross, 1991; Phinney, 1990). Scholars have begun to move away from this linear way of framing identity change, and instead, highlight how identity negotiation is an ongoing process throughout the lifetime (Verschuere et al., 2017). The current study pushes us to think more about why some Black women in the sample “reverted” back to not exploring their identity and reported little clarity around their race and gender. Finally, although no women in the sample remained in the Mixed Status clusters across all three time points, about 18% of the sample was in the Mixed Status-Race Central/Committed cluster at Time 3. Thus, at the end of their junior year, almost one-fifth of the sample were in a transitory state that would likely change if I had examined an additional time point, which underscores that identity exploration continues throughout Black women’s time in college (Hannon et al., 2016).

Black Women’s Change Clusters and Interpersonal Discrimination Experiences

Movement into the Achieved Clusters

Accounting for socioeconomic status, identity-based experiences of discrimination on campus related to race and gender identity stability and change among Black women. Over the first year of college, movement into the Achieved cluster was related to having a higher household income, fewer race and gender hassles and fewer classroom racial inferiorization experiences, but more classroom gender inferiorization experiences compared to women who remained stable. Similarly, from the end of the first year to junior year, movement into the Achieved cluster was related to having fewer classroom racial inferiorization experiences, but more gender inferiorization experiences at both Time 2 and Time 3.

Consistent with social identity frameworks of development (Tafjel et al., 1986), Black women who encountered identity-based threats that challenged their sense of belonging and abilities in the classroom may have responded to the perceived discrimination by thinking more about their social group memberships. It is unclear why gender-related discrimination spurred such cluster movement rather than racial discrimination or race and gender discrimination, given their higher frequencies among Black women in the Achieved clusters at each time point. However, it is possible that since Black women in these groups generally reported lower gender centrality, exploration, and commitment, encountering gender-related discrimination may have encouraged them to engage more with this less-explored identity. Perhaps by junior year, their lens for processing race-related discrimination was more advanced compared to their lens for processing gender-related discrimination.

While I maintained that thinking more about their race and gender identities and forming a strong attachment would relate to better adjustment outcomes, this relationship between more gendered discrimination and movement into the Achieved cluster should encourage scholars to

consider how encountering discrimination experiences within a particular context undermines an individual's ability to function and thrive within that context. As Black women confronted more classroom gender inferiorization at the end of their first year and into their junior year, they may have been wondering – Can I be successful here? Am I valued as a person and as a student at this university?

Movement into the Diffused Clusters

Over the first year of college, movement into the Diffused cluster was related to having fewer racial hassle experiences compared to women who remained stable in their cluster group membership. Given that women in the Diffused cluster reported a low sense of attachment, exploration, and commitment to their race and gender identities, perhaps having fewer challenges with daily race-related hassles supported their belief that they were not discriminated against as racial minorities on campus. Likewise, movement into the Diffused cluster by the end of junior year was related to having fewer classroom gender inferiorization experiences at Time 2, but more classroom racial inferiorization experiences.

This last pattern is contrary to the other findings for movement into the Diffused cluster (i.e., fewer racial hassles and fewer challenges with classroom gender discrimination). Overall, this finding is surprising given that women reported very few classroom discrimination experiences. While I expected that perceptions of discrimination would be influential on changes to Black women's identity beliefs over time, I did not expect to find that more classroom racial discrimination would relate to moving into the Diffused cluster. However, by the junior year time point, Black women in the Diffused group reported higher racial centrality, exploration, and commitment than Black women in the Diffused group during the first year. Although these women reported an overall lower sense of attachment or commitment to their racial identities

compared to women from the other cluster groups, they may have also been more attuned to race-related dynamics than women in this group years earlier. It also highlights that PWIs can make race salient to Black women in a way that discourages them from developing a strong and positive attachment to their identities. Given that these women are in college, they have already demonstrated that they are capable students with a vested interest in learning and education. For some women, perhaps encountering racial discrimination in the classroom makes them distance themselves from their race and gender identities and focus on academic persistence and resilience. Black women in the Diffused clusters may not feel limited by their status as African American women, even though they are aware that others have negative stereotypes about Blacks and Black culture. This may have been the case for several women in the study, who confronted negative racial and gender discrimination, but wanted their overall college narrative to be defined by academic resilience and success. Future research must continue to consider the mental and emotional toll that such forms of persistence have on Black women's overall wellbeing (Lewis et al., 2017; Moradi et al., 2003; Pascoe et al., 2009).

Movement into the Mixed Status Clusters

Finally, during the first-year transition, movement into the Mixed Status-Race and Gender Exploring cluster was related to having more classroom racial inferiorization experiences. The classroom inferiorization scales captured students' perceptions of the extent to which their racial and gender identities are devalued and treated pejoratively in the classroom through interpersonal interactions with peers and faculty. As such, experiencing more challenges with racial discrimination in the classroom during the first year of college may push Black women to start thinking more about their social status on campus as a racial minority and the ways that African American students are regarded and perceived in academic settings, and at the

broader university. Black women who are encountering fewer challenges with race and gender related discrimination in the classroom may perceive academic contexts as fairer and more inclusive to students from diverse backgrounds, making their race and gender a less chronically salient and relevant identity for them (e.g., Richardson et al., 2018).

For example, one woman who moved from the Diffused to the Mixed Status cluster stated,

“I don't think it's a big deal in my life personally, because being raised around all kinds of different races, 'cause I lived in Florida, there's so many different diversity there, which I really loved. But here, not so much, so you automatically put yourself in your own race. You see a group of Black girls, and you see a group of White girls. You gotta think about which group would you walk over to first. And freshman year, I automatically got categorized into [a dorm] and it was mostly of African-American students, and at the time, I really didn't, really didn't think about it. Now, thinking back on it, I wonder why...and I personally think that the races do get treated the same here. I haven't felt like African-Americans get treated worse, but I haven't felt as though like they get favored the most. It hasn't been a negative, but it hasn't been a huge positive either, 'cause again, we are a minority here, so you walk around campus, and there's a chance that you won't see someone who, who looks like you.” (Zedaya)

In this example, we see several important reflections on self-identity, institutional climate, and her perceptions of how others categorize her identity. She notes that race was less important to her before arriving to college because she was in a racially diverse metropolitan area, but the overwhelming lack of racial/ethnic diversity at her university coerced her into framing her social groupings into a “Black-White dichotomy” that wasn't a challenge for her before. At another point in her interview, she talks about a discussion in an economics course about income

inequality among racial groups in the U.S. and how Black women have historically been at the bottom of the social hierarchy. This exchange highlights how her academic experiences have pushed her to think about her social status position as a Black woman in ways that were new and “uncomfortable” to her. This young woman was in the Mixed Status-Race Central/Committed cluster by junior year, suggesting that she is still grappling with questions on the significance and meaning of her social identities in the college context, which is nicely framed by the latter part of her statement about how she thinks Blacks are treated equally well on campus as other racial groups, but notes their significant underrepresentation.

In sum, the findings around identity change suggest that in large part, Black women’s classroom experiences of race and gender discrimination are important areas of study for identity and college student development scholarship (e.g., Richardson et al., 2018). These findings also suggest that interventions focused on inclusion should include a targeted focus on interpersonal engagement in classroom spaces between faculty and students.

Limitations and Considerations

The present study represents an important exploration of the nature of race and gender identity change among Black college women, potential mechanisms explaining stability and change, and the implications of such change for academic and psychological adjustment. In interpreting the findings, one study limitation is that Black women were represented disproportionately in some clusters, and future work might consider other dimensions of race and gender identity (i.e., pride and salience) that may link to additional variation in identity change. Another consideration is that the sample size of my participants from each university ranged (3-29%), and although there were not significant differences in any of the predictor variables, future work might try to equalize participation across different universities by oversampling at certain

institutions. Further, these findings were drawn from mid-sized to large 4-year public institutions in the Midwest, so the results may not generalize to other types of PWIs (private, liberal arts college, smaller, less affluent PWIs, and PWIs from other demographic regions). There was also a significant reduction in the number of women included in the study ($n = 464$ to $n = 235$) since I focused on women who completed the survey at all three time points. While this is a common attrition issue in longitudinal work, in the future, I will use latent transition analysis or another data analysis tool to assess whether these findings remain consistent using data imputation with the larger sample. Lastly, it is worth reiterating that my findings do not attest to participants' sense of their Black woman identity – but instead, captured their reports on similar indicators of race and gender identity to see how they functioned in tandem.

This last limitation draws attention to a strength of the study, in that it is one of the first investigations to examine race and gender identity change over a 3-year period. I was able to ascertain that some patterns of change remained consistent from Black women's first year of college to their junior year of college (academic persistence and race and gender hassles), and the study presented an in-depth look at how Black women's identity beliefs stayed stable or changed over time. In addition, the study highlighted systematic change in Black women's identity beliefs by mapping cluster movement at each of the three time points. While some patterns of change related to more positive academic motivation outcomes by junior year (Black women in the Achieved cluster reporting greater academic curiosity), it is still unclear whether race and gender identity beliefs are important for psychological wellbeing factors among Black women. Future research could examine longer-term trajectories of race and gender identity – perhaps into senior year – and could also focus on other important indicators of mental health and psychological

adjustment, such as self-esteem, anxiety, and depressive symptomology (Belgrave, Abrams, Hood, Moore, & Nguyen, 2016).

Conclusions

The current study adds to the small, but growing literature specifically investigating Black women's social identity development, as well as their experiences of and responses to race, gender, and race and gender discrimination. In addition, this work adds to the budding research seeking to examine the extent to which race and gender function similarly for Black women as cultural assets. My results indicate that many Black women exhibit a variety of identity belief shifts during their time in college, and that contextual experiences of discrimination affect these shifts – but not in such a way that more discrimination experiences in one domain relate to identity change in that domain. The findings also highlight that the significance and meaning of race and gender diverge across Black women, and that more research is needed to understand how pre-college experiences and socialization experiences relate to Black girls' identity development. Also, given that women in the Diffused, Mixed Status, and Achieved cluster groups tended to report similar levels of academic and psychological adjustment, scholars should consider how college institutions can provide environments that support the diverse belief systems of Black women. It is my hope that future research will build on this work by finding more intersectional ways of quantitatively examining race and gender identity development among Black women, and by also exploring how to disrupt the deleterious influence of discrimination on Black women's academic adjustment to college.

Table 11. Model fit statistics for latent class cluster analyses for change classes for race and gender identity variables

Model	BIC(LL)	L^2	df	Bootstrap p value	% Reduction in L^2	Maximum BVR	BLRT p value	Classification error %
Time 1								
One-class	1792.34	206.58	57	--	99.59	198.58	< .001	--
Two-class	1727.07	83.78	50	.002	76.56	21.83	.014	8.6%
Three-class	1718.61	57.79	43	.065	80.18	7.99	.174	12.3%
Four-class	1745.33	46.98	36	.10	77.76	4.82	.302	15.1%
Five-class	1770.85	34.97	29	.21	78.45	2.53	.412	15.6%
Time 2								
One-class	2047.27	299.71	135	.000	100.00	201.98	<.001	0.00%
Two-class	1978.25	153.34	128	.052	86.83	18.66	.058	6.5%
Three-class	1965.93	143.76	121	.08	77.47	4.26	0.07	11.84%
Four-class	1991.78	132.35	114	.07	71.61	1.72	0.12	15.14%
Five-class	2021.93	125.24	107	.05	67.61	0.59	0.11	20.63%
Time 3								
One-class	2192.62	503.94	135	.000	100.00	480.50	<.001	0.00%
Two-class	1882.66	156.26	128	.001	98.98	38.91	.04	0.46%
Three-class	1881.19	117.07	121	.054	89.43	8.59	.058	5.88%
Four-class	1888.82	86.97	114	.19	88.87%	2.76	.08	7.17%
Five-class	1909.48	69.91	107	.49	86.66%	1.28	.19	8.51%

Note. BIC(LL) = Log-likelihood Bayesian information criterion. L^2 = Likelihood ratio chi-square, BVR = Bivariate residuals, BLRT = Bootstrap likelihood ratio test. Bold font highlight class model that best fits the data.

Figure 4. Race and gender identity profiles for Black women at Time 1

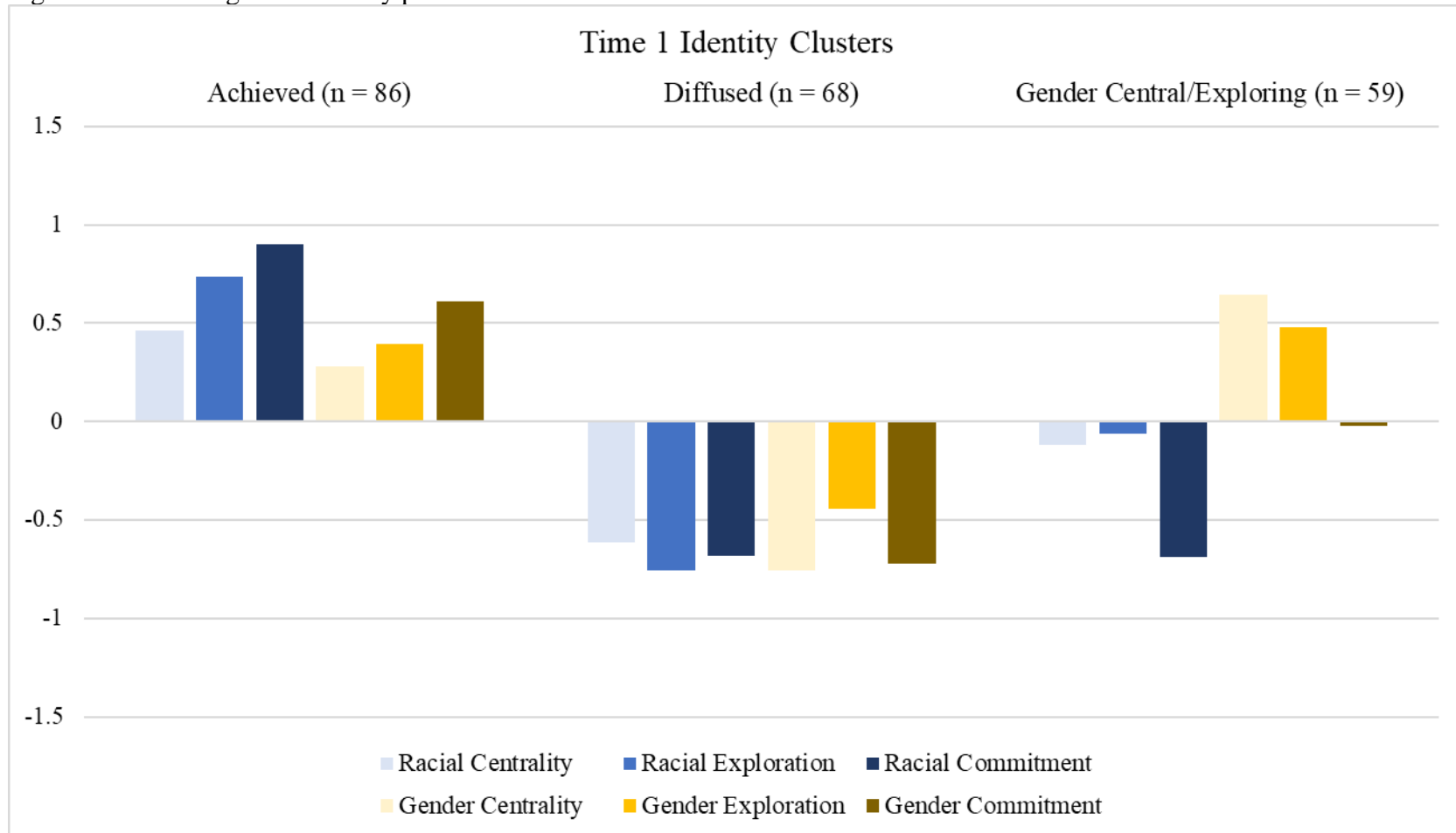


Table 12. Raw means, standardized means (and standard deviations) of identity variables for Black women's cluster group membership at Time 1

Variable	Total Sample (n = 235)	Achieved (n = 86)	Diffused (n = 68)	Gender Central/Exploring (n = 59)
<i>Raw Means</i>				
Racial Centrality	5.13 (1.38)	5.82 (1.03) ^a	4.38 (1.36) ^b	5.05 (1.23) ^c
Racial Exploration	3.03 (0.64)	3.50 (0.47) ^a	2.52 (0.51) ^b	2.98 (0.53) ^c
Racial Commitment	3.15 (0.74)	3.85 (0.23) ^a	2.71 (0.72) ^b	2.70 (0.42) ^b
Gender Centrality	3.50 (0.78)	3.67 (0.73) ^a	2.90 (0.62) ^b	3.94 (0.60) ^a
Gender Exploration	2.65 (0.75)	2.84 (0.75) ^a	2.22 (0.65) ^b	2.90 (0.68) ^a
Gender Commitment	3.17 (0.69)	3.58 (0.50) ^a	2.70 (0.62) ^b	3.16 (0.65) ^c
<i>Standardized Means</i>				
Racial Centrality	-0.06 (1.03)	0.46 (0.77) ^a	-0.62 (1.02) ^b	-0.12 (0.92) ^c
Racial Exploration	0.01 (0.97)	0.74 (0.71) ^a	-0.75 (0.77) ^b	-0.06 (0.81) ^c
Racial Commitment	-0.07 (1.03)	0.90 (0.32) ^a	-0.69 (1.00) ^b	-0.69 (0.58) ^b
Gender Centrality	0.05 (1.04)	0.28 (0.98) ^a	-0.76 (0.83) ^b	0.65 (0.80) ^a
Gender Exploration	0.13 (1.02)	0.39 (1.02) ^a	-0.44 (0.88) ^b	0.48 (0.93) ^a
Gender Commitment	-0.01 (1.05)	0.61 (0.76) ^a	-0.72 (0.95) ^b	-0.02 (0.98) ^c

Note. Significant differences at the $p < .05$ level are denoted by differences in subscripts.

Table 13. Demographic characteristics by cluster at Time 1

	Achieved		Diffused		Gender Central/Exploring			
	(n = 86)		(n = 68)		(n = 59)		Totals	
Hometown	Rural	2	Rural	0	Rural	1	Rural	3
	Small Town	24	Small Town	17	Small Town	15	Small Town	56
	Suburb	27	Suburb	20	Suburb	25	Suburban	72
	Urban Area	33	Urban Area	30	Urban Area	18	Urban Area	81
Racial Composition of Home Neighborhood	< 20%	13	< 20%	11	< 20%	16	< 20%	40
	21-40%	13	21-40%	17	21-40%	14	21-40%	44
	41-60%	10	41-60%	13	41-60%	10	41-60%	33
	61-80%	12	61-80%	10	61-80%	6	61-80%	28
	81-100%	38	81-100%	17	81-100%	13	81-100%	68
Social Class Background	Poor	4	Poor	8	Poor	2	Poor	14
	Working	14	Working	10	Working	9	Working	33
	Lower Middle	22	Lower Middle	12	Lower Middle	11	Lower Middle	45
	Middle	40	Middle	29	Middle	25	Middle	94
	Upper Middle	6	Upper Middle	8	Upper Middle	11	Upper Middle	25
	Upper	0	Upper	1	Upper	0	Upper	1

Figure 5. Race and gender identity profiles for Black women at Time 2

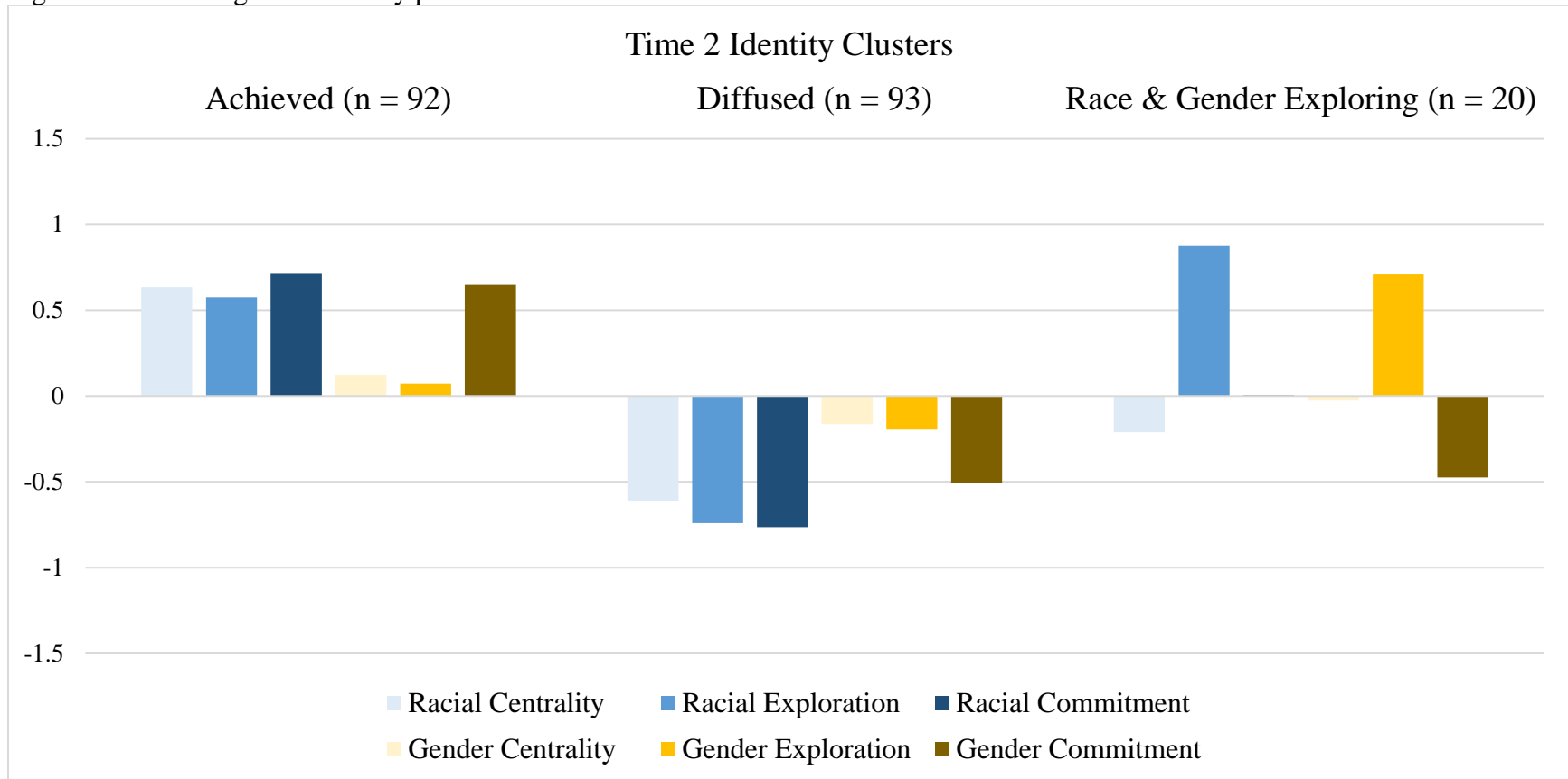


Table 14. Raw means, standardized means (and standard deviations) of identity variables for Black women's cluster group membership at Time 2

	Total Sample (n = 235)	Achieved (n = 92)	Diffused (n = 93)	Race and Gender Exploring (n = 20)
Racial Centrality	5.13 (1.35)	6.02 (0.87) ^b	4.34 (1.21) ^a	4.88 (1.33) ^a
Racial Exploration	3.08 (0.65)	3.45 (0.55) ^b	2.60 (0.40) ^a	3.65 (0.35) ^b
Racial Commitment	3.16 (0.72)	3.68 (0.48) ^c	2.63 (0.51) ^a	3.18 (0.71) ^b
Gender Centrality	3.64 (1.00)	3.79 (1.05)	3.52 (1.02)	3.65 (0.81)
Gender Exploration	2.69 (0.76)	2.74 (0.84) ^a	2.54 (0.70) ^a	3.23 (0.44) ^b
Gender Commitment	3.17 (0.66)	3.60 (0.52) ^b	2.83 (0.60) ^a	2.85 (0.59) ^a
<i>Standardized Means</i>				
Racial Centrality	-0.03 (1.00)	0.63 (0.65) ^b	-0.61 (0.89) ^a	-0.21 (0.98) ^a
Racial Exploration	0.01 (1.00)	0.57 (0.85) ^b	-0.74 (0.62) ^a	0.88 (0.54) ^b
Racial Commitment	-0.01 (1.01)	0.72 (0.67) ^c	-0.76 (0.72) ^a	0.01 (1.00) ^b
Gender Centrality	-0.03 (1.03)	0.12 (1.08)	-0.16 (1.04)	-0.25 (0.83)
Gender Exploration	-0.00 (1.01)	0.71 (1.11) ^a	-0.20 (0.92) ^a	0.71 (0.58) ^b
Gender Commitment	0.01 (0.99)	0.65 (0.77) ^b	-0.51 (0.90) ^a	-0.47 (0.88) ^a

Note. Subscripts denote significant differences with Scheffe's Multiple Comparison Test. * $p < .05$, ** $p < .01$, *** $p < .001$.

Table 15. Demographic characteristics by cluster at Time 2

	Achieved		Diffused		Race and Gender Exploring			
	(n = 92)		(n = 93)		(n = 20)		Totals	
Hometown	Rural	3	Rural	1	Rural	0	Rural	4
	Small Town	21	Small Town	27	Small Town	4	Small Town	52
	Suburb	31	Suburb	32	Suburb	5	Suburban	68
	Urban Area	36	Urban Area	33	Urban Area	10	Urban Area	79
Racial Composition of Home Neighborhood	< 20%	16	< 20%	17	< 20%	4	< 20%	37
	21-40%	17	21-40%	24	21-40%	2	20%-40%	43
	41-60%	13	41-60%	9	41-60%	5	41%-60%	27
	61-80%	11	61-80%	15	61-80%	2	61%-80%	28
	81-100%	35	81-100%	28	81-100%	7	81%-100%	70
Social Class Background	Poor	7	Poor	9	Poor	1	Poor	17
	Working	15	Working	12	Working	3	Working	30
	Lower Middle	19	Lower Middle	21	Lower Middle	5	Lower Middle	45
	Middle	41	Middle	38	Middle	10	Middle	89
	Upper Middle	9	Upper Middle	12	Upper Middle	1	Upper Middle	22
	Upper Class	0	Upper Class	1	Upper Class	0	Upper Class	1

Figure 6. Race and gender identity profiles for Black women at Time 3

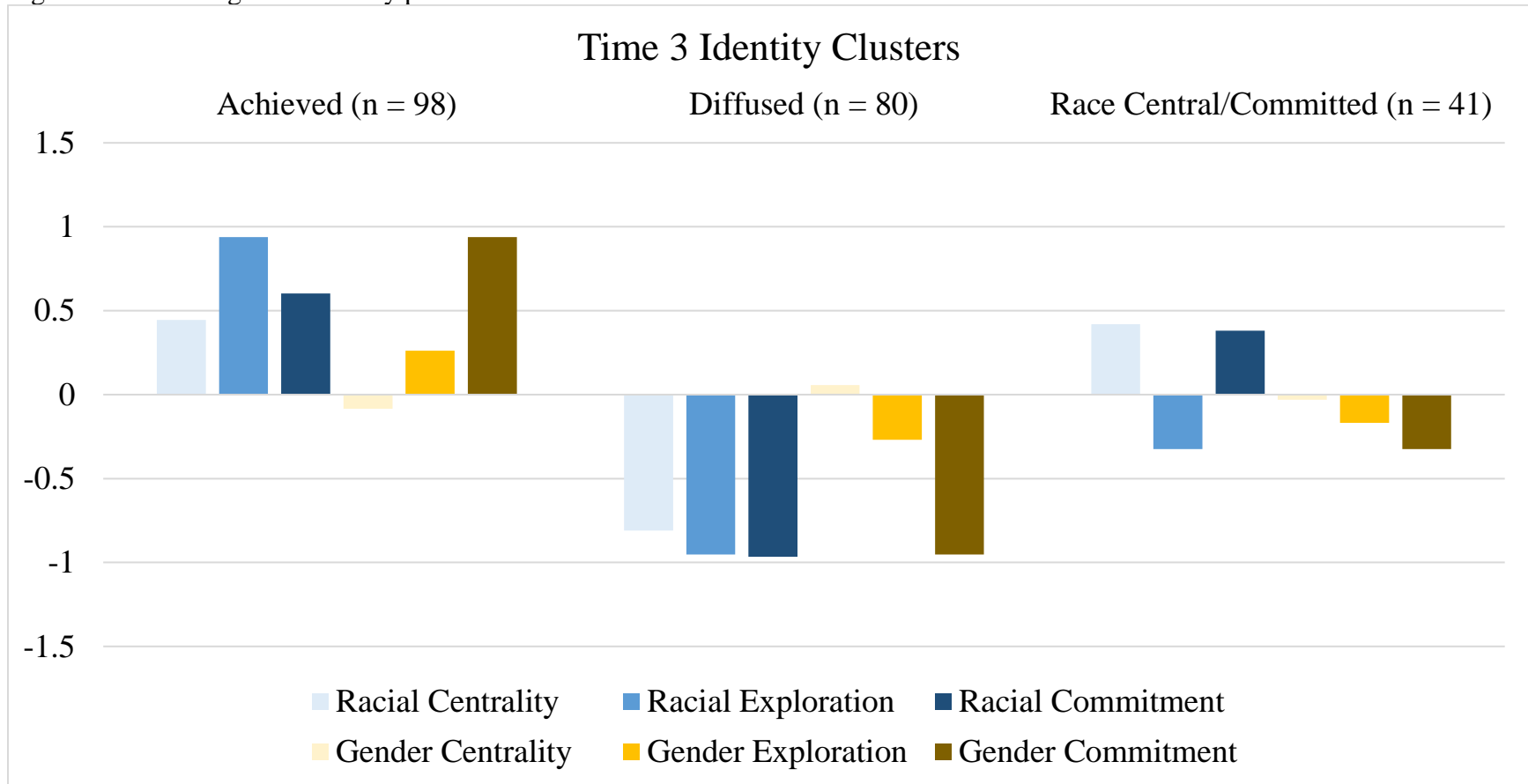


Table 16. Raw means, standardized means (and standard deviations) of identity variables for Black women's cluster group membership at Time 3

	Total Sample (n = 235)	Achieved (n = 98)	Diffused (n = 80)	Race Central/Committed (n = 41)
Racial Centrality	5.50 (1.39)	6.16 (1.12) ^b	4.40 (1.30) ^a	6.12 (0.65) ^b
Racial Exploration	3.27 (0.62)	3.84 (0.19) ^c	2.69(0.44) ^b	3.07 (0.28) ^a
Racial Commitment	3.35 (0.65)	3.76 (0.40) ^b	2.73 (0.53) ^a	3.61 (0.36) ^b
Gender Centrality	2.65 (1.19)	2.57 (1.24)	2.74 (1.16)	2.63 (1.22)
Gender Exploration	2.86 (0.67)	3.04 (0.69) ^b	2.68 (0.59) ^a	2.74 (0.69) ^a
Gender Commitment	3.27 (0.62)	3.84 (0.19) ^c	2.69 (0.44) ^a	3.07 (0.28) ^b
<i>Standardized Means</i>				
Racial Centrality	-0.02 (0.99)	0.44 (0.80) ^b	-0.81 (0.93) ^a	0.42 (0.47) ^b
Racial Exploration	-0.01 (1.02)	0.94 (0.32) ^c	-0.95 (0.73) ^b	-0.32 (0.46) ^a
Racial Commitment	-0.02 (0.99)	0.60 (0.61) ^b	-0.97 (0.80) ^a	0.38 (0.55) ^b
Gender Centrality	-0.02 (1.01)	-0.08 (1.05)	0.57 (0.98)	-0.03 (1.04)
Gender Exploration	-0.00 (0.99)	0.26 (1.01) ^b	-0.27 (0.86) ^a	-0.17 (1.01) ^a
Gender Commitment	-0.01 (1.02)	0.94 (0.32) ^c	-0.95 (0.73) ^a	-0.32 (0.46) ^b

Note. Subscripts denote significant differences with Scheffe's Multiple Comparison Test. *p < .05, **p < .01, ***p < .001.

Table 17. Demographic characteristics by cluster at Time 3

	Achieved		Diffused		Race Central/Committed		Totals	
	(n = 98)		(n = 80)		(n = 41)			
Hometown	Rural	2	Rural	2	Rural	0	Rural	4
	Small Town	25	Small Town	9	Small Town	11	Small Town	55
	Suburb	32	Suburb	30	Suburb	11	Suburban	73
	Urban Area	39	Urban Area	27	Urban Area	19	Urban	85
Racial Composition of Home Neighborhood	< 20%	15	< 20%	21	< 20%	6	< 20%	42
	21-40%	20	21-40%	17	21-40%	8	20%-40%	45
	41-60%	16	41-60%	7	41-60%	9	41%-60%	32
	61-80%	13	61-80%	11	61-80%	4	61%-80%	28
	81-100%	34	81-100%	24	81-100%	14	81%-100%	72
Social Class Background	Poor	7	Poor	6	Poor	5	Poor	18
	Working	17	Working	13	Working	3	Working	33
	Lower Middle	19	Lower Middle	14	Lower Middle	11	Lower Middle	44
	Middle	40	Middle	39	Middle	17	Middle	96
	Upper Middle	13	Upper Middle	7	Upper Middle	5	Upper Mid	25
	Upper	0	Upper	1	Upper	0	Upper	1

Table 18. Means and standard deviations in identity variables for clusters over time

	Time 1 (n = 86)	Time 2 (n = 92)	Time 3 (n = 98)
<i>Achieved Clusters</i>			
Racial Centrality ^{b*}	5.82 (1.03)	6.02 (0.87)	6.16 (1.12)
Racial Exploration ^{b***c***}	3.50 (0.47)	3.45 (0.55)	3.84 (0.19)
Racial Commitment ^{a*}	3.85 (0.23)	3.68 (0.48)	3.76 (0.40)
Gender Centrality ^{b***c***}	3.67 (0.73)	3.79 (1.05)	2.57 (1.24)
Gender Exploration ^{c***}	2.84 (0.75)	2.74 (0.84)	3.04 (0.69)
Gender Commitment ^{b***c***}	3.58 (0.50)	3.60 (0.52)	3.84 (0.19)
<i>Diffused Clusters</i>			
	(n = 68)	(n = 93)	(n = 80)
Racial Centrality	4.38 (1.36)	4.34 (1.21)	4.40 (1.30)
Racial Exploration ^{b*}	2.52 (0.51)	2.60 (0.40)	2.69 (0.44)
Racial Commitment	2.71 (0.72)	2.63 (0.51)	2.73 (0.53)
Gender Centrality ^{b***c***}	2.90 (0.62)	3.52 (1.02)	2.74 (1.16)
Gender Exploration ^{a**b***}	2.22 (0.65)	2.54 (0.70)	2.68 (0.59)
Gender Commitment	2.70 (0.62)	2.83 (0.60)	2.69 (0.44)
<i>Mixed Status Clusters</i>			
	Gender Central/Exploring (n = 59)	Race & Gender Exploring (n = 20)	Race Central/Committed (n = 41)
Racial Centrality ^{b***c***}	5.05 (1.23)	4.88 (1.33)	6.12 (0.65)
Racial Exploration ^{a***c***}	2.98 (0.53)	3.65 (0.35)	3.07 (0.28)
Racial Commitment ^{a**b***c*}	2.70 (0.42)	3.18 (0.71)	3.61 (0.36)
Gender Centrality ^{b***c***}	3.94 (0.60)	3.65 (0.81)	2.63 (1.22)
Gender Exploration ^{a*c**}	2.90 (0.68)	3.23 (0.44)	2.74 (0.69)
Gender Commitment	3.16 (0.65)	2.85 (0.59)	3.07 (0.28)

Note. Subscripts denote significant differences with summary independent samples t-test. a = difference between Time 1 and Time 2, b = difference between Time 1 and Time 3, c = difference between Time 2 and Time 3. *p < .05, **p < .01, ***p < .001.

Figure 7. Achieved clusters over time

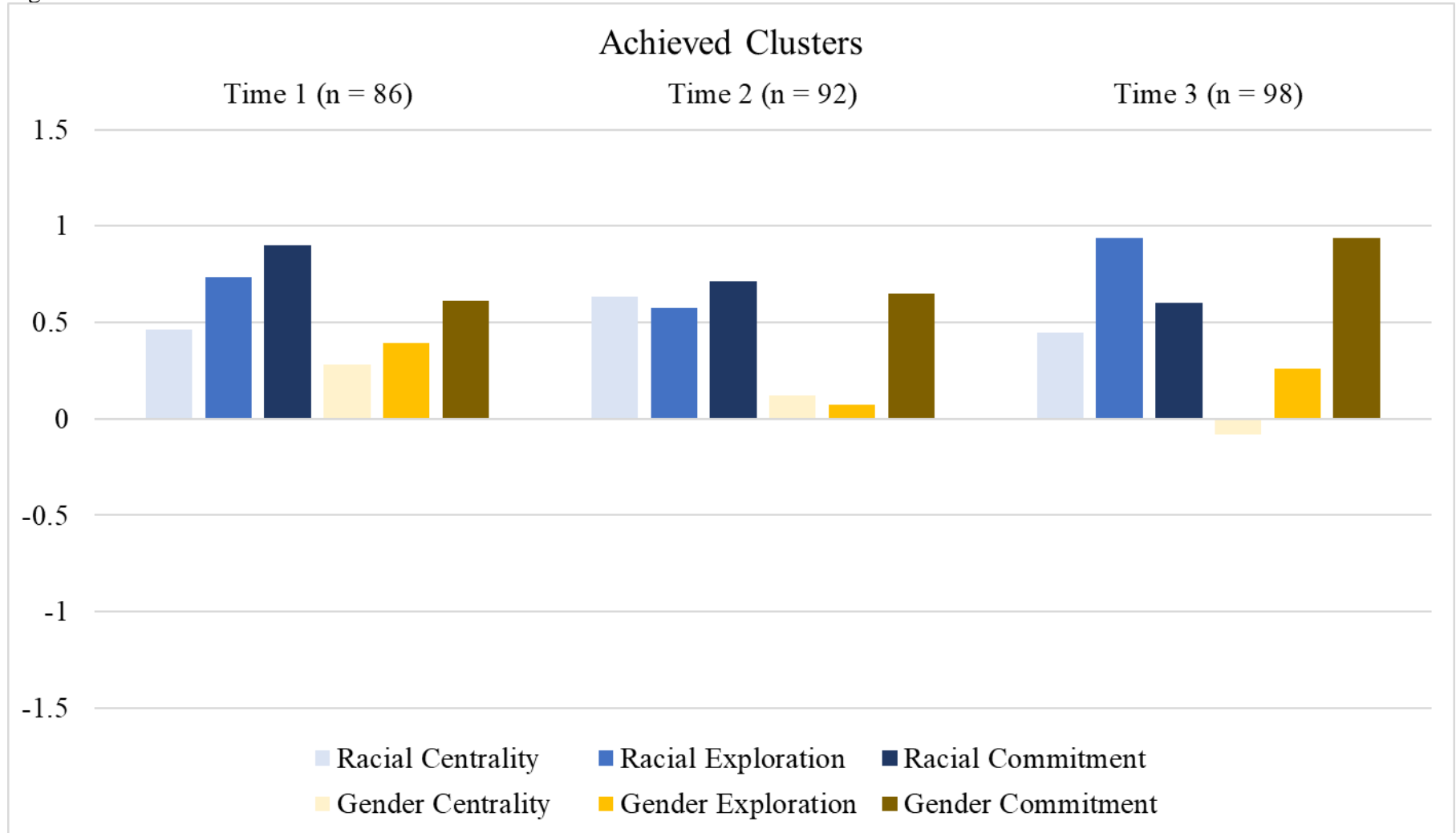


Figure 8. Diffused clusters over time

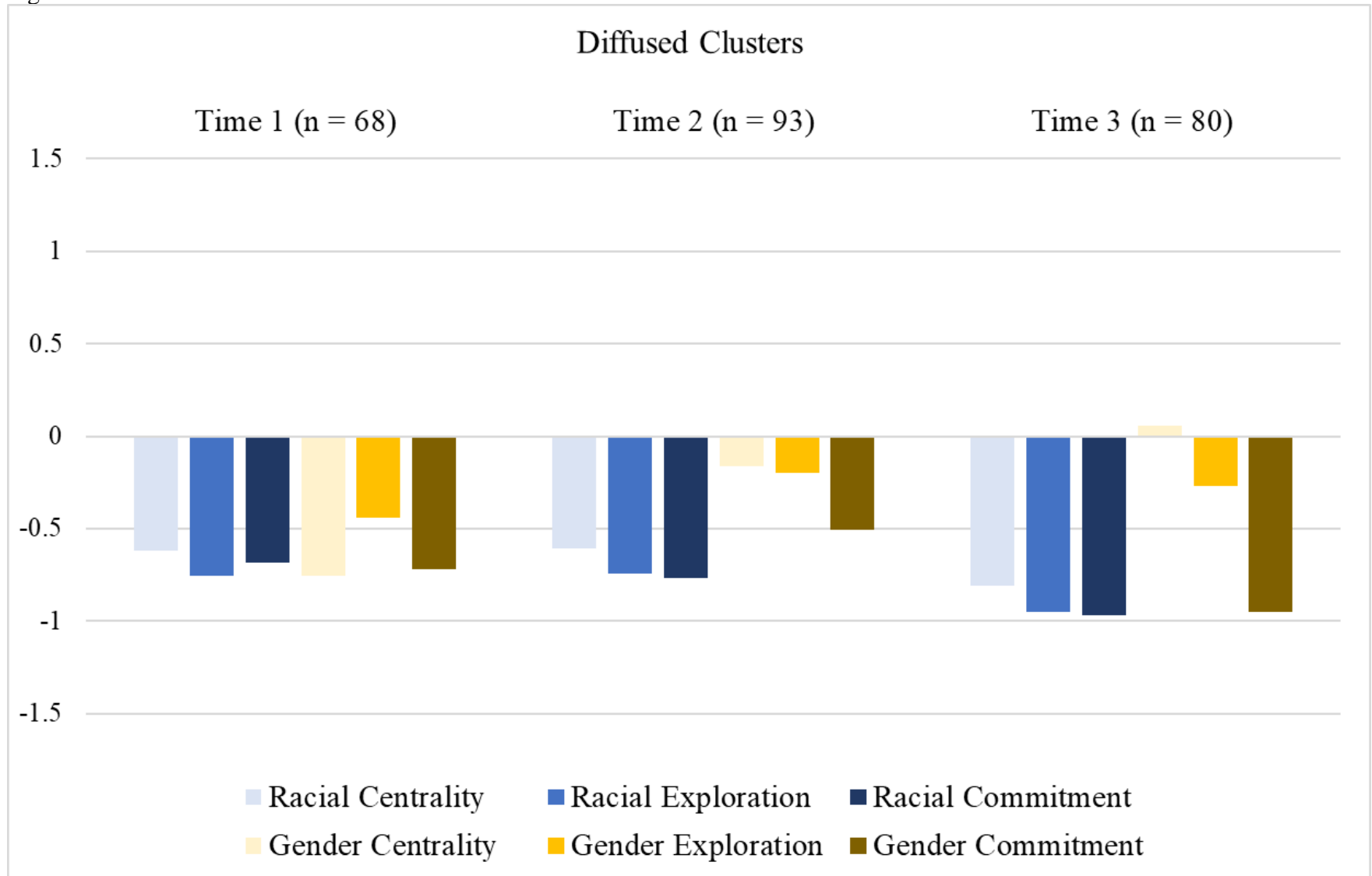


Figure 9. Mixed Status clusters over time

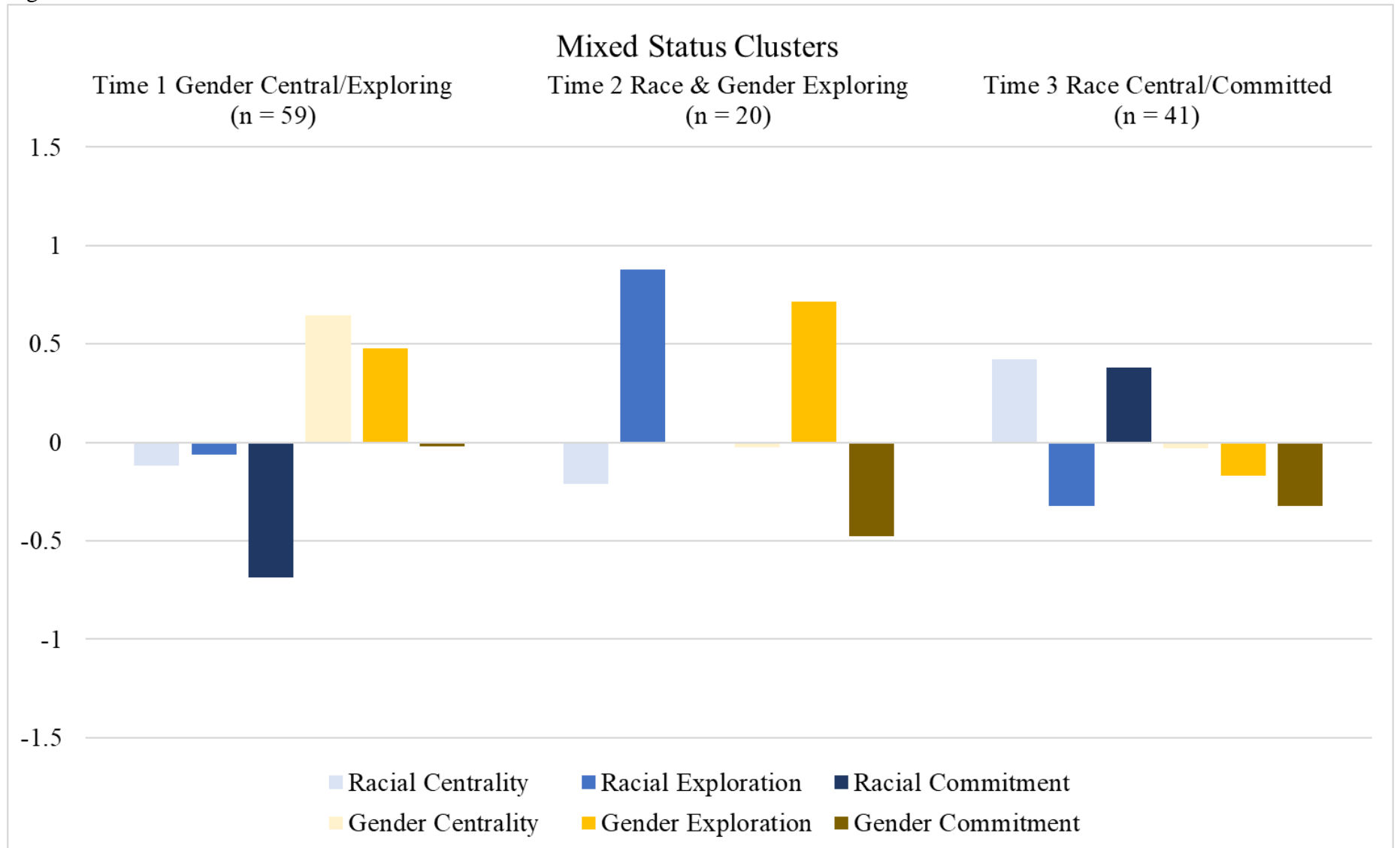


Table 19. Cluster movement across time

Time 2 Movement	Stayed the Same		Into Achieved		Into Diffused		Into Race & Gender Exploring	
AA0	2	DA0	2	ADA	13	AEA	4	
AAA	25	DAA	6	ADD	8	AED	1	
AAD	7	DAD	5	ADE	6	DEA	2	
AAE	11	DAE	3	EDA	7	DED	4	
DD0	1	EAA	12	EDD	12	EE0	1	
DDA	10	EAD	4	EDE	4	EEA	7	
DDD	22	EAE	3			EED	1	
DDE	5							
	Total: 83		Total: 35		Total: 50		Total: 20	

Time 3 Movement	Stayed the Same		Into Achieved		Into Diffused		Into Race Central/Committed	
0AA	5	ADA	13	0AD	4	0AE	2	
0DD	5	AEA	4	AAD	7	ADE	6	
AAA	25	DDA	10	AED	1	AAE	11	
ADD	8	DEA	2	DAD	5	DDE	5	
DDD	22	EDA	7	DED	4	DAE	3	
DAA	6	EEA	7	EAD	4	EDE	4	
EAA	12			EED	1	EAE	3	
EDD	12							
	Total: 95		Total: 43		Total: 26		Total: 34	

Note. A = Achieved, D = Diffused, E = Exploring (Mixed Status). Code = Code for each Time, so AAA = Achieved at Time 1, Time 2, and Time 3. 0 = Missing cluster group membership at that time, even though survey was completed for that participant. Pathways with missing cluster assignment = 00D, 0A0, A00, A0A, A0D, A0E, E00, E0A, E0D, E0E, D00, D0D, D0E

Table 20. Means and standard deviations for “Movement Into” clusters from Time 1 to Time 2 and Time 2 outcomes

	T1 → T2 Stayed (n = 83)	T1 → T2 Into Diffused (n = 50)	T1 → T2 Into Achieved (n = 35)	T1 → T2 Into Race & Gender Exploring (n = 20)	F-statistic
<i>Interpersonal Discrimination</i>					
Racial Hassles	4.27 (4.68)	2.41 (3.51)	4.00 (3.97)	4.00 (4.78)	(4, 230) = 1.64, $p = .16$
Gender Hassles	1.05 (2.02)	1.00 (1.60)	1.40 (2.56)	1.15 (2.03)	(4, 230) = 1.51, $p = .82$
Race and Gender Hassles	4.28 (4.95) ^{ab}	3.98 (4.80) ^{ab}	2.43 (3.54) ^a	6.20 (5.38) ^b	(4, 230) = 2.84, $p < .05$
Classroom Racial Inferiorization	3.30 (0.81)	3.29 (0.58)	2.83 (0.66)	2.93 (0.75)	(4, 230) = 3.71, $p < .01$
Classroom Gender Inferiorization	3.38 (0.69)	3.25 (0.68)	3.57 (0.51)	3.30 (0.64)	(4, 222) = 1.74, $p = .14$
<i>Academic Outcomes</i>					
Academic Competence	2.90 (0.63)	2.76 (0.56)	2.85 (0.78)	3.07 (0.56)	(4, 219) = 0.90, $p = .47$
Academic Curiosity	3.24 (0.69) ^{ab}	2.90 (0.58) ^a	3.54 (0.62) ^b	2.85 (0.59) ^a	(4, 220) = 6.96, $p < .001$
Academic Persistence	2.15 (0.83) ^{ab}	2.07 (0.84) ^{ab}	1.78 (0.74) ^a	2.53 (0.89) ^b	(4, 213) = 2.78, $p < .05$
<i>Psychological Outcomes</i>					
Autonomy	3.94 (0.73)	3.82 (0.66)	3.76 (0.71)	3.85 (0.73)	(4, 215) = .53, $p = .72$
Self-Acceptance	4.45 (0.88)	3.84 (0.75)	4.87 (1.08)	4.54 (0.98)	(4, 211) = 1.24, $p = .29$
Environmental Mastery	3.98 (0.80)	4.31 (0.94)	4.24 (0.97)	4.14 (1.07)	(4, 209) = 1.77, $p = .14$

Note. Outcome variables are for Time 2. Subscripts denote significant differences with Scheffe’s Multiple Comparison Test. * $p < .05$, ** $p < .01$, *** $p < .001$.

Table 21. Means and standard deviations for “Movement Into” clusters from Time 2 to Time 3 and Time 2 outcomes

	T2 → T3 Stayed (n = 95)	T2 → T3 Into Diffused (n = 26)	T2 → T3 Into Achieved (n = 43)	T2 → T3 Into Race Central/ Commitment (n = 34)	F statistic
<i>Interpersonal Discrimination</i>					
Racial Hassles	3.47 (3.88)	2.19 (3.19)	3.58 (4.01)	4.24 (4.33)	(4, 230) = 1.14, $p = .34$
Gender Hassles	1.13 (1.91)	1.54 (2.76)	0.93 (1.72)	1.18 (2.24)	(4, 230) = 0.93, $p = .45$
Race and Gender Hassles	4.48 (4.97)	3.08 (3.98)	4.07 (4.86)	3.68 (4.18)	(4, 230) = 1.36, $p = .25$
Classroom Racial Inferiorization	3.11 (0.77)	3.29 (0.69)	3.05 (0.78)	3.29 (0.71)	(4, 230) = 0.78, $p = .53$
Classroom Gender Inferiorization	3.25 (0.74) ^{ab}	2.87 (0.56) ^a	3.66 (0.47) ^{ab}	3.69 (0.25) ^b	(4, 222) = 11.00, $p < .001$
<i>Academic Outcomes</i>					
Academic Competence	2.89 (0.63)	2.61 (0.68)	2.98 (0.67)	2.75 (0.67)	(4, 219) = 1.60, $p = .18$
Academic Curiosity	3.17 (0.72) ^{ab}	3.44 (0.62) ^b	2.92 (0.65) ^a	3.34 (0.55) ^{ab}	(4, 220) = 3.34, $p < .01$
Academic Persistence	2.20 (0.81)	1.99 (0.93)	2.05 (0.85)	2.03 (0.81)	(4, 213) = 0.77, $p = .54$
<i>Psychological Outcomes</i>					
Autonomy	3.84 (0.70)	3.89 (0.80)	3.91 (0.73)	4.04 (0.76)	(4, 215) = 1.80, $p = .13$
Self-Acceptance	4.49 (1.01)	4.75 (0.85)	4.46 (0.91)	4.47 (0.98)	(4, 211) = 1.23, $p = .29$
Environmental Mastery	4.09 (0.83)	4.22 (0.76)	3.86 (0.90)	3.95 (0.86)	(4, 209) = .53, $p = .71$

Note. Outcome variables are for Time 2. Subscripts denote significant differences with Scheffe’s Multiple Comparison Test. * $p < .05$, ** $p < .01$, *** $p < .001$.

Table 22. Means and standard deviations for “Movement Into” clusters from Time 2 to Time 3 and Time 3 outcomes

	T2 → T3 Stayed (n = 95)	T2 → T3 Into Diffused (n = 26)	T2 → T3 Into Achieved (n = 43)	T2 → T3 Into Race Central/ Commitment (n = 34)	F statistic
<i>Interpersonal Discrimination</i>					
Racial Hassles	5.35 (4.50)	3.15 (4.45)	5.28 (3.95)	5.06 (4.47)	(4, 217) = 2.86, $p < .05$
Gender Hassles	1.56 (2.65)	1.08 (2.17)	1.74 (2.78)	0.71 (1.57)	(4, 230) = 1.61, $p = .17$
Race and Gender Hassles	4.78 (4.28)	3.62 (4.60)	5.23 (4.52)	4.29 (5.02)	(4, 230) = 0.87, $p = .48$
Classroom Racial Inferiorization	3.12 (0.77) ^{ab}	3.50 (0.49) ^b	2.84 (0.59) ^a	3.28 (0.74) ^{ab}	(4, 217) = 4.79, $p < .001$
Classroom Gender Inferiorization	2.55 (0.73)	2.79 (0.80)	2.76 (0.75)	2.64 (0.76)	(4, 217) = 0.78, $p = .54$
<i>Academic Outcomes</i>					
Academic Competence	3.11 (0.66)	3.10 (0.83)	3.19 (0.70)	3.23 (0.71)	(4, 225) = .65, $p = .62$
Academic Curiosity	3.22 (0.63)	3.12 (0.61)	3.35 (0.52)	3.49 (0.51)	(4, 223) = 1.99, $p = .09$
Academic Persistence	2.37 (0.74)	2.26 (0.77)	2.48 (0.93)	2.12 (0.80)	(4, 219) = 1.12, $p = .35$
<i>Psychological Outcomes</i>					
Autonomy	3.69 (0.73)	3.84 (0.59)	3.81 (0.72)	3.88 (0.62)	(4, 215) = .66, $p = .62$
Self-Acceptance	4.55 (1.02)	4.68 (0.87)	4.85 (0.85)	4.87 (0.83)	(4, 230) = 2.86, $p < .05$
Environmental Mastery	3.83 (0.92)	4.09 (0.86)	4.01 (0.88)	4.08 (0.93)	(4, 219) = 2.04, $p = .09$

Note. Outcome variables are for Time 3. Subscripts denote significant differences with Scheffe’s Multiple Comparison Test. * $p < .05$, ** $p < .01$, *** $p < .001$.

Table 23. Summary of multinomial logistic regression for Time 2 “Movement Into” clusters with Time 2 discrimination outcomes

	B	SE	Wald	Df	Sig.	Exp(B)
<i>Into Achieved</i>						
Household Income	.09	.04	5.04	1	.03	1.09
Racial Hassles	-.10	.06	2.77	1	.10	.90
Gender Hassles	.20	.11	3.32	1	.07	1.22
Race and Gender Hassles	-.13	.06	4.86	1	.03	.88
Classroom Racial Inferiorization	-1.45	.34	17.93	1	.001	.23
Classroom Gender Inferiorization	1.52	.48	10.14	1	.001	4.58
<i>Into Diffused</i>						
Household Income	-.04	.03	1.49	1	.22	1.04
Racial Hassles	-.13	.06	4.81	1	.03	.88
Gender Hassles	.05	.10	.28	1	.59	1.06
Race and Gender Hassles	-.03	.04	.47	1	.50	.97
Classroom Racial Inferiorization	.05	.30	.03	1	.86	1.06
Classroom Gender Inferiorization	-.14	.31	.21	1	.65	.87
<i>Into Race & Gender Exploring</i>						
Household Income	.05	.04	1.51	1	.22	1.06
Racial Hassles	.01	.07	.03	1	.88	1.01
Gender Hassles	-.01	.13	.01	1	.99	1.00
Race and Gender Hassles	.07	.05	1.68	1	.20	1.07
Classroom Racial Inferiorization	-.78	.39	4.14	1	.04	.45
Classroom Gender Inferiorization	.19	.45	.19	1	.66	1.22

Model $X^2 = 58.04$, $p < .001$, $-2 \log \text{likelihood} = 586.24$, pseudo R^2 (Nagelkerke) = 0.25. The reference category is those who stayed the same (in the Achieved or Diffused categories).

Table 24. Summary of multinomial logistic regression for Time 3 “Movement Into” clusters with Time 2 discrimination outcomes

	B	SE	Wald	Df	Sig.	Exp(B)
<i>Into Achieved</i>						
Household Income	-.03	.04	.54	1	.46	.97
Racial Hassles	.05	.07	.46	1	.50	1.05
Gender Hassles	-.04	.12	.10	1	.76	.96
Race and Gender Hassles	-.03	.06	.33	1	.57	.97
Classroom Racial Inferiorization	-.66	.34	3.82	1	.05	.52
Classroom Gender Inferiorization	3.31	.60	25.55	1	.001	20.85
<i>Into Diffused</i>						
Household Income	.04	.05	.62	1	.43	1.04
Racial Hassles	-.16	.12	1.82	1	.18	.85
Gender Hassles	.25	.15	2.70	1	.10	1.28
Race and Gender Hassles	-.11	.08	1.81	1	.18	.90
Classroom Racial Inferiorization	.18	.45	.16	1	.69	1.20
Classroom Gender Inferiorization	-1.99	.62	10.37	1	.001	.14
<i>Into Race Central/Committed</i>						
Household Income	-.04	.04	.79	1	.37	.96
Racial Hassles	.01	.07	.02	1	.89	1.01
Gender Hassles	.07	.12	.32	1	.57	1.07
Race and Gender Hassles	-.03	.06	.23	1	.63	.97
Classroom Racial Inferiorization	-.01	.34	.001	1	.98	.99
Classroom Gender Inferiorization	1.92	.57	11.50	1	.001	6.80

Model $X^2 = 136.55$, $p < .001$, $-2 \log \text{likelihood} = 421.151$, pseudo R^2 (Nagelkerke) = 0.53. The reference category is those who stayed the same (in the Achieved or Diffused categories).

Table 25. Summary of multinomial logistic regression for Time 3 “Movement Into” clusters with Time 3 discrimination outcomes

	B	SE	Wald	Df	Sig.	Exp(B)
<i>Into Achieved</i>						
Household Income	-.03	.04	.54	1	.46	.97
Racial Hassles	-.13	.08	2.50	1	.11	.88
Gender Hassles	.11	.10	1.11	1	.29	1.11
Race and Gender Hassles	.04	.06	.50	1	.48	1.04
Classroom Racial Inferiorization	-2.00	.43	21.67	1	.001	.14
Classroom Gender Inferiorization	.82	.34	6.03	1	.01	2.28
<i>Into Diffused</i>						
Household Income	.04	.05	.62	1	.43	.14
Racial Hassles	-.01	.09	.02	1	.90	.99
Gender Hassles	-.15	.16	.96	1	.33	.86
Race and Gender Hassles	-.08	.08	1.04	1	.31	.93
Classroom Racial Inferiorization	2.33	.70	11.03	1	.001	10.29
Classroom Gender Inferiorization	.76	.44	3.03	1	.08	2.14
<i>Into Race Central/Committed</i>						
Household Income	-.04	.04	.79	1	.37	.96
Racial Hassles	-.05	.08	.33	1	.56	.96
Gender Hassles	-.20	.14	2.00	1	.16	.82
Race and Gender Hassles	-.01	.06	.03	1	.86	.99
Classroom Racial Inferiorization	-.75	.41	3.30	1	.07	.47
Classroom Gender Inferiorization	.35	.31	1.26	1	.26	1.42

Model $X^2 = 136.55$, $p < .001$, $-2 \log \text{likelihood} = 421.151$, pseudo R^2 (Nagelkerke) = 0.53. The reference category is those who stayed the same (in the Achieved or Diffused categories).

Chapter Five: Discussion and Conclusion

The major goal in the present dissertation was to examine the multidimensionality of race and gender identity beliefs among Black college women over time in relation to their experiences of interpersonal discrimination and college adjustment. It is worth noting the advantages of the person-centered approach that I used in both studies of this dissertation. The person-centered latent cluster approach allowed me to identify groups of Black women who were similar to each other in terms of race and gender identity beliefs, and at the same time, different from other Black women. As such, I was able to describe how certain race and gender profiles related to academic and psychological outcomes, and also illustrate how the same types of identity beliefs coexisted in different types of Black women (i.e., women with different household incomes, hometown neighborhood, and racial composition of prior neighborhoods). A variable-centered approach would have allowed me to consider how race and gender centrality, exploration, and commitment functioned over time in relation to discrimination and adjustment outcomes, but not in relation to one another. For instance, examining how race and gender centrality functioned in response to discrimination could highlight how the importance one attaches to an identity fluctuates over time (variable-centered approach). In a future study, I may consider how a variable-centered approach and person-centered approach can serve as complementary analysis tools.

In my first study, I investigated the types of race and gender clusters that emerged among Black women upon arrival to college. In addition, I examined whether significant differences emerged in Black women's cluster group membership based on background demographic characteristics (i.e., household income, hometown, and racial composition of neighborhood). I was surprised to find null findings in the demographic make-up of the cluster groups, i.e., Black women from a range of demographic backgrounds were similarly likely to end up in each of the identity profiles. My initial hypotheses expected that perhaps women from predominantly Black environments would be more likely to cluster into the Achieved profile, for example, but this was not the case. However, this initial hypothesis maps onto the similar idea that I discounted in Study 2 that "more discrimination related to an identity would relate to change in that identity," which wasn't always the case. Instead, women from significantly different demographic backgrounds (being from all-White vs. all-Black neighborhoods or being from rural versus urban areas) had conceptually similar belief about their race and gender identities. It would be worth examining whether this was true with much larger and representative samples of Black women from certain areas (i.e., rural) or socioeconomic classes (i.e., upper middle class to upper class). Further, this suggests that the "identity-building" experiences that contribute to centrality, exploration, and commitment occur across diverse demographic environments.

During the fall semester of women's first year, three distinct and meaningful identity groups emerged across race and gender centrality (affective attachment to one's group), exploration (active engagement in thinking about the meaning of one's social identity group), and commitment (level of clarity or resolution about one's social identity). Three clusters emerged among first-year Black women. The largest proportion of women belonged to the Achieved group (44%), who generally reflected a higher level of engagement and attachment to

race and gender; followed by Mixed Status-Gender Central/Exploring/Central (35%) cluster of women, who reported a stronger sense of attachment and exploration of their gender identity rather than their racial identity; and finally, the Diffused group (21%) who indicated a lower level of engagement and attachment to race and gender. In addition, I considered the relationships between these race and gender identity profiles and Black women's experiences of race and gender discrimination, as well as their academic and psychological adjustment during the first-year transition. Black women tended to report the same frequency of daily hassle challenges but revealed a few distinctions in classroom inferiorization experiences by clusters. Across the three groups, Black women also reported similar levels of academic adjustment and psychological wellbeing, with slight differences in academic curiosity.

My second study used the same person-centered latent profile approach to examine the extent to which interpersonal discrimination experiences predict stability and change in race and gender identity beliefs among Black college women from freshman year through the end of junior year. Similar to study 1, three distinct and meaningful groups emerged at each of the three time points; an Achieved cluster of women (Time 2 - 39% and Time 3 - 42%) who reported above the sample mean on all six indicators of race and gender identity, as well as a Diffused cluster of women (Time 2 - 39% and Time 3 - 34%) who reported below the sample mean on all six indicators of race and gender identity. The third cluster of women at each time point were labeled "Mixed Status," as they did not follow a specific pattern in the same way as the Achieved and Diffused clusters of women. Instead, at Time 1, these women were characterized by higher gender centrality and exploration; at Time 2, they reported higher race and gender exploration, and at Time 3, a within-group examination revealed that the women demonstrated a stronger sense of racial centrality and commitment compared to the other dimensions of identity.

Generally, Black women reported similar levels of academic and psychological adjustment across cluster groupings. Movement into a new cluster group at Time 2 and Time 3, compared to staying in the same cluster as the previous time point, was distinguished by experiences of racial hassles and classroom inferiorization experiences related to both race and gender.

These two studies highlight the importance of attending to the diversity of Black women's race and gender identity beliefs, incorporating Black women's self-concepts into examinations of college adjustment, and considering the influence of interpersonal discrimination experiences on identity development and adjustment outcomes.

Race and Gender Identity Beliefs among Black College Women

The purpose of the first study was to explore whether person-oriented profiles of Black college women's race and gender identity could be identified across distinct dimensions of identity, namely centrality, exploration, and commitment, as well as to examine whether Black women's sociodemographic characteristics (hometown, racial demography of home neighborhoods, family household income) were associated with membership in these identity subgroups. This was the first person-oriented study of Black college women to explicitly focus on multiple components of race and gender, and to examine whether certain identity profiles supported adaptive academic and psychological adjustment during the first-year transition. In addition, this was one of the first studies with Black college women to consider how race and gender identity served as protective cultural assets in the context of race and gender discrimination. Additionally, I examined the effects of race, gender, and race and gender discrimination to explicitly tap into the ways in which Black women's perceptions of and attributions of discrimination experiences relate to the deleterious influence of such experiences on their college adjustment.

Building on Prior Studies of Black Women's Identity Beliefs

The within-group approach revealed the substantial variation in Black women's race and gender identity beliefs. Latent class analysis resulted in three distinctive subgroups of Black women based on multiple race and gender indicators, which included some overlap with prior research on Black women (e.g., Jones et al., 2018). The Achieved cluster represented the largest group (44%), with all race and gender beliefs close to or above the mean of the sample. The next largest cluster (35%), the Mixed Status-Gender Central/Exploring group of women, had a stronger attachment to their gender identity compared to race. Finally, the smallest subgroup of women (21%), the Diffused cluster, exhibited less race and gender centrality, exploration, and commitment than women in the other two clusters.

Beginning with the Achieved group of women, this profile represented Black women who were actively thinking about the meanings attached to their race and gender identity and also felt a stronger sense of attachment and clarity about these group memberships. The Achieved cluster was notable because there was considerable overlap with the theoretical descriptions of "Intersectional Aware and Intersectional Engaged" Black women in a recent study by Jones and colleagues (2018); in this study, the two "Intersectional" groups of Black women rated their race and gender as similarly and moderately important and used both identities as a framework to delineate their experiences of marginalization within broader society. Women in these groups reported higher levels of race and gender centrality, and also indicated an awareness that they experienced racist and gender biases -- highlighting a consciousness about their racial positioning in U.S. society, as well as the challenges they encounter as women. Similarly, women in the Achieved group reported that race and gender were central parts of their self-concept, and also indicated a strong sense of commitment to both

identities. Unlike the Jones piece, I was not able to tap into Black women's intersectional beliefs about their identity, since I did not ask about "Black womanhood." However, the person-oriented approach does provide an empirical understanding of how Black women's race and gender identities were operating in relation to one another. This work expands our theoretically-based scholarship on racialized gender identity among Black women in regard to the significance and meaning Black women assign to their race and gender social groups.

The Mixed Status-Gender Central/Exploring group of women included women who reported high levels of gender exploration, as well as an above average sense of gender centrality. Women in this group reported lower commitment to both identities, and this was especially the case with their racial identity. This profile of women was conceptually like the "Gender Expressive" cluster in Jones et al., (2018), in which women reported significantly higher gender centrality than racial centrality. Interviews with women in the Gender Expressive group revealed a strong commitment to womanhood and conventional gender roles, such as taking care of one's family, contributing to the wellbeing of others Black girls and women, and maintaining their beauty. Importantly, these women also reported the most distance from thinking about themselves as racialized gender minorities; the author suggests that in doing so, they were able to focus more on the positives associated with being a woman and less about how their racial status may complicate others' perceptions of their womanhood (i.e., "identity interference"; Settles, 2006). Given that historical gender narratives in the U.S. forefront White women's experiences and physical features in ways that largely overlook Black women (Awad et al., 2014; Tribble, Allen, Hart, Francois, & Smith-Bynum, 2019), it is important to think about the meaning and importance that Black women place on their gender. Further, prior studies note that Black children receive various types of socialization messages about cultural pride and racial

bias (e.g., McHale et al., 2006; McNeil, Reynolds, Fincham, & Beach, 2016), but we know very little about the gendered socialization experiences of Black girls or how this translates into gender identity beliefs into adulthood. The Mixed Status-Gender Central/Exploring group highlights that gender is an important social identity to some Black women, perhaps over and above their racial identity. We must expand the study of gender theory and gender identity development among Black women to generate a better understanding of how they think about constructs such as femininity and masculinity, gender schematicity (i.e., ascribed genders and gender roles in a society), and other intrapersonal topics related to female identity development (Starr & Zurbriggen, 2017). To date, there are a few studies that are beginning to examine racialized gender socialization among Black girls (e.g., Bailey-Fakhoury, 2014; Brown et al., 2010; Brown et al., 2017; Tribble et al., 2019), which highlight the versatility in how Black women are taught to think about their gender, but overall, there is general disregard for thinking about normative gender role development among Black girls and women that does not involve direct comparisons to White girls and women.

Finally, the Diffused cluster of women reported lower race and gender centrality, exploration, and commitment compared to women from the prior two clusters. While the averages of this cluster were below the sample mean, it is worth noting that their means (for centrality, for example) were near a 5 on a 7-point scale (race) and close to a 3 on a 5-point scale (gender). Thus, these Black women are less attached to their identities as African Americans and women compared to Black women who are *very* strongly attached to those social identities. This may also be one of the reasons that there were very few differences in academic and psychological adjustment outcomes; overall, Black women in the sample reported relatively strong connections to these two social identities. This positive skew for racial centrality is a

common trend in other research on racial identity among African Americans (e.g., Richardson et al., 2018), highlighting how a “low” average in a person-centered approach should be contextualized in relation to the overall sample means.

Still, this cluster was characterized by women who reported engaging in significantly less thought about their race and gender identities, and felt a weaker sense of attachment, and clarity about the meaning of those identities. The low level of clarity (commitment) is likely in part, related to the lack of exploration that these women have engaged in about their identities -- which may also tie in to the low sense of attachment. These women appear generally detached from their race and gender, which may have influenced their choice to attend a PWI college or reflect their stronger affiliation with other components of their self-concept (e.g., academic identity, sexual orientation, social class status). While the Diffused cluster in the present study is characterized by lower levels of endorsement across the identity dimensions, it would also be interesting to consider the qualitative nature of a Diffused cluster that was characterized by higher levels of exploration and commitment, but lower levels of centrality -- i.e., a Black woman who has contemplated the meanings attached to her race and gender identity and has a sense of resolution that these identities matter very little to her self-concept.

Black Women's Profiles in relation to Discrimination and Adjustment

Several studies consider how individual's experiences of discrimination are influenced by or related to their social identity beliefs (e.g., King, 2003; Lee et al., 2013; Moradi et al., 2002; Sellers et al., 2003; Neblett et al., 2014). However, most of these studies focus on racial discrimination, do not include Black women's perceptions of gender discrimination, or fail to consider race and gender discrimination (for exceptions, see Harnois, 2014; Hannon et al., 2016; Levin et al., 2002; Lewis et al., 2015; McGee et al., 2017). Thus, study 1 is one of the few

investigations that consider the effects of race, gender, and race and gender discrimination on Black women's adjustment outcomes based on identity beliefs. Overall, Black women did not vary in the number of daily hassle experiences they reported, and all three clusters tended to report more racial and race and gender hassles compared to gender hassles. The higher frequency of race and gender hassles is consistent with prior findings that Black women are more likely than Black men and White men and women to perceive multiple sources of discrimination (e.g., Harnois, 2014). These articles suggest that being attuned to the social inequalities tied to a marginalized social status can have an interactive effect when individuals occupy multiple marginal social statuses, such as Black women (King, 1988). This result aligns with a growing body of empirical literature highlighting how Black women have an awareness of the unique discrimination they face at the intersections of their race and gender identities (Marsh, 2010; Moradi et al., 2003; William et al., 2010; Winkle-Wagner, 2009), challenging us to reconfigure how Black women's experiences are integrated into research. In social movements for racial equity and gender equality, for example, Black women's lived experiences have been largely overlooked and subsumed by Black men and White women (i.e., being told in the Civil Rights and Black Power movement to focus on unifying "racial issues" and being told to fight for rights that were less relevant to them -- like being in the workplace), which is very similar to how they have been juxtaposed (or neglected) in scientific research.

The current study also extends previous studies with racial centrality and gender centrality (e.g., Foley et al., 2015; Sellers et al., 2003; Shelton et al., 2000), in that women in the Achieved cluster reported more classroom racial and gender inferiorization experiences. Thus, women who felt more strongly attached and were engaging in more exploration of their identities reported more discrimination experiences related to those identities. This suggests that gender

centrality and perceived gender discrimination may function in a similar way as racial centrality and racial discrimination (Sellers et al., 2003), in that the significance of one's group to the self-concept is associated positively with how sensitive individuals are to discrimination in that domain. Somewhat inconsistent with prior studies, the profile groups in study 1 did not differ across most of the academic and psychological indicators of adjustment. The one exception was that Black women in the Achieved cluster reported more academic curiosity than women in the Mixed-Status Gender Exploring or Diffused clusters. This is consistent with research suggesting the motivational benefits of viewing race as an important identity (Chavous et al., 2003; Richardson et al., 2018; White-Johnson, 2012). In the present study, considering race and gender important social identities related to more interest and engagement in the classroom at the end of the first year. Conversely, Black women who entered college with lower race and gender centrality, as well as less exploration and commitment, experienced less engagement and motivation. Despite their lower investment in their race and gender identities, the PWI context may have made them highly salient in a way that placed Black women in the Diffused group at risk for more negative outcomes. Still, this was only the case for academic curiosity, which may relate back to the overall high levels of race and gender centrality in the sample.

Finally, I examined the protective effects of cluster group membership on Black women's academic and psychological outcomes, with the belief that the Achieved profile (higher centrality, exploration and commitment) would mitigate the harmful influence of discrimination experiences during the first-year transition. Findings suggest that this was true for racial hassles, but not gender hassles. Specifically, Black women in the Achieved cluster demonstrated higher self-acceptance in the context of more racial hassles compared to women in the Mixed Status-Gender Central/Exploring cluster. On the other hand, Black women in the Achieved cluster

reported lower self-acceptance in the midst of gender hassles compared to women in the Mixed Status-Gender Central/Exploring cluster. Consistent with prior studies, these results underscore that discrimination experiences undermine the psychological wellbeing of Black college women (Greer, 2011; Henry et al., 2012; James et al., 2011; Jones et al., 2007), and these two interactions may further highlight how the process of identity development relates to self-acceptance.

Prior research has found that individuals with higher racial centrality have stronger negative mood responses (specifically, disgust and anger) to racial discrimination (Neblett et al., 2014), which may relate to the differential negative mental health consequences of gender hassles and racial hassles for women in the Achieved and Gender Exploring clusters. While women in the Achieved status reported higher race and gender centrality, exploration, and commitment than women in the other clusters, a within-group examination revealed that race was the more central and explored identity of the two, and their self-acceptance was less affected by instances of racial hassles. Similarly, women in the Mixed Status-Gender Central/Exploring cluster were characterized by heightened levels of gender exploration and centrality compared to race, and they reported greater self-acceptance amidst gender hassles compared to women in the Achieved cluster. Thus, women in the Achieved cluster may have been more prepared to cope with racial hassles and women in the Gender Exploring cluster may have been better able to process gender hassles due to their higher level of engagement with race and gender, respectively.

More research is needed to understand the dynamic nature of racial and gender identity and their effects on psychological wellbeing, but these results suggest that a stronger connection to a group identity relates to more resilience when experiencing discrimination related to that

identity. One challenge with the multidimensional approach is that I was unable to disentangle the effects of centrality, exploration, and commitment in the interactions. Thus, while this work furthers our understanding of how race and gender identity beliefs relate to college adjustment outcomes among Black college women, questions remain regarding the effects of particular dimensions of individuals' social identity beliefs.

A Longitudinal Consideration of Changes to Black Women's Identity Beliefs in response to Interpersonal Discrimination

In my second study, I sought to explore the patterns of race and gender identity that emerged over time, and whether interpersonal experiences of discrimination related to stability or changes in Black women's cluster group membership. I also assessed the pathways of change that developed from Time 1 to Time 3 to assess whether Black women's identity beliefs progressed similarly over time. Lastly, I examined whether movement into a new cluster at Time 2 and Time 3 was associated with differences in academic and psychological outcomes.

At the first time point, the largest group of Black women were in the Achieved cluster, followed by women in the Gender Exploring cluster, and finally, women in the Diffused cluster. These three unique clusters represented (1) women who were actively engaging with both identities, but a bit more with race than gender, (2) women who were thinking about and felt a stronger attachment to their gender identity than their racial identity, and (3) women who were not strongly identified with either their race or gender identity. At the latter two time points, there were the same two large, stable clusters of Black women who reported higher (Achieved) or lower (Diffused) endorsement of the race and gender measures, as well as a third cluster of Black women (Mixed Status) who varied in the extent to which they were engaging with their

identities (Time 1: Gender Exploring, Time 2: Race & Gender Exploring, Time 3: Race Central/Committed).

The consistent emergence of the Achieved and Diffused groups indicates that amidst the wide range of Black women in the sample, a considerable number of women fell into groups that represented either higher levels of engagement with social identity processes or overall disengagement from their Blackness and womanness. The clusters reaffirm the relative stability of race and gender centrality, exploration, and commitment among Black women, although this stability differed by cluster group. Women in the Achieved cluster reported similarly on the racial identity measures from Time 1 to Time 3 but decreased in how attached they were to their gender identity. Conversely, Black women in the Diffused clusters indicated that race and gender were equally of little importance at Time 1 but reported heightened gender centrality over time. These nuances show that while these clusters are more distinct from other clusters and more similar to each other across the three time points, there were also changes within the clusters that reflect lower or higher levels of endorsement on some of the indicators.

An important contribution of the current study is its illumination of how many ways that Black women vary in how their racial and gender identity beliefs change over time, depending on the beliefs they hold as they enter college, as well as the types of race- and gender-related discrimination experiences they encounter during the first few years. Only forty-seven women from the sample (20%) remained stable in their Achieved or Diffused categorization over time; the identity beliefs of the remaining 80% of the sample changed over time in over forty different ways. This challenges the idea that there is a linear, normative model for identity development among Black women, and underscores that significant identity development occurs during the college years for Black women (Arnett, 2000; Hurd et al., 2012; Richardson et al., 2018). Most

of the sample was in the Achieved cluster by Time 3, suggesting that over time, Black women began to think more about the meaning and significance of their race and gender identities. Moreover, the Mixed Status cluster at Time 3 was characterized by women with higher levels of racial centrality and commitment, intimating that by the end of junior year, the vast majority of women felt that race was a central part of their self-concept. This likely relates to the types of interpersonal and institutional experiences these women encountered at a PWI as a racial minority student.

For instance, accounting for pre-college background, identity-based experiences on campus related to cluster stability and change. Black women who encountered more classroom gender inferiorization experiences moved into the Achieved cluster by spring of the first year. The campus inferiorization measure captures students' perceptions of the extent to which racial and gender minoritized students are valued by peers and faculty in academic contexts. As such, those who experienced more gender discrimination in the classroom may have been encouraged to start thinking more about their gender identity and its meaning within the college setting. Relatedly, Black women who encountered fewer racial hassles were more likely to move into the Diffused cluster by the end of the first year. Encountering fewer challenges with race-related discrimination during intergroup interactions may make race a less salient and relevant identity to these women. Finally, Black women who encountered more classroom racial inferiorization were more likely to move into the Race and Gender Exploring cluster by the end of the first year. These results suggest that interpersonal experiences of race and gender discrimination are significant influences on the extent to which Black women actively engage with the meanings of their social identities. However, given that Black women reported similar levels of academic and psychological adjustment across clusters during the first-year transition, these findings point to

the importance of acknowledging that race and gender do not have to be important in the same ways for Black women to adjust well to college.

There were similar patterns in how interpersonal discrimination experiences related to cluster movement from first year to junior year. For example, more gender inferiorization experiences was related to moving into the Achieved and the Race Central/Committed cluster by junior year, while having fewer gender inferiorization experiences was associated with moving into the Diffused cluster. In much the same way, we see that more encounters with bias and discrimination relate to moving into clusters that are characterized by forming a stronger attachment or engaging in more identity exploration, while having fewer issues with discrimination is associated with moving into a cluster characterized by low attachment, engagement, and commitment. This pattern was true for classroom gender inferiorization experiences specifically, even for movement into a cluster that was distinguished by a stronger commitment to racial identity. For women in the Achieved cluster, this could again relate to a new commitment among these Black women to think about the meaning attached to their gender identity; for women moving into the Race Central/Committed cluster, perhaps this represented a way to cope with the gender discrimination by maintaining a stronger commitment to one's racial identity. The one exception was that women who moved into the Diffused cluster by junior year reported more classroom racial inferiorization experiences throughout that year. Women in the Diffused cluster at Time 3 maintained a low sense of racial centrality and racial commitment as in prior years but indicated more racial exploration – suggesting that the racial discrimination experiences in the classroom may be pushing them to think more about their racial identity. Overall, these findings demonstrate the importance of considering race and gender identity

development processes among Black women, especially given the dearth of theorization on gender development and gender discrimination in prior literature with this population.

Considerations and Directions for Future Research

The present studies represent an important exploration of the nature of race and gender identity change among Black college women, both during the first-year transition to college, and well into students' college career (junior year). There are a few conceptual and methodological limitations worth noting for the overall project. First, although the measures asked women about their identity beliefs related to both race and gender, other research suggests that these two social identities are inextricably linked for many Black women (King, 1988; Stewart, 2008; Szymanski et al., 2016). Similarly, in relation to the daily hassle measure that was used, Black women could have been thinking about the same types of events but labeled them in different ways. Thus, while a Black woman in the Achieved cluster may have recognized how a discriminatory event was related to both race and gender, perhaps a Black woman in the Diffused cluster attributed the same event to race, or a Black woman in the Gender Exploring cluster related it to gender. In addition, the daily hassles measure was a "select all that apply" for the discrimination items, so women could have been responding about the same event and said it was due to race *and* race and gender. We also just asked if a particular event happened; I did not assess how frequently certain types of events occurred, or the extent to which the different types of hassles influenced Black women's college adjustment outcomes.

Also, while a great strength of the current study was the multidimensional nature of focusing on race and gender, some of the null findings in relation to college adjustment may have been related to how the six indicators were grouped together. Further, while the study included one of the few samples available with such a sizeable number of the same Black college

women over time, some of the nonsignificant findings could have been due to lower sample size by cluster (i.e., Mixed Status-Race and Gender Exploring, $n = 20$). On the other hand, while I would expect race and gender identity to factor into Black women's contextual experiences in college, I would not expect them to be one of the most significant factors in Black women's overall success. I was able to ascertain the heterogeneity in race and gender identity beliefs among Black women, and extend our understanding of how these beliefs, do, in fact, matter for some of these women.

Future studies should continue to examine the diversity of social identity beliefs among Black college women, such as ethnic identity, sexual identity, social class identity, and religious identity. In addition to race and gender, it is important to take a more comprehensive and multifaceted approach to social identity development within an increasingly diverse and integrated society. Just as Black women tend to be neglected or subsumed in research with Black men and White women, the vast majority of research on "Black women" in psychology and education focuses on African American women within the U.S. context (Frazier, 2012; Gay et al., 1998; Hunter, 2002; Konrad & Harris, 2002; Moradi et al., 2003). While this is gradually beginning to change through a more intensive focus on the diversity within Black female populations (e.g., Henry et al., 2011; McGuire et al., 2016), most measures were not designed and are not equipped to operationalize how racial socialization or gender roles, for example, manifest differently in Caribbean, Jamaican, or Afro Latino households. It is not enough to note "differences" between ethnically diverse populations of Black women without joining that with a critical understanding of how these processes work across communities with unique histories (Walt, 2011). As another example, too much of the work with Black women forefronts dominant social identities -- such as heterosexuality and Christian religious identification. We have few

empirical examinations of Black women from queer or LGBTQ communities or Black women from Muslim or atheist communities. Further, the historical deficit-based framing within psychology has translated into a preponderance of studies on lower-income Black women versus middle class or higher income Black women. In addition to challenging the pejorative stereotypes around lower-income status and being Black, female, and poor in the U.S., expanding empirical studies beyond these dominant identities could support the development of more inclusive theoretical frameworks of Black womanhood.

Another area of future study relates to the directionality of movement over time. I chose to focus on how women remained stable or moved *into* different clusters in response to discrimination experiences, but it would also be interesting to examine what types of contextual experiences relate to movement out of particular clusters. Arguably, based on my findings, I might expect that Black women would move out of the Diffused cluster after experiencing more discrimination, but that was beyond the scope of the current study. Might there be specific types of experiences that relate to significant shifts in identity beliefs, specifically identity exploration (Abrams et al., 2014; Marcia, 1980; Stewart, 2008)? As suggested by Cross' Nigrescence model (1978), racial identity exploration takes off after an "encounter" moment that makes race highly salient to an individual who has given it little thought beforehand. Are there common experiences among Black women at PWIs that serve as encounter moments, or more likely, as important representations of the general campus climate towards Black women (Hannon et al., 2016; Turner, 2002)?

Lastly, we should examine the racial and gender socialization practices within Black girls' communities to understand how certain messages translate into the development of identity beliefs like those seen in the Achieved and Diffused clusters. More studies are beginning to

consider how peers, family, and school settings communicate messages about Black girlhood and Black womanhood to young Black girls (Epstein et al., 2017; Shorter-Gooden et al., 1996; Stephens & Phillips, 2003), and future research should integrate these into our understanding of identity. In line with this, the field of psychology would benefit from a validated measure of gendered racial identity that was established for and normed with Black women. While my studies attempt to integrate Black women's beliefs about their race and gender, the measures were not designed to tap into the unique experiences of Black women.

Implications for Theory and Practice

What are the conceptual and practical implications of my dissertation for the way we discuss Black college women? First, Black women enter college with a wide array of beliefs that are cultivated from a diverse range of experiences -- there is no singular "Black woman experience" that can encompass the range of beliefs and perspectives of Black women. Yet, Black women's race and gender identities are still very relevant to their overall self-concept, which may be intensified within a PWI context. Across the two studies, the majority of women in the sample were members of the Achieved (39-44%) group, and even among the Diffused (21-39%) clusters of women, race was a central identity that remained relatively stable over time or increased in importance (Mixed Status-Race Central/Committed).

Next, we should acknowledge that there are within-group differences in identity among Black women, even those who are highly attached to their race and gender identities. The centrality of Black women's race and gender identities shift over time, as does their level of exploration, and their general sense of commitment. While these processes may go hand-in-hand for some women, there are also groups of Black women who focus more on the relevance of race for their lives, as well as women who foreground their gendered experiences as a woman.

Further, the identity profiles across study 1 and study 2 revealed that while Black women varied in how they prioritized their race and gender identities, there was strikingly little difference in how these identity beliefs mapped onto their academic and psychological adjustment. In light of this, more research should focus on the persistence and resilience strategies among Black college women to find out the sources of support they draw upon to remain motivated and engaged on campus.

In addition, a significant gap in current identity literature with Black women is the meaning-making processes and experiences that contribute to their beliefs about Black womanhood. Research with college students tends to overlook how early and late adolescent experiences factor into their adjustment. As I suggested earlier, future studies should examine the ways in which messages about race and gender during childhood contribute to certain identity belief systems, especially regarding the extent to which Black women think these prior socialization messages support or inhibit their academic and psychological success in college. The present investigation sets the stage to consider the developmental link between the socialization experiences of Black women during childhood and early adolescence to their identity beliefs as emerging adults.

Practically, the findings with self-acceptance in study 2 indicate that Black women's experience of race and/or gender discrimination undermines the confidence they have about who they are and how much they are valued within the college environment. As mentioned before, students are actively negotiating their identity beliefs and worldviews throughout college, which includes integrating or rejecting others' perceptions of their social identity groups. While the PWI context may do a wonderful job supporting identity development and growth among historically dominant groups, like upper-income White males, higher education policies should

focus on increasing feelings of safety and inclusion among minoritized and marginalized populations on campus. These policies and practices must include initiatives that require all students to examine their implicit biases about individuals from different social communities, as well as consider how they treat students from backgrounds that are different than their own. Yet, this is not enough. Stakeholders with significant power at the institutional level must also make a commitment to fostering equitable changes on campus that make a difference in the daily lived experiences of students; for instance, by increasing the numerical representation of Black women on campus (students, staff, and faculty), providing adequate financial aid for lower-income students so they can capitalize on unpaid internship opportunities, requiring cultural humility training among campus security officers so students of color aren't criminalized while walking to class. These types of experiences send dehumanizing messages to students that they are less valued at their institution than other social groups and may inhibit positive identity development as well as overall wellbeing.

There has also been substantial debate about how Black women integrate their racial and gender identity beliefs into an intersectional framework of Black womanhood identity (e.g., Settles, 2006; Thomas, Hoxha, & Hacker, 2011), and yet, most empirical studies focus on how Black women think about race or about gender. Belgrave and colleagues (2016) constructed a measure of gender role beliefs with Black women that explored the ways in which sociohistorical factors affected participants' cultural values and belief systems and found two conceptually distinct gender role constructs—*Agency* (i.e., belief that one can do what is required and needed) and *Caretaking* (i.e., perceived and assumed responsibilities for taking care of and providing for the well-being of others). This study highlights how Black women's identity beliefs may differ from that of women in other racial groups and draws attention to the need for culturally grounded

research that accounts for the sociohistorical realities of Black women. Collins (2004) stated, “Black women do not adhere to traditional gender role beliefs or behaviors because they could not,” (p. 202) which highlights how Black women’s gender identity development occurs within a society that normed feminine identity from the experiences of the socially privileged dominant group, White women. My study illustrates that race and gender do not always operate in tandem and the fact that race has shaped the social relations and realities of Black women in distinct ways that have implications for their gender identity beliefs—remains relatively unexplored in identity literature.

In conclusion, this dissertation contributes to our understanding of identity development among Black college women and its implications for women’s academic and psychological adjustment at PWIs. The history of Black women in U.S. higher education is dominated by a narrative of exclusion and academic underperformance, but the findings from this study extends a growing literature highlighting the resilience and agentic determination to access education among young Black women (Turner, 2002; Upton et al., 2012; Wagner et al., 2006). Yet, Black women still encounter a myriad of challenges within PWI settings related to their race and gender identities that can undermine their achievement and mental health. As such, it is important to generate more complex understandings of how Black women successfully navigate college contexts that were never designed for their success. As Audre Lorde reminds us, Black women have been “crunched into other people's fantasies and eaten alive” for too long - it is imperative that we focus on the dynamic lived experiences that Black women craft of themselves.

References

- Abes, E., & Jones, S. (2004). Meaning-making capacity and the dynamics of lesbian college students' multiple dimensions of identity. *Journal of College Student Development*, 45(6), 612-632. doi: <https://doi.org/10.1353/10.1353/csd.2004.0065>
- Abes, E., Jones, S., & McEwen, M. (2007). Reconceptualizing the model of multiple dimensions of identity: The role of meaning-making capacity in the construction of multiple identities. *Journal of College Student Development*, 48(1), 1-22. doi: <https://doi.org/10.1353/csd.2007.0000>
- Abrams, J., Maxwell, M., Pope, M., & Belgrave, F. (2014). Carrying the world with the grace of a lady and the grit of a warrior: Deepening our understanding of the “strong Black woman” schema. *Psychology of Women Quarterly*, 38(4), 503-518. doi: 10.1177/0361684314541418
- African American Registry. (2005, July 9). Mary Jane Patterson, a Natural Educator! Retrieved from <https://aaregistry.org/story/mary-jane-patterson-pioneering-educator-born/>
- Aiken, L., & West, S. (1991). *Multiple regression: Testing and interpreting interactions*. Newbury Park: Sage.
- Alexander, M. (2010). *The New Jim Crow*. New York, NY: Perseus Distribution.
- Allen, R. (1992). The color of success: African American college students' outcomes at predominantly White and historically Black public colleges and universities. *Harvard Educational Review*, 62(1), 26-44.

- Allen, W., Jayakumar, U., Griffin, K., Korn, W., & Hurtado, S. (2006). More Black women than Black men in higher education. *The Journal of Pan African Studies, 1*, 106-109.
- Amos, C. (2015, November). Black college students share pros and cons of Historically Black Colleges versus Predominantly White Institutions. Retrieved from <http://www.nydailynews.com/news/national/graduates-hbcus-pwis-share-pros-cons-article-1.2434280>.
- Andone, D., & Simon, D. (2018, July). Officials still don't know why a White man stabbed a Black woman to death in a subway station. Retrieved from <https://www.cnn.com/2018/07/27/us/nia-wilson-murder-bart-stabbing-trnd/index.html>
- Anglin, D. M., & Wade, J. C. (2007). Racial socialization, racial identity, and Black students' adjustment to college. *Cultural Diversity & Ethnic Minority Psychology, 13*, 207–215. doi:10.1037/1099-9809.13.3.207
- Arnett, J.J. (2000). Emerging adulthood: A theory of development from the late teens through the twenties. *American Psychologist, 55*(5), 69-80. doi: 10.1037/0003-066x.55.5.469
- Awad, G., Norwood, C., Taylor, D., Martinez, M., McClain, S., Jones, B., Holman, A., & Chapman-Hilliard, C. (2014). Beauty and body image concerns among African American college women. *Journal of Black Psychology, 41*(6), 540-564. doi: 10.1177/0095798414550864
- Azmitia, M., Syed, M., & Radmacher, K. (2008). On the intersection of personal and social identities: Introduction and evidence from a longitudinal study of emerging adults. In M. Azmitia, M. Syed, & K. A. Radmacher (Eds.), *The intersections of personal and social identities: New directions for child and adolescent development* (pp. 1-16). San Francisco: Jossey-Bass.

- Baber, L. (2012). A qualitative inquiry on the multidimensional racial development among first-year African American college students attending a predominately White Institution. *Journal of Negro Education, 8*, 67-81. doi:10.7709/jnegroeducation.81.1.0067
- Bailey-Fakhoury, C. (2014). Navigating, negotiating, and advocating: Black mothers, their young daughters, and white schools. *Michigan Family Review, 18*, 57–79.
doi:10.3998/mfr.4919087.0018.105
- Baldwin, J. A. (1984). African self-consciousness and the mental health of African-Americans. *Journal of Black Studies, 15*, 177-194.
- Banks, K. (2010). African American college students' experience of racial discrimination and the role of college hassles. *Journal of College Student Development, 51*(1), 23-34. doi:
<https://doi.org/10.1353/csd.0.0115>
- Banks, K., & Kohn-Wood, L. (2007). The influence of racial identity profiles on the relationship between racial discrimination and depressive symptoms. *Journal of Black Psychology, 33*(3), 331-354. doi: 10.1177/0095798407302540
- Banks, K., & Stephens, J. (2018). Reframing internalized racial oppression and charting a way forward. *Social Issues and Policy Review, 12*(1), 91-111.
- Barnes, P. W., & Lightsey, O. R., Jr., (2005). Perceived racist discrimination, coping, stress, and life satisfaction. *Journal of Multicultural Counseling and Development, 33*, 48-61.
- Battle, N. (2016). From slavery to Jane Crow to Say Her Name: An intersectional examination of Black women and punishment. *Meridians: Feminism, race, transnationalism, 15*(1), 109-136.
- Baxter-Magolda, M. (2014). Self-authorship. *New Directions for Higher Education, 166*, 25-33.
doi: 10.1002/he.20092

- Beauboeuf-Lafontant, T. (2007). You have to show strength: An exploration of gender, race, and depression. *Gender & Society, 21*, 28-51. doi:10.1177/0891243206294108
- Belgrave, F., & Abrams, J., Hood, K., Moore, M., & Nguyen, A. (2016). Development and validation of a preliminary measure of African American women's gender role beliefs. *Journal of Black Psychology, 42*(4), 320-342. doi: 10.1177/0095798415576614
- Bem, S.L. (1974). The measurement of psychological androgyny. *Journal of Consulting and Clinical Psychology, 42*, 155-162. doi: 10.1037/h0036215
- Bem, S.L. (1983). Gender schema theory and its implications for child development: Raising gender-aschematic children in a gender-schematic society. *Sign, 8*, 598-616.
- Bentley-Edwards, K., Agonafer, E., Edmondson, R., & Flannigan, A. (2016). If I can do for my people, I can do for myself: Examining racial factors for their influence on goal efficacy for Black college students. *Journal of College Student Development, 57*(2), 151-167. doi: <https://doi.org/10.1353/csd.2016.0018>
- Bernard, D., Lige, Q., Willis, H., Sosoo, E., & Neblett, E. (2017). Imposter phenomenon and mental health: The influence of racial discrimination and gender. *Journal of Counseling Psychology, 64*(2), 155-166. doi: 10.1037/cou0000197
- Blake-Beard, S., Bayne, M., Crosby, F., & Muller, C. (2011). Matching by race and gender in mentoring relationships: Keeping our eyes on the prize. *Journal of Social Issues, 67*(3), 622-643. doi: <https://doi.org/10.1111/j.1540-4560.2011.01717>
- Boisnier, A. (2003). Race and women's identity development: Distinguishing between feminism and womanism among Black and White women. *Sex Roles, 49*(5/6), 211-218.
- Borrero, N. E., & Yeh, C. J. (2011). The multidimensionality of ethnic identity among urban high school youth. *Identity, 11*, 114-135.

- Boysen, G. (2013). Confronting math stereotypes in the classroom: Its effect on female college students' sexism and perceptions of confronters. *Sex Roles, 69*(5-6), 297-307.
- Branscombe, N. R., Schmitt, M. T., & Harvey, R. D. (1999). Perceiving pervasive discrimination among African Americans: Implications for group identification and well-being. *Journal of Personality and Social Psychology, 77*(1), 135-149. doi:
<http://dx.doi.org/10.1037/0022-3514.77.1.135>
- Brewer, M. (2001). The many faces of social identity: Implications for political psychology. *Political Psychology, 22*(1), 115-125.
- Brondolo, E., Brady ver Halen, N., Pencille, M., Beatty, D. L., & Contrada, R. J. (2009). Coping with racism: A selective review of the literature and a theoretical and methodological critique. *Journal of Behavioral Medicine, 32*, 64–88. doi:10.1007/s10865-008-9193-0
- Brown, E. (2012). “It’s about race . . . no, it isn’t!” Negotiating race and social class: Youth identities at Anderson School in 2005. in Slaughter-Defoe D. T., Stevenson, H. C., Arrington E. G, & Johnson, D. J. (Eds.) *Black educational choice: Assessing the private and public alternatives to traditional K-12 public schools*, (pp. 28-48). Santa Barbara, CA: Praeger.
- Brown, D., Blackmon, S., Rosnick, C., Griffin-Fennell, F., & White-Johnson, R. (2017). Initial development of a gendered-racial socialization scale for African American college women. *Sex Roles, 77*, 178-193. doi: 10.1007/s11199-016-0707-x
- Brown, R. P., & Pinel, E. C. (2003). Stigma on my mind: Individual differences in the experience of stereotype threat. *Journal of Experimental Social Psychology, 39*, 626–633. doi: 10.1016/S0022-1031(03)00039-8

- Brown, D., Rosnick, C., & Segrist, D. (2017). Internalized racial oppression and higher education values: The mediational role of academic locus of control among college African American men and women. *Journal of Black Psychology, 43*(4), 358-380. doi: 17984166418650.1177/0095
- Brubaker, R., & Cooper, F. (2000). Beyond “identity.” *Theory & Society, 29*, 1-47.
- Buchanan, N. T. (2005). The nexus of race and gender domination: The racialized sexual harassment of African American women. In P. Morgan & J. Gruber (Eds.), *In the company of men: Re-discovering the links between sexual harassment and male domination* (pp. 294–320). Boston: Northeastern University Press.
- Buchanan, N. T., & Ormerod, A. J. (2002). Racialized sexual harassment in the lives of African American women. *Women & Therapy, 25*, 107–124. doi: 10.1300/J015v25n03_08
- Buckley, T., & Carter, R. (2005). Black adolescent girls: Do gender role and racial identity impact their self-esteem? *Sex Roles, 53*, 9/10, 647-661. doi: 10.1007/s11199-005-7731-6
- Burrow, A., & Ong, A. (2009). Racial identity as a moderator of daily exposure and reactivity to racial discrimination. *Self and Identity, 9*(4), 383-402. doi: 10.1080/15298860903192496
- Butler-Barnes, S., Leath, S., Williams, A., Byrd, C., Carter, R., & Chavous, T. (2018). Promoting resilience among African American girls: Racial identity as a protective factor. *Child Development. doi: 10.1111/cdev.12995*
- Byrd, C., & Chavous, T. (2009). Racial identity and academic achievement in the neighborhood context: A multilevel analysis. *Journal of Youth and Adolescence, 38*, 544-559.
- Cabrera, A., Nora, A., Terenzini, P., Pascarella, E., & Hagedorn, L. (1999). Campus racial climate and the adjustment of students to college: A comparison between White students and African American students. *The Journal of Higher Education, 70*(2), 134-160. doi: 10.2307/2649125

- Caldwell-Colbert, A. T., Parks, F. M., & Eshun, S. (2009). Positive psychology: African American strengths, resilience, and protective factors. In H. A. Neville, B. M. Tynes, & S. O. Utsey (Eds.), *Handbook of African American psychology* (pp. 375-384). Thousand Oaks, CA: Sage.
- Capodilupo, C. M., Nadal, K. L., Corman, L., Hamit, S., Lyons, O., & Weinberg, A. (2010). The manifestation of gender microaggressions. In D. W. Sue (Ed.), *Microaggressions and marginality: Manifestation, dynamics, and impact* (pp. 193–216). New York: Wiley.
- Carr, E. R., Szymanski, D. M., Taha, F., West, L., & Kaslow, N. (2014). Understanding the link between multiple oppressions and depression among low-income African American women: The role of internalization. *Psychology of Women Quarterly*, *38*, 233–245.
doi:10.1177/0361684313499900
- Carter, S., Corra, M., & Carter, S. (2009). The interaction of race and gender: Changing gender-role attitudes, 1974-2006. *Social Science Quarterly*, *90*(1), 196-211.
- Carter, R., Lau, M., Johnson, V., & Kirkinis, K. (2017). Racial discrimination and health outcomes among racial/ethnic minorities: A meta-analytic review. *Journal of Multicultural Counseling and Development*, *45*, 232-259.
- Carter, R., Mazzula, S., Victoria, R., Vazquez, R., Hall, S., Smith, S.,... Williams, B., (2011). Initial development of the race-based traumatic stress symptom scale: Assessing the emotional impact of racism. *Psychological Trauma: Theory, Research, Practice, and Policy*, *5*(1), 1-9. doi: 10.1037/a0025911
- Chae, D., Powell, W., Nuru-Jeter, A., Smith-Bynum, M., Seaton, E., Forman, T., Turpin, R., & Sellers, R. (2017). The role of racial identity and implicit bias in self-reported racial

- discrimination: Implications for depression among African American men. *Journal of Black Psychology*, 43(8), 789-812. doi: 10.1177/0095798417690055
- Chambers, C. (2011). *Support systems and services for diverse populations: Considering the intersection of race, gender, and the needs of Black female undergraduates*. Bingley, UK: Emerald Group Publishing.
- Chao, R., Mallinckrodt, B., & Wei, M. (2012). Co-occurring presenting problems in African American college clients reporting racial discrimination distress. *Professional Psychology*, 43(3), 199-207. doi: 10.1037/a0027861
- Chavous, T. (2005). An intergroup contact-theory framework for evaluating racial climate on predominantly White college campuses. *American Journal of Community Psychology*, 36(3/4), 239-257. doi: 10.1007/S10464-005-8623-1
- Chavous, T., Bernat, D., Schmeelk-Cone, K., Caldwell, C., Kohn-Wood, L., & Zimmerman, M. (2003). Racial identity and academic attainment among African American adolescents. *Child Development*, 74(4), 1076-1090.
- Chavous, T., Richardson, B., Webb, F., Fonseca-Bolorin, G., & Leath, S. (2018). Shifting contexts and shifting identities: Campus race-related experiences, racial identity and academic motivation among Black students during the transition to college. *Race and Social Problems*, 10, 1-18. doi: 10.1007/s12552-017-9218-9
- Clark, R., Anderson, N., Clark, V., & Williams, D. (1999). Racism as a stressor for African Americans: A biopsychological model. *American Psychologist*, 54, 805-816.
- Clark, K., & Clark, M. (1939). The development of consciousness of self and the emergence of racial identification in Negro preschool children. *The Journal of Social Psychology*, 10, 591-599.

- Cohen, J., Cohen, P., West, S., & Aiken, L. (2003). *Applied multiple regression/correlation analyses for the behavioral sciences* (3rd ed.). Hillsdale, NJ: Erlbaum.
- Cokley, K., & Moore, P. (2007). Moderating and mediating effects of gender and psychological disengagement on the academic achievement of African American college students. *Journal of Black Psychology, 33*(2), 169-187. doi: 10.1177/0095798407299512
- Cole, B. (2009). Gender, narratives, and intersectionality: Can personal experience approaches to research contribute to “undoing gender”? *International Review of Education, 55*(5/6), 561-578. doi: 10.1007/s11159-009-9140-5
- Coles, E. (2009). Intersectionality and research in psychology. *American Psychologist, 64*, 170-180.
- Collins, P.H. (1991). *Black feminist thought*. Boston, MA: Routledge, Chapman, & Hall, Inc.
- Collins, P. H. (2000). *Black feminist thought: Knowledge, consciousness, and the politics of empowerment*. (2nd ed.). New York, NY: Routledge, Chapman, & Hall, Inc.
- Collins, P.H. (2004). *Black sexual politics: African American, gender, and the new racism*. New York, NY: Routledge, Chapman, & Hall, Inc.
- Collins, L.M., & Lanza, S.T. (2010). *Latent class and latent transition analysis with applications in the social, behavioral, and health sciences*. Hoboken, NJ: John Wiley & Sons, Inc.
- Constantine, M. G., & Sue, D. W. (Eds.) (2006). *Addressing racism: Facilitating cultural competence in mental health and educational settings*. Hoboken, NJ: Wiley.
- Cooper, S., Guthrie, B., Brown, C., & Metzger, I. (2011). Daily hassles and African American adolescents' females' psychological functioning: Direct and interactive associations with gender role orientation. *Sex Roles, 65*, 397-409. doi: 10.1007/s11199-011-0019-0

- Crede, M., & Niehorster, S., (2012). Adjustment to college as measured by the student adaptation to college questionnaire: A quantitative review of its structure and relationships with correlates and consequences. *Educational Psychology Review*, 24(1), 133-165.
- Crenshaw, K. (1989). Demarginalizing the intersection of race and sex: A Black feminist critique of antidiscrimination doctrine, feminist theory, and antiracist politics. *University of Chicago Legal Forum*, 14, 538-554.
- Crenshaw, K. (1991). Mapping the margins: Intersectionality, identity politics, and violence against women of color. *Stanford Law Review*, 43(6), 1241-1299. doi: 10.2307/1229039
- Crocker, J. (1999). Social stigma and self-esteem: Situational construction of self-worth. *Journal of Experimental Social Psychology*, 35, 89-107.
- Crocker, J., & Major, B. (1989). Social stigma and self-esteem: The self-protective properties of stigma. *Psychological Review*, 96, 608-630.
- Crocker, J., Luhtanen, R., Blaine, B., & Broadnax, S. (1994). Collective self-esteem and psychological wellbeing among white, black, and Asian college students. *Personality and Social Psychology Bulletin*, 20, 503-513.
- Cross, W.E. (1978). The Thomas and Cross models of psychological Nigrescence: A review. *The Journal of Black Psychology*, 5(1), 13-31.
- Cross, W. E. (1991). *Shades of Black: Diversity in African American identity*. Philadelphia: Temple University Press.
- Cross, W. E., Jr., & Cross, T. B. (2008). Theory, research, and models. In S. M. Quintana & C. McKown (Eds.), *The handbook of race, racism and developing child* (pp. 154–181). Hoboken, NJ: Wiley.

- Croteau, J., Talbot, D., Lance, T., & Evans, N. (2002). A qualitative study of the interplay between privilege and oppression. *Journal of Multicultural Counseling and Development*, 30(4), 239-258.
- DeBlaere, C., & Bertsch, K. N. (2013). Perceived sexist events and psychological distress of sexual minority women of color: The moderating role of womanism. *Psychology of Women Quarterly*, 37, 167–178. doi:10.1177/0361684312470436
- Donovan, R., Galban, D., Grace, R., Bennett, J., & Felecie, S. (2013). Impact of racial macro- and microaggressions in Black women’s daily lives: A preliminary analysis. *Journal of Black Psychology*, 39(2), 185-196. doi: 10.1177/0095798412443259
- Dortch, D., & Patel, C. (2017). Black undergraduate women and their sense of belonging in STEM at Predominantly White Institutions. *NASPA, Journal about Women in Higher Education*, 10(2), 202-215. doi: 10.1080/19407882.2017.1331854
- DuBois, D.L., Burk-Braxton, C., Swenson, L. Tevendale, H., & Hardesty, J.L. (2002). Race and gender influences on adjustment in early adolescence: Investigation of an integrative model. *Child Development*, 73(5), 1573-1592.
- Dugger, K. (1988). Social location and gender-role attitudes: A comparison of Black and White women. *Gender and Society*, 2, 425-448.
- Epstein, R., Blake, J., & Gonzalez, T. (2017). Girlhood interrupted: The erasure of Black girls’ childhood. *Center on Poverty and Inequality*. Retrieved from <https://www.law.georgetown.edu/poverty-inequality-center/wp-content/uploads/sites/14/2017/08/girlhood-interrupted.pdf>
- Erikson, E. (1968). *Identity, youth, and crisis*. New York: Norton Publishing Press.

- Espinosa, L. L. (2011). Pipelines and pathways: Women of color in undergraduate STEM majors and the college experiences that contribute to persistence. *Harvard Educational Review*, 81, 209-240.
- Essed, P. (1991). *Understanding everyday racism: An interdisciplinary theory*. Thousand Oaks, CA: SAGE.
- Evans-Winters, V. (2005). *Teaching Black girls: Resiliency in urban classrooms*. New York: Peter Lang Publishing, Inc.
- Fhagen-Smith, P., Vandiver, B., Worrell, F., & Cross Jr., W. (2010). (Re)examining racial identity attitude differences across gender, community type, and socioeconomic status among African American college students. *An International Journey of Theory and Research*, 10(3), 164-180. Doi: 10.1080/15283488.2010.495907
- Fischer, M. (2007). Settling into campus life: Differences by race/ethnicity in college involvement and outcomes. *The Journal of Higher Education*, 78(2), 125-156. doi: <https://doi.org/10.1353/jhe.2007.0009>
- Foley, S., Ngo, H.Y. and Loi, R. (2006). Antecedents and consequences of perceived gender discrimination: a social identity perspective. *Sex Roles*, 55(3/4), 197-208.
- Foley, S., Ngo, H, Loi, R., & Zheng, X. (2015). Gender, gender identification and perceived gender discrimination: An examination of mediating processes in China. *Equality, Diversity, and Inclusion: An International Journal*, 34(8), 650-665. doi: 10.1108/EDI-05-2015-0038
- Ford, D.Y. (1995). *Correlates of underachievement among gifted Black students*. Storrs, CT: National Research Center on the Gifted and Talented.

- Ford, D.Y., Harris, J.J., Webb, K.S. and Jones, D.L. (1994). Rejection or confirmation of racial identity: A dilemma for high-achieving Blacks. *The Journal of Educational Thought*, 28(1), 7–33.
- Fordham, S. (1988). Racelessness as a factor in Black students' success: Pragmatic victory or pyrrhic victor. *Harvard Educational Review*, 58, 29-84.
- Foster, M.D. (1999). Acting out against gender discrimination: The effects of different social identities. *Sex Roles*, 40(3/4), 167-186.
- Frazier, D. (2012). They only talk to me when they're drunk: The African American experiences at small predominantly White institutions. *SAGE Open*, 2(2), 1-9. doi: 10.1177/2158244012445489
- Freeman, K. (1999). HBCUs or PWIs?: African American high school students' consideration of higher education institution types. *The Review of Higher Education*, 23(1), 91-104.
- Fries-Britt, S., & Griffin, K. (2007). The Black box: How high-achieving Blacks resist stereotypes about Black Americans. *Journal of College Student Development*, 48(5), 509-524. doi: 10.1353/csd.2007.0048
- Fuller-Rowell, T., Burrow, A., & Ong, A. (2011). Changes in racial identity among African American college students following the election of Barack Obama. *Developmental Psychology*, 47(6), 1608-1618. doi: 10.1037/a0025284
- Gay, C. (2004). Putting race in context: Identifying the environmental determinants of Black racial attitudes. *American Political Science Review*, 98(4), 547-562.
- Gay, C., & Tate, K. (1998). Doubly bound: The impact of gender and race on the politics of black women. *Political Psychology*, 19, 169–184.

- Gender Public Advocacy Coalition [GenderPAC]. (2007). 50 under 30: Masculinity and the war on America's youth, a human rights report. Retrieved from <http://www.gpac.org/50under30/50u30.pdf>
- Gomez, J. (2018). What's the harm? Internalized prejudice and cultural betrayal trauma theory in ethnic minorities. *American Journal of Orthopsychiatry*, 1-11. doi: 10.1037/ort0000367
- Gomez, J., & Trierweiler, S. (1999). Exploring cross-group discrimination: Measuring the dimensions of inferiorization. *Journal of Applied Social Psychology*, 29(9), 1900-1926.
- Greer, T. (2011). Coping strategies as moderators of the relationship between race-and gender-based discrimination and psychological symptoms for African American women. *Journal of Black Psychology*, 37(1), 42-54. doi: 10.1177/0095798410380202
- Griffin, K., Cunningham, E., & Mwangi, C. (2016). Defining diversity: Ethnic differences in Black students' perceptions of racial climate. *Journal of Diversity in Higher Education*, 9, 34-49. doi:10.1037/a0039255
- Griffin, T., Chavous, T., Cogburn, C., Branch, L., & Sellers, R. (2012). Dimensions of academic contingencies among African American college students. *Journal of Black Psychology*, 38(2), 201-227. doi:10.1177/0095798411414892
- Gushue, G., & Whitson, M. (2006). The relationship of ethnic identity and gender role attitudes to the development of career choice goals among Black and Latina girls. *Journal of Counseling Psychology*, 53(3), 379-385. doi: 10.1037/0022-0167.53.3.379
- Habermas, T., & Bluck, S. (2000). Getting a life: The emergence of the life story in adolescence. *Psychological Bulletin*, 126, 248-269.
- Hannon, C., Woodside, M., Pollard, B., & Roman, J. (2016). The meaning of African American college women's experiences attending a predominantly White institution: A

- phenomenological study. *Journal of College Student Development*, 57(6), 652-666. doi: 10.1353/csd.2016.0036
- Harper, S. R., Patton, L.D., & Wooden, O. S. (2009). Access and equity for African American students in higher education: A critical race historical analysis of policy efforts. *Journal of Higher Education*, 80, 389-414.
- Harper, B., & Tuckman, B. (2006). Racial identity beliefs and academic achievement: Does being Black hold students back? *Social Psychology of Education*, 9, 381-403. doi: 10.1007/s11218-006-9001-z
- Harrell, S. P. (1997). *The racism and life experiences scales*. Unpublished manuscript.
- Harrell, S. P. (2000). A multidimensional conceptualization of racism-related stress: Implications for the well-being of people of color. *American Journal of Orthopsychiatry*, 70, 42-57.
- Harris, A. & Marsh, K. (2010). Is a raceless identity an effective strategy for academic success among Blacks? *Social Science Quarterly*, 91(5), 1242–1263.
- Harter, S., & Monsour, A. (1992). Developmental analysis of conflict caused by opposing attributes in the self-portrait. *Developmental Psychology*, 28, 251-260.
- Hausmann, L., Ye, F., Schofield, J., & Woods, R. (2009). Sense of belonging and persistence in White and African American first-year students. *Research in Higher Education*, 50(7), 649-669.
- Heinen, T. (1996). *Latent class and discrete latent trait models: Similarities and differences*. Thousand Oaks, CA: Sage Publications.
- Henry, W., Butler, D., & West, N. (2012). Things are not as rosy as they seem: Psychosocial issues of contemporary Black college women. *Journal of College Student Retention*, 13(2), 137-153. doi: 102190/CS.13.2.a

- Henry, W., Fuerth, K., & Richards, E. (2011). Black and gay in college: A review of the experiences of students in double jeopardy. *College Student Affairs Journal, 30*(1), 63-74.
- Hernandez, M., Robins, R., Widaman, K., & Conger, R. (2017). Ethnic pride, self-esteem, and school belonging: A reciprocal analysis over time. *Developmental Psychology, 53*(12), 2384-2396. doi: 10.1037/dev0000434
- Hill, N. E. (2001). Parenting and academic socialization as they relate to school readiness: The roles of ethnicity and family income. *Journal of Educational Psychology, 93*(4), 686-697.
- Hill, J., & Lynch, M. (1983). The intensification of gender-related role expectations during early adolescence. In J. Brooks Gunn & A. Petersen (Eds.), *Girls at puberty: Biological and psychosocial perspectives*. New York, NY: Plenum Press.
- Hill, M., & Thomas, V., (2002). Racial and gender identity development for Black and White women in interracial partner relationships. *Journal of Couple & Relationship Therapy, 1*(4), 1-35. doi: 10.1300/J398v01n04_01
- Hoggard, L., Jones, S., & Sellers, R. (2017). Racial cues and racial identity: Implications for how African Americans experience and respond to racial discrimination. *Journal of Black Psychology, 43*(4), 409-432. doi: 10.1177/0095798416651033
- hooks, bell. (1991). Narratives of struggle. In *Critical Fictions: The Politics of Imaginative Writing*, P. Mariani, (Ed.) Seattle, WA: Bay Press.
- Hope, E., Chavous, T., Jagers, R., & Sellers, R. (2013). Connecting self-esteem and achievement: Diversity in academic identification and disidentification patterns among Black college students. *American Educational Research Journal, 50*(5), 1122-1151. doi: 10.3102/0002831213500333

- Horowitz, R. (1939). Racial aspects of self-identification in nursery school children. *Journal of Psychology*, 7, 91-99.
- Hughes, M., Kiecolt, K., Keith, V., & Demo, D. (2015). Racial identity and well-being among African Americans. *Social Psychology Quarterly*, 78(1), 25-48. doi: 10.1177/0190272514554043
- Hunter, M. L. (2002). "If you're light you're alright": Light skin color as social capital for women of color. *Gender & Society*, 16, 175-193.
- Hurd, N., Sellers, R., Cogburn, C., Butler-Barnes, S., & Zimmerman, M. (2012). Racial identity and depressive symptoms among Black emerging adults: The moderating effects of neighborhood racial composition. *Developmental Psychology*, 49(5), 938-950. doi: 10.1037/a0028826
- Hurtado, S. (1992). The campus racial climate: Contexts of conflict. *Journal of Higher Education*, 63, 539-569.
- Hurtado, S., Cabrera, N., Lin, M., Arellano, L., & Espinosa, L. (2009). Diversifying science: Underrepresented student experiences in structured research programs. *Research in Higher Education*, 50(2), 189-214. doi: 10.1007/s11162-008-9114-7
- Hyde, J., & Kling, K. (2001). Women, motivation, and achievement. *Psychology of Quarterly*, 25, 364-378.
- Jack, A. (2014). Culture shock revisited: The social and cultural contingencies to class marginality. *Sociological Forum*, 29(2), 453-475. doi: 10.1111/socf.12092
- Jacobs, C. (2016). Developing the "oppositional gaze": Using critical media pedagogy and Black feminist thought to promote Black girls' identity development. *The Journal of Negro Education*, 85(3), 225-238.

- John, H. (1999). Diminishing diversity: UGA lacks critical mass of Black students. *The Atlanta Constitution*, 1-3.
- Johnson, A. (2001). Women, race, and science: The academic experiences of twenty Women of Color with a passion for science. *Dissertation Abstracts International*, 62(02), 428–485.
- Johnson, D. R. (2011). Women of Color in science, technology, engineering, and mathematics (STEM). *New Directions for Institutional Research*, 2011(152), 75–85.
doi:10.1002/ir.v2011.152
- Johnson, D. (2011). Examining sense of belonging and campus racial diversity experiences among women of color in STEM living-learning programs. *Journal of Women and Minorities in Science and Engineering*, 17(3), 209-223. doi:
10.1615/jWomenMinorScienceEng.2011002843
- Johnson, D. R. (2012). Campus racial climate perceptions and overall sense of belonging among racially diverse women in STEM majors. *Journal of College Student Development*, 53(2), 336–346. doi:10.1353/csd.2012.0028
- Johnson, T., & Wassersug, R. (2010). Gender identity disorder outside the binary: When gender identity disorder-not otherwise specified is not good enough. *Archives of Sexual Behavior*, 39, 597-598. doi: 10.1007/s10508-010-99608-1
- Johnston, M., Pizzolato, J., & Kanny, M. (2015). Examining the significance of “race” in college students’ identity within a “postracial” era. *Journal of College Student Development*, 56(3), 227-242. doi: 10.1353/csd.2015.0023
- Jones, M., & Day, S. (2018). An exploration of Black women’s gendered racial identity using a multidimensional and intersectional approach. *Sex Roles*, 79, 1-15. doi: 10.1007/s11199-017-0854-8

- Jones, H., Cross, W., & DeFour, D. (2007). Race-related stress, racial identity attitudes, and mental health among Black women. *Journal of Black Psychology, 33*(2), 208-231. doi: 10.1177/005798407299517
- Jones, S., Lee, D., Gaskin, A., & Neblett, E. (2014). Emotional response profiles to racial discrimination: Does racial identity predict affective patterns? *Journal of Black Psychology, 40*(4), 334-358. doi: 10.1177/0095798413488628
- Joseph, J. (2012). From one culture to another: Years one and two of graduate school for African-American women in the STEM fields. *International Journal of Doctoral Studies, 7*, 125-142.
- Joseph, V., & Williams, T. (2008). "Good niggers": The struggle to find courage, strength, and confidence to fight internalized racism and internalized dominance. *Democracy & Education, 17*(3), 67-75.
- Kane, E. (1992). Race, gender, and attitudes toward gender stratification. *Social Psychology Quarterly, 55*(3), 311-320.
- Kane, E. (2000). Racial and ethnic variations in gender-related attitudes. *Annual Review of Sociology, 26*, 419-439.
- Kanter, R. M. (1977). *Men and women of the corporation*. New York: Basic Books.
- Kessels, U., Heyder, A., Latsch, M., & Hannover, B. (2014). How gender differences in academic engagement relate to students' gender identity. *Educational Research, 56*(2), 220-229. doi: 10.1080/00131881.2014.89816
- Kiecolt, J., Hughes, M., & Keith, V. (2009). Can a high sense of control and John Henryism be bad for mental health? *The Sociological Quarterly, 50*, 693-714.

- Kiefer, A., & Sekaquaptewa, D. (2007). Implicit stereotypes, gender identification, and math-related outcomes: A prospective study of female college students. *Psychological Science, 18*(1), 13-18.
- King, K. R. (2003). Racism or sexism? Attributional ambiguity and simultaneous membership in multiple oppressed groups. *Journal of Applied Social Psychology, 33*, 223–247.
doi:10.1111/j.1559- 1816.2003.tb01894
- Klonoff, E. A., & Landrine, H. (1995). The Schedule of Sexist Events: A measure of lifetime and recent sexist discrimination in women’s lives. *Psychology of Women Quarterly, 19*, 439 – 472. doi: 10.1111/j.1471-6402.1995.tb00086
- Konrad, A. M., & Harris, C. (2002). Desirability of the Bem Sex-Role Inventory items for women and men: A comparison between African Americans and European Americans. *Sex Roles, 47*, 259-271. doi:10.1023/A:1021386727269
- Kramer, H. C. (1980). Monitoring freshman perceptions of college. *Journal of the National Association for Women Deans, Administrators, and Counselors, 44*, 7–13.
- Kuperminc, G. (1994). Social orientation, social competence, and the prevention of adolescent problem behavior. *Dissertation Abstracts International*.
- LaCosse, J., Sekaquaptewa, D., & Bennett, J. (2016). STEM stereotypic attribution bias among women in an unwelcoming science setting. *Psychology of Women Quarterly, 40*(3), 378-397. doi: 10.1177/0361684316630965
- Landrine, H., & Klonoff, E. A. (1996). The Schedule of Racist Events: A measure of racial discrimination and a study of its negative physical and mental health consequences. *Journal of Black Psychology, 22*, 144-168.

- Leaper, C., Farkas, T., & Brown, C (2012). Adolescent girls' experiences and gender-related beliefs in relation to their motivation in math/science and English. *Journal of Youth and Adolescence, 41*, 268-282. doi: 10.1007/s10964-011-9693-z
- Lee, D., & Ahn, S. (2013). The relation of racial identity, ethnic identity, and racial socialization to discrimination-distress: A meta-analysis of Black Americans. *Journal of Counseling Psychology, 60*(1), 1-14. doi: 10.1037/a0031275
- Levin, S., Sinclair, S., Veniegas, R. C., & Taylor, P. L. (2002). Perceived discrimination in the context of multiple group memberships. *Psychological Science, 13*, 557–560.
- Lewis, J., & Neville, H. (2015). Construction and initial validation of the gendered racial microaggression scale for Black women. *Journal of Counseling Psychology, 62*(2), 289-302. doi: 10.1037/cuo0000062
- Lewis, J., Williams, M., Peppers, E., & Gadson, C. (2017). Applying intersectionality to explore the relations between gendered racism and health among Black women. *Journal of Counseling Psychology, 64*(5), 475-486. doi: 10.1037/cou0000231
- Lige, Q., Peteet, B., & Brown, C. (2016). Racial identity, self-esteem, and the imposter phenomenon among African American college students. *Journal of Black Psychology, 43*(4), 345-357. doi: 10.1177/0095798416648787
- Lightsey, O. R., Jr., & Barnes, P. W. (2007). Discrimination, attributional tendencies, generalized self-efficacy, and assertiveness as predictors of psychological distress among African Americans. *Journal of Black Psychology, 33*, 27-50.
doi:10.1177/0095798406295098
- Luhtanen, R., & Crocker, J. (1992). A collective self-esteem scale: Self-evaluation of one's social identity. *Personality and Social Psychology Bulletin, 18*, 302-318.

- Luyckx, K., Schwartz, S. J., Berzonsky, M. D., Soenens, B., Vansteenkiste, M., Smits, I. and Goossens, L. (2008). Capturing ruminative exploration: Extending the four-dimensional model of identity formation in late adolescence. *Journal of Research in Personality* 42(1): 58–82, doi: 10.1016/j.jrp.2007.04.004
- Major, B., & O'Brien, L. (2005). The social psychology of stigma. *Annual Review in Psychology*, 56, 393-421. doi: 10.1146/annurev.psych.56.091103.070137
- Malcom, L. E., & Malcom, S. M. (2011). The double bind: The next generation. *Harvard Educational Review*, 81, 162-171.
- Marcia, J. (1966). Development and validation the of ego identity statuses. *Journal of Personality and Social Psychology*, 3, 551-558.
- Marcia, J. (1980). Identity in adolescence. In J. Adelson (Ed.), *Handbook of adolescent psychology* (pp. 159-197). New York: Wiley.
- Marsh, K. (2010). “Staying Black”: The demonstration of racial identity and womanhood among a group of young high-achieving Black women. *International Journal of Qualitative Studies in Education*, 26(10), 1213-1237. doi: 10.1080/09518398.2012.731536
- Martin, J., & Hall, G. (1992). Thinking Black, thinking internal, thinking feminist. *Journal of Counseling Psychology*, 39, 509-514.
- McCabe, J. (2009). Racial and gender microaggressions on a predominantly White campus: Experiences of Black, Latina/o and White undergraduates. *Race, Gender, & Class*, 16(1/2), 133-151.
- McGee, E., & Bentley, L. (2017). The troubled success of Black women in STEM. *Cognition and Instruction*, 35(4), 265-289. doi: 10.1080/073700008.2017.1355211.

- McGuire, K., Casanova, S., & Davis, C. (2016). "I'm a Black female who happens to be Muslim": Multiple marginalities of an immigrant Black Muslim woman on a predominantly White campus. *The Journal of Negro Education*, 85(3), 316-329.
- McHale, S. M., Crouter, A. C., Kim, J. Y., Burton, L. M., Davis, K. D., Dotterer, A. M., & Swanson, D. P. (2006). Mothers' and fathers' racial socialization in African American families: Implications for youth. *Child Development*, 77, 1387-1402. doi:10.1111/j.1467-8624.2006.00942
- McLaughlin, K. A., Hatzenbuehler, M. L., & Keyes, K. M. (2010). Responses to discrimination and psychiatric disorders among Black, Hispanic, female, and lesbian, gay, and bisexual individuals. *American Journal of Public Health*, 100, 1477-1484. doi: 10.2105/AJPH.2009.181586
- McLean, K., Shucard, H., & Syed, M. (2017). Applying the master narrative framework to gender identity development in emerging adulthood. *Emerging Adulthood*, 5(2), 93-105. doi: 10.1177/2167696816656254
- McLean, K., & Syed, M. (2015). Personal, master, and alternative narratives: An integrative framework for understanding identity development in context. *Human Development*, 58, 318-349. doi: 10.1159/000445817
- McNeil, S., Reynolds, J. E., Fincham, F. D., & Beach, S. R. (2016). Parental experiences of racial discrimination and youth racial socialization in two-parent African American families. *Cultural Diversity and Ethnic Minority Psychology*, 22, 268. doi:10.1037/cdp0000064

- Moradi, B., & Subich, L. M. (2003). A concomitant examination of the relations of perceived racist and sexist events to psychological distress for African American women. *Counseling Psychologist, 32*, 451-469.
- Moradi, B., Subich, L.M., & Phillips, J.C. (2002). Revisiting feminist identity development theory, research, and practice. *The Counseling Psychologist, 30*, 6–43.
- Morris, E.W. (2007). ‘Ladies’ or ‘loudies’? Perceptions and experiences of black girls in classrooms. *Youth & Society, 38*(4), 490–515. doi: 10.1177/0044118X06296778
- Museus, S. (2008). The role of ethnic student organizations in fostering African American and Asian American students’ cultural adjustment and membership at predominantly White institutions. *Journal of College Student Development, 49*(6), 568-586. doi: 10.1353/csd.0.0039
- Museus, S., & Neville, K. (2012). Delineating the ways that key institutional agents provide racial minority students with access to social capital in college. *Journal of College Student Development, 53*(3), 436-452. doi: 10.1353/csd.2012.0042
- Muthén, L. K., & Muthén, B. O. (2000). Integrating person-centered and variable-centered analyses: Growth mixture modeling with latent trajectory classes. *Alcoholism: Clinical and Experimental Research, 24*, 882-891. doi: 10.1111/j.1530-0277.2000.tb02070
- Muthén, L. K., & Muthén, B. O. (1998-2012). *Mplus User’s Guide: Statistical Analysis with Latent Variables* (7th ed.). Los Angeles, CA: Muthén & Muthén.
- Nadal, K. (2017). *The SAGE Encyclopedia of Psychology and Gender*. Sage Publications: Thousand Oaks, CA.

- Nadler, D., & Komarraju, M. (2016). Negating stereotype threat: Autonomy support and academic identification boost performance of African American college students. *Journal of College Student Development, 57*(6), 667-679. doi: 10.1353/csd.2016.0039
- National Center for Education Statistics. (2016). Percentage of 18 to 24-year-olds enrolled in degree-granting postsecondary institutions, by level of institutions and sex of student: 1970 through 2015. Retrieved from https://nces.ed.gov/programs/digest/d16/tables/dt16_302.60.asp
- Neblett, E., Philip, C., Cogburn, C., & Sellers, R. (2006). African American adolescents' discrimination experiences and academic achievement: Racial socialization as a cultural compensatory and protective factor. *Journal of Black Psychology, 32*, 199-218.
- Nelson, T., Cardemill, E., & Adeoye, C. (2016). Rethinking strength: Black women's perceptions of the "Strong Black Woman" role. *Psychology of Women Quarterly, 40*(4), 551-563. doi: 10.1177/0361684316646716
- Neville, H., & Lilly, R. (2000). The relationship between racial identity cluster profiles and psychological distress among African American college students. *Journal of Multicultural Counseling and Development, 28*, 194-207. doi: 10.1002/j.2161-1912.2000.tb00615
- Nylund, K.L. (2007). *Latent Transition Analysis: Modeling extensions and an application to peer victimization*. (PhD Dissertation), University of California, Los Angeles.
- Nylund, K.L., Muthen, M., and Muthen, B.O. (2007). Deciding on the number of classes in latent class analysis and growth mixture modeling: A Monte Carlo simulation study. *Structural Equation Modeling, 14*(4), 535-569. doi: 10.1080/10705510701575396

- Oney, C., Cole, E., & Sellers, R. (2011). Racial identity and gender as moderators of the relationship between body image and self-esteem for African Americans. *Sex Roles, 65*, 619-631. doi: 10.1007/s11199-01109962
- Ong, M., Smith, J., & Ko, L. (2018). Counterspaces for women of color in STEM higher education: Marginal and central spaces for persistence and success. *Journal of Research in Science Teaching, 55*(2), 206-245. doi: 10.1002/tea.21417
- Oyserman, D., Harrison, K., & Bybee, D. (2010). Can racial identity be promotive of academic efficacy? *International Journal of Behavioral Development, 25*(4), 379-385. doi: 10.1080/01650250042000401
- Pahl, K., & Way, N. (2006). Longitudinal trajectories of ethnic identity among urban Black and Latino adolescents. *Child Development, 77*, 1403–1415. doi:10.1111/j.1467-8624.2006.00943
- Parham, T.A., & Helms, J. E. (1981). The influence of Black students' racial identity attitudes on preferences for counselor's race. *Journal of Counseling Psychology, 28*, 250-257. doi: 10.1037/0022-0167.28.3.250
- Parks, E. E., Carter, R. T., & Gushue, G. V. (1996). At the crossroads: Racial and womanist identity development in Black and White women. *Journal of Counseling & Development, 74*, 624-631. doi: 10.1002/j.1556-6676.1996.tb02302
- Pascoe, E., & Richman, L. (2009). Perceived discrimination and health: A meta-analytic review. *Psychological Bulletin, 135*(4), 531-554. doi: 10.1037/a0016059
- Patton, L. (2006). The voice of reason: A qualitative examination of Black student perceptions of Black culture centers. *Journal of College Student Development, 47*(6), 628-646. doi: 10.1353/csd.2006.0068

- Perry, J. (2008). School engagement among urban youth of color. *Journal of Career Development, 34*(4), 397-422. doi: 10.1177/0894845308316293
- Perry, B., Pullen, E., & Oser, C. (2012). Too much of a good thing? Psychosocial resources, gendered racism, and suicidal ideation among low socioeconomic status African American women. *Social Psychology Quarterly, 75*(4), 334-359. doi: 10.1177/0190272512455932
- Phinney, J. (1989). Stages of ethnic identity development in minority group adolescents. *Journal of Early Adolescence, 9*, 34-49. doi: 10.1177/0272431689091004
- Phinney, J. (1990). Ethnic identity in adolescence and adulthood: Review of research. *Psychological Bulletin, 108*, 499-514. doi: 10.1111/cdev.12196
- Phinney, J. (1992). The multigroup ethnic identity measure: A new scale for use with diverse groups. *Journal of Adolescent Research, 7*(2), 156-176. doi: 10.1177/074355489272003
- Phinney, J., & Ong, A. (2007). Conceptualization and measurement of ethnic identity: Current status and future directions. *Journal of Counseling Psychology, 54*(3), 271-281. doi: 10.1037/0022-0167.54.3.271
- Pieterse, A., & Carter, R. (2010). An exploratory investigation of the relationship between racism, racial identity, perceptions of health, and health locus of control among Black American women. *Journal of Health Care for the Poor and Underserved, 21*(1), 334-348. doi: 10.1353/hpu.0.0244
- Pietri, E., Johnson, I., & Ozgumus, E. (2018). One size may not fit all: Exploring how the intersection of race and gender and stigma consciousness predict effective identity-safe cues for Black women. *Journal of Experimental Social Psychology, 74*, 291-306. doi: 10.1016/j.jesp.2017.06.021

- Pinel, E. (1999). Stigma consciousness: The psychological legacy of social stereotypes. *Journal of Personality and Social Psychology*, 76(1), 114-128. doi: 10.1037/0022-3514.76.1.114
- Pizzolato, J. (2003). Developing self-authorship: Exploring the experiences of high-risk college students. *Journal of College Student Development*, 44(6), 797-812. doi: 10.1353/csd.2003.0074
- Poindexter-Cameron, J.M., & Robinson, T.L. (1997). Relationships among racial identity attitudes, womanist identity attitudes, and self-esteem in African American college women. *Journal of College Student Development*, 38, 288-296. doi: 10.1353/csd.2006.0038
- Porter, C. (2016). Black women undergraduates: Challenging history to reframe its context in a PWI. *Dissertation Abstracts International*.
- Prelow, H., Mosher, C., & Bowman, M. (2006). Perceived racial discrimination, social support, and psychological adjustment among African American college students. *Journal of Black Psychology*, 32(4), 442-454. doi: 10.1177/0095798406292677
- Rainey-Brown, S., Johnson, G., Richardson, L., Stinson, T., Race, N. (2012). New American racism: A microcosm study of a small town. *Gender & Class*, 19(3-4), 266-291.
- Ramirez, J., Oshin, L., & Milan, S. (2017). Imagining her future: Diversity in mothers' socialization goals for their adolescent daughters. *Journal of Cross-Cultural Psychology*, 48(4), 593-610. doi: 10.1177/0022022117696802
- Reynolds, A., & Pope, R. (1991). The complexities of diversity: Exploring multiple oppressions. *Journal of Counseling & Development*, 70, 174-180. doi: 10.1002/j.1556-6676.1991.tb01580

- Reynolds, A., Sneva, J., & Beehler, G. (2010). The influence of racism-related stress on the academic motivation of Black and Latino/a students. *Journal of College Student Development, 51*(2), 135-149. doi: 10.1353/csd.0.0120
- Richardson, D. (2007). Patterned fluidities: (Re)Imagining the relationship between gender and sexuality. *Sociology, 41*(3), 457-474. doi: 10.1177/0038038507076617
- Ridley, C. R. (2005). *Overcoming unintentional racism in counseling and therapy: A practitioner's guide to intentional intervention* (2nd Eds.). Thousand Oaks, CA: Sage Publishing.
- Rivas-Drake, D., Seaton, E., Markstrom, C., Quintana, S., Syed, M., Lee, R., Scwartz, S., Umana-Taylor, A., French, S., & Yip, T. (2014). Ethnic and racial identity in adolescence: Implications for psychosocial, academic, and health outcomes. *Child Development, 85*(1), 40-57. doi: 10.1111/cdev.12200
- Robitschek, C. (1999). Further validation of the Personal Growth Initiative Scale. *Measurement and Evaluation in Counseling and Development, 31*, 197-210.
- Robitschek, C., Ashton, M. W., Spering, C. C., Geiger, N., Byers, D., Schotts, C., & Thoen, M. A. (2012). Development and psychometric evaluation of the Personal Growth Initiative Scale–II. *Journal of Counseling Psychology, 59*, 274-287. doi:10.1037/a0027310
- Rogers, L., Scott, M., & Way, N. (2015). Racial and gender identity among Black adolescent males: An intersectionality perspective. *Child Development, 86*(2), 407-424. doi: 10.1111/cdev.12303
- Rowley, S., Chavous T., & Cooke, D. (2003). A person-centered approach to African American gender differences in racial ideology. *Self and Identity, 2*, 287-306. doi: 10.1080/714050249

- Rowley, S. J., Sellers, R. M., Chavous, T. M., & Smith, M. A. (1998). The relationship between racial identity and self-esteem in African American college and high school students. *Journal of Personality and Social Psychology, 74*, 715–724. doi: 10.1037/0022-3514.74.3.715
- Russell, M., & Russell, J. (2015). Black American undergraduate women at a PWI: Switching majors in STEM. *The Negro Educational Review, 66*(1-4), 101-127.
- Sanders, J., & Bradley, C. (2005). Multiple-lens paradigm: Evaluating African American girls and their development. *Journal of Counseling and Development, 83*, 299–304. doi: 10.1002/j.1556-6678.2005.tb00347
- Saunders, K., & Kashubeck-West, S. (2006). The relations among feminist identity development, gender-role orientation, and psychological well-being in women. *Psychology of Women Quarterly, 30*, 199–211. doi:10.1111/j.1471-6402.2006.00282.x.
- Schmader, T., Johns, M., & Forbes, C. (2008). An integrated process model of stereotype effects on performance. *Psychological Review, 115*, 336-356. doi:10.1037/0033-295X.115.2.336
- Seaton, E., Scottham, K., & Sellers, R. (2006). The status model of racial identity development in African American adolescents: Evidence of structure, trajectories, and well-being. *Child Development, 77*(5), 1416-1426.
- Seaton, E., Yip, T., Morgan-Lopez, A., & Sellers, R. (2012). Racial discrimination and racial socialization as predictors of African American's racial identity development using latent transition analysis. *Developmental Psychology, 48*(2), 448-458. doi: 10.1037/a0025328
- Sekaquaptewa, D., & Thompson, M. (2002). Differential effects of solo status on members of high- and low- status groups. *Personal and Social Psychology Bulletin, 28*(5), 694-707. doi: 10.1177/0146167202288013

- Sellers, R., Caldwell, C., Schmeelk-Cone, K., & Zimmerman, M. (2003). Racial identity, racial discrimination, perceived stress, and psychological distress among African American young adults. *Journal of Health and Social Behavior, 44*(3), 302-317.
- Sellers, R., Chavous, T., & Cooke, D. (1998). Racial ideology and racial centrality as predictors of African American college students' academic performance. *Journal of Black Psychology, 8*-27. doi: 10.1177/00957984980241002
- Sellers, R., Copeland-Linder, N., Martin, P., & Lewis, R. (2006). Racial identity matters: The relationship between racial discrimination and psychological functioning in African American adolescents. *Journal of Research on Adolescence, 16*(2), 187-216. doi: 10.1111/j.1532-7795.2006.00128
- Sellers, R., Rowley, S., Chavous, T., Shelton, J., & Smith, M. (1997). Multidimensional Inventory of Black Identity: A preliminary investigation of reliability and construct validity. *Journal of Personality and Social Psychology, 73*(4), 805-815. doi: 10.1037/0022-3514.73.4.805
- Sellers, R.M, & Shelton, J.N. (2003). The role of racial identity in perceived racial discrimination. *Journal of Personality and Social Psychology, 84*(5), 1079-1092. doi: 10.1037/0022-3514.84.5.1079
- Sellers, R. M., Smith, M. A., Shelton, J. N., Rowley, S. A., & Chavous, T. M. (1998). Multidimensional model of racial identity: A reconceptualization of African American racial identity. *Personality and Social Psychology Review, 2*, 18-39. PMID: 15647149
- Settles, I. H. (2004). When multiple identities interfere: The role of identity centrality. *Personality and Social Psychology Bulletin, 30*, 487–500. doi: 10.1177/0146167203261885

- Settles, I.H. (2006). Use of an intersectional framework to understand Black women's racial and gender identities. *Sex Roles, 54*, 589-601. doi: 10.1007/s11199-006-9029-8
- Settles, I.H., Navarrete, C., Pagano, S., Abdou, C., & Sidanius, J. (2010). Racial identity and depression among African American women. *Cultural Diversity and Ethnic Minority Psychology, 16*(2), 248-255. doi: 10.1037/a0016442
- Settles, I., O'Connor, R., & Yap, S. (2016). Climate perceptions and identity interference among undergraduate women in STEM: The protective role of gender identity. *Psychology of Women Quarterly, 40*(4), 488-503. doi: 10.1177/0361684316655806
- Shahid, N., Nelson, T., & Cardemill, E. (2018). Lift every voice: Exploring the stressors and coping mechanisms of Black college women attending predominantly White institutions. *Journal of Black Psychology, 44*(1), 3-24. doi: 10.1177/0095798417732415
- Shapiro, J., & Williams, A. (2012). The role of stereotype threats in undermining girls' and women's performance and interest in STEM fields. *New York, 66*(3-4), 175-183. doi: 10.1007/s11199-011-0051-0
- Shelton, J. N., & Sellers, R. M. (2000). Situational stability and variability in African American racial identity. *Journal of Black Psychology, 26*(1), 27-50. doi: 10.1177/0095798400026001002
- Shorter-Gooden, K., & Washington, N. C. (1996). Young, Black, and female: The challenge of weaving an identity. *Journal of Adolescence, 19*, 465-475. doi:10.1006/jado.1996.0044
- Shrogen, K., & Shaw, L. (2016). The role of autonomy, self-realization, and psychological empowerment in predicting outcomes for youth with disabilities. *Remedial and Special Education, 37*(1), 55-62. doi: 10.1177/0741932515585003

- Skinner, E., Kindermann, T., & Furrer, C. (2009). A motivational perspective on engagement and disaffection: Conceptualization and assessment of children's behavioral and emotional participation in academic activities in the classroom. *Educational and Psychological Management, 69*(3), 493-525. doi: 10.1177/0013164408323233
- Skinner, E., Wellborn, J., & Connell, J. (1990). What it takes to do well in school and whether I've got it: A process model of perceived control and children's engagement and achievement in school. *Journal of Educational Psychology, 82*(1), 22-32. doi: 10.1037/0022-0663.82.1.22
- Smalls, C., & Cooper, S. (2012). Racial group regard, barrier socialization, and African American adolescents' engagement: Patterns and processes by gender. *Journal of Adolescence, 35*, 887-897. doi: 10.1016/j.adolescence.2011.12.007
- Smalls, C., White, R., Chavous, T., & Sellers, R. (2007). Racial ideological beliefs and racial discrimination experiences as predictors of academic engagement among African American adolescents. *Journal of Black Psychology, 33*, 299-330. doi: 10.1177/0095798407302541
- Smith, W., Allen, W., & Danley, L. (2007). "Assume the position...you fit the description": Psychosocial experiences and racial battle fatigue among African American male college students. *American Behavioral Scientist, 51*(4), 551-578. doi: 10.1177/0002764207307742
- Smith, S., & Watson, J. (Eds.). (1992). *Decolonizing the subject: The politics of gender in women's autobiography*. Minneapolis: University of Minnesota Press.

- Solorzano, D., Ceja, M., & Yosso, T. (2000). Critical race theory, racial microaggressions, and campus racial climate: The experiences of African American college students. *Journal of Negro Education, 69*, 60-73.
- Spencer, M. B., Noll, E., Stoltzfus, J., & Harpalani, V. (2001). Identity and school adjustment: Revisiting the “acting white” assumption. *Educational Psychologist, 36*, 21-30. doi: 10.1207/S15326985EP3601_3
- Starr, C. R., & Zurbriggen, E. L. (2017). Sandra Nem’s gender schema theory after 34 years: A review of its reach and impact. *Sex Roles, 76*(9-10), 566-578. doi: 10.1007/s11199-016-0591-4
- Steele, C.M. (1997). A threat in the air: How stereotypes shape intellectual identity and performance. *American Psychologist, 52*, 613-629. doi: 10.1037/0003-066.x.52.6.613
- Steele, C.M., & Aronson, J. (1995). Stereotype threat and the intellectual performance of African Americans. *Journal of Personality and Social Psychology, 69*, 797-811. doi: 10.1037/0022-3514.69.5.797
- Stephens, D. P., & Phillips, L. D. (2003). Freaks, gold diggers, divas and dykes: The sociopolitical development of adolescent African American women’s sexual scripts. *Sexuality & Culture, 7*, 3-49. doi: 10.1007/BF03159848
- Sterling, D. (1984). *We Are Your Sisters: Black Women in the Nineteenth Century*. New York, NY: Norton & Company.
- Stewart, D. (2008). Being all of me: Black students negotiating multiple identities. *The Journal of Higher Education, 79*(2), 183-207. doi: 10.1353/jhe.2008.0007
- Strayhorn, T. (2013). Measuring race and gender differences in undergraduate students’ perceptions of campus climate and intentions to leave college: An analysis in Black and

- White. *Journal of Student Affairs Research and Practice*, 50(2), 115-132. doi: 10.1515/jsarp-2013-0010
- Stryker, S., & Serpe, R. T. (1982). Commitment, identity salience, and role behavior: Theory and research example. In W. Ickes & E. S. Knowles (Eds.), *Personality, roles, and social behavior* (pp. 199–218). New York: Springer-Verlag.
- Stryker, S., & Serpe, R. T. (1994). Identity salience and psychological centrality: Equivalent, overlapping, or complementary concepts? *Social Psychology Quarterly*, 57, 16-35.
- Sue, D., Capodilupo, C., & Holder, A. (2008). Racial microaggressions in the life experiences of Black Americans. *Professional Psychology*, 39(3), 329-336. doi: 10.1037/0735-7028.39.3.329
- Suizzo, M., Robinson, C., & Pahlke, E. (2008). African American mothers' socialization beliefs and goals with young children. *Journal of Family Issues*, 29(3), 287-313. doi: 10.1177/0192513x07308368
- Swanson, D., Spencer, M., Dell'Angelo, T., Harpalani, V., & Spencer, T. (2002). Identity processes and the positive youth development of African Americans: An explanatory framework. *New Directions for Youth Development*, 95, 73-99. doi: 10.1002/yd.17
- Syed, M., & Azmitia, M. (2008). A narrative approach to ethnic identity in emerging adulthood: Bringing life to the identity status model. *Developmental Psychology*, 44(4), 1012-1027. doi: 10.1037/0012-1649.44.4.1012
- Syed, M., & Azmitia, M. (2009). Longitudinal trajectories of ethnic identity during the college years. *Journal of Research on Adolescence*, 19, 601-624. doi: 10.1111/j.1532-7795.2009.00609

- Syed, M., & Azmitia, M. (2010). Narrative and ethnic identity exploration: A longitudinal account of emerging adults' ethnicity-related experiences. *Developmental Psychology*, 46(1), 208-219. doi: 10.1037/a0017825
- Syed, M., Azmitia, M., & Phinney, J. (2007). Stability and change in ethnic identity among Latino emerging adults in two contexts. *Identity: An International Journal of Theory and Research*, 7, 155-178. doi: 10.1080/15283480701326117
- Szymanski, D., & Lewis, J. (2016). Gendered racism, coping, identity centrality, and African American college women's psychological distress. *Psychology of Women Quarterly*, 40(2), 229-243. doi: 10.1177/0361684315616113
- Szymanski, D. M., & Stewart, D. (2010). Racism and sexism as correlates of African American women's psychological distress. *Sex Roles*, 63, 226–238. doi:10.1007/s11199-010-9788-0
- Tafjel, H., & Turner, J. (1986). The social identity theory of intergroup behavior. In S. Worchel & W. Austin (Eds.), *Psychology of Intergroup Relations* (pp. 7-24). Chicago: Nelson-Hall.
- The Journal of Black in Higher Education. (2016). Black women students far outnumber Black men at the nation's highest-ranked universities. Retrieved from http://www.jbhe.com/news_views/51_gendergap_universities.html
- Thomas, O., Davidson, W., & McAdoo, H. (2008). An evaluation study of the Young Empowered Sisters (YES!) Program: Promoting cultural assets among African American adolescent girls through a culturally relevant school-based intervention. *Journal of Black Psychology*, 34(3), 281-308. doi: 10.1177/0095798408314136

- Thomas, A., Hacker, J., & Hoxha, D. (2011). Gendered racial identity of Black young women. *Sex Roles, 64*, 630-542. doi: 10.1007/s11199-011-9939-y
- Thomas, A., Hoxha, D., & Hacker, J. (2012). Contextual influences on gendered racial identity development of African American young women. *Journal of Black Psychology, 39*(1), 88-101. doi: 10.1177/0095798412454679
- Thomas, A.J., & King, C.T. (2007). Gendered racial socialization of African American mothers and daughters. *The Family Journal, 15*(2), 137-142. doi: 10.1177/1066480706297853
- Thomas, D., Love, K., Roan-Belle, C., Tyler, K., Brown, C., & Garriott, P. (2009). Self-efficacy, motivation, and academic adjustment among African American women attending institutions of higher education. *The Journal of Negro Education, 78*(2), 159-171.
- Thomas, A. J., Witherspoon, K. M., & Speight, S. L. (2008). Gendered racism, psychological distress, and coping styles of African American women. *Cultural Diversity and Ethnic Minority Psychology, 14*, 307–314. doi:10.1037/1099-9809.14.4.307
- Titcomb, C. (2017). Key events in Black Higher Education. *Journal of Blacks in Higher Education*. Retrieved from <https://www.jbhe.com/chronology/>
- Torres, K. (2009). ‘Culture shock’: Black students account for their distinctiveness at an elite college. *Ethnic and Racial Studies, 32*(5), 883-905. doi: 10.1080/01419870701710914
- Torres-Harding, S., Andrade, A., & Romero Diaz, C. (2012). The Racial Microaggressions Scale (RMAS): A new scale to measure experiences of racial microaggressions in people of color. *Cultural Diversity and Ethnic Minority Psychology, 18*(2), 153-164. doi: 10.1037/a0027658

- Tribble, B., Allen, S., Hart, J., Francois, T., & Smith-Bynum, M. (2019). "No [right] way to be a Black woman": Exploring gendered racial socialization among Black women. *Psychology of Women Quarterly*, 1-17. doi: 10.1177/0361684318825439
- Turnage, B. F. (2004). Influences on adolescent African American females' global self-esteem: Body image and ethnic identity. *Journal of Ethnic and Cultural Diversity in Social Work*, 13, 27-45. doi: 10.1300/j051v13n04_02
- Turner, C. (2002). Women of color in academe: Living with multiple marginality. *The Journal of Higher Education*, 73(1), 74-93.
- Turner, J.C., Oakes, P.J., Haslam, A., & McGarty, C. (1994). Self and collective: Cognition and social context. *Personality and Social Psychology Bulletin*, 20, 454-463. doi: 10.1177/0146167294205002
- Umana-Taylor, A., Quinana, S., Lee, R., Cross Jr., W., Rivas-Drake, D., Schwartz, S., Syed, M., et al...(2014). Ethnic and racial identity during adolescence and into young adulthood: An integrated conceptualization. *Child Development*, 85(1), 21-39. doi: 10.1111/cdev.12196
- Upton, R., Panter, A., Daye, C., Allen, W., & Wightman, L. (2012). Examining the relationship among self-reported assertiveness, perceived discrimination, and college environment in a national sample of Black women law students. *Psychology of Women Quarterly*, 36(1), 54-65. doi: 10.1177/0361684311433283
- Utsey, S. O., Ponterotto, J. G., Reynolds, A. L., & Cancelli, A. A. (2000). Racial discrimination, coping, life satisfaction, and self-esteem among African Americans. *Journal of Counseling and Development*, 78, 72-80. doi: 10.1002/j.1556-6676.2000.tb02562

- Van Camp, D., Barden, J., & Sloan, L. (2010). Predictors of Black students' race-related reasons for choosing an HBCU and intentions to engage in racial identity-relevant behaviors. *Journal of Black Psychology, 36*(2), 226-250. doi: 10.1177/0095798409344082
- Vermunt, J.K., & Magidson, J. (2016). *Technical guide for Latent GOLD 5.1: Basic, advanced, and syntax*. Belmont, MA: Statistical Innovations Inc.
- Vespa, J. (2009). Gender ideology construction: A life course and intersectional approach. *Gender and Society, 23*(3), 363-387. doi: 01.1177/0891243209337507
- Vue, R., Haslerig, S., & Allen, W. (2017). Affirming race, diversity, and equity through Black and Latinx students' lived experiences. *American Educational Research Journal, 54*(5), 868-903. doi: 10.3102/0002831217708550
- Wagner, I., & Wodak, R. (2006). Performing success: Identifying strategies of self-presentation in women's biographical narratives. *Discourse & Society, 17*(3), 385-41. doi: 10.1177/0957926506060251
- Walt, P. (2011). In search of an authentic African American and/or Black identity: Perspectives of first-generation U.S.-Born Africans attending a predominantly White institution. *Journal of Black Studies, 42*(3), 479-503. doi: 10.1177/0021934710378748
- Walton, G. M., & Cohen, G. L. (2007). A question of belonging: Race, social fit, and achievement. *Journal of Personality and Social Psychology, 92*, 82-96. doi:10.1037/0022-3514.92.1.82
- Ward, J. V. (1996). Raising resisters: The role of truth telling in the psychological development of African American girls. In B. J. Ross Leadbeater & N. Way (Eds.), *Urban girls: Resisting stereotypes, creating identities*. New York, NY: New York University Press.

- Wehmeyer, M.L. (2003). A functional theory of self-determination: Definition and categorization. In M. L. Wehmeyer, B. Abery, D. E. Mithaug, & R. Stancliffe (Eds.), *Theory in self-determination: Foundations for educational practice* (pp. 174-181). Springfield, IL: Charles C. Thomas.
- Wehmeyer, M.L. (2006). Self-determination and individuals with severe disabilities: Re-examining meanings and misinterpretations. *Research and Practice for Persons with Severe Disabilities, 30*, 113-120. doi: 10.2511/rspd.30.3.113
- Weigold, I., Weigold, A., Russell, E., & Drakeford, N. (2014). Examination of the psychometric properties of the Personal Growth Initiative Scale-II in African American college students. *Assessment, 21*(6), 754-764. doi: 10.1177/1073191114524019
- West, L. M., Donovan, R. A., & Roemer, L. (2010). Coping with racism: What works and doesn't for Black women? *Journal of Black Psychology, 36*, 331-349.
- Whaley, A. (2018). Advances in stereotype threat research on African Americans: Continuing challenges to the validity of its role in the achievement gap. *Social Psychology of Education, 21*, 111-137. doi: 10.1007/s11218-017-9415-9
- White, A., Strube, M., & Fisher, S. (1998). A Black feminist model of rape myth acceptance. *Psychology of Women Quarterly, 22*, 157-173. doi: 10.1111/j.147-6402.1998.tb00148
- Williams, D., & Mohammed, S. (2013). Racism and health I: Pathways and scientific evidence. *American Behavioral Scientist, 57*, 1152-1173.
- Williams, C., & Wiggins, M. (2010). Womanist spirituality as a response to the racism-sexism double bind in African American women. *Counseling and Values, 54*(2), 175.

- Wilson, A., & Leaper, C. (2016). Bridging multidimensional models of ethnic-racial and gender identity among ethnically diverse emerging adults. *Journal of Youth and Adolescence*, 45(8), 1614-1637. doi: 10.1007/s10964-015-0323-z
- Winifred, B. (2007). *The trouble between us: An uneasy history of White and Black women in the feminist movement*. New York, NY: Oxford University Press. doi: 10.1093/acprof:oso/9780195179040.001.0001
- Winkle-Wagner, R. (2009). *The unchosen me: Race, gender, and identity among Black women in college*. Baltimore, MD: John Hopkins University Press.
- Winkle-Wagner, R. (2015). Having their lives narrowed down? The state of Black women's college success. *Review of Educational Research*, 85(2), 171-204. doi: 10.3102/0034654314551065
- Wood, W., & Eagly, A. (2015). Two traditions of research on gender identity. *Sex Roles*, 1-13. doi: 10.1007/s11199-015-0480-2
- Woods, K. C., Buchanan, N. T., & Settles, I. H. (2009). Sexual harassment across the color line: Experiences and outcomes of cross versus intraracial sexual harassment among black women. *Cultural Diversity and Ethnic Minority Psychology*, 15, 67-76. doi:10.1037/a0013541
- Yenika-Agbaw, V., & Jesus, A. (Eds.) (2011). *Race, women of color, and the state university system: Critical reflections*. New York: University Press of America.
- Yip, T., Sellers, R., & Seaton, E. (2006). African American racial identity across the lifespan: Identity status, identity content, and depressive symptoms. *Child Development*, 77(5), 1504-1517.

Appendix A

Demographic Measures

What is your gender?

- Man
- Woman
- Preferred term not listed (please specify): _____

Which of these terms best describes your racial background?

- African American/Black (Non-Hispanic)
- American Indian/Native Alaskan
- Asian/Asian-American
- Biracial or Multiracial (please specify) _____
- Caucasian/White (Non-Hispanic)
- Hispanic/Latino/a
- Pacific Islander/Native Hawaiian
- Preferred term not listed (please specify) _____

Which of these terms best describes your ethnic background?

- African American
- African (country of origin) _____
- Asian Indian
- Biracial or Multiracial (please specify) _____
- Caribbean/Caribbean American (country of origin) _____
- Chinese/Chinese American
- European/European American (country of origin) _____
- Filipino/Filipino American
- Guamanian or Chamorro
- Hispanic/Latino/a (country of origin) _____
- Japanese/Japanese American
- Korean/Korean American
- Native Hawaiian
- Other Asian (country of origin) _____
- Other Pacific Islander (country of origin) _____
- Samoan/ Samoan American
- Vietnamese/Vietnamese American
- Preferred term not listed (Please specify) _____

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

- poor
- working class
- lower middle class
- middle class
- upper middle class
- upper class

How would you describe your sexual orientation?

- Heterosexual
- Gay/lesbian
- Bisexual
- Preferred term not listed (please specify): _____

What is the best estimate of your family household's total income in [YEAR]?

- Below \$4,999
- \$5,000-\$14,999
- \$15,000-\$24,999
- \$25,000-\$34,999
- \$35,000-\$44,999
- \$45,000-\$54,999
- \$55,000-\$64,999
- \$65,000-\$74,999
- \$75,000-\$84,999
- \$85,000-\$94,999
- \$95,000-\$104,999
- \$105,000-\$114,999
- \$115,000-\$124,999
- \$125,000-\$134,999
- \$135,000-\$144,999
- \$145,000-\$154,999
- \$155,000-\$164,999
- \$165,000-\$174,999
- \$175,000 - \$184,999
- \$185,000 - \$194,999
- \$195,000 - \$204,999
- \$205,000 or more
- Don't Know

Your hometown would best be described as:

- Rural
- Small Town or City
- Suburban
- Urban or Large Metropolitan Area

What was the racial composition of the neighborhood in which you lived the longest period of your youth?

- Less than 20% of my racial/ethnic background
- From 20%-40% of my racial/ethnic background
- From 41%-60% of my racial/ethnic background
- From 61%-80% of my racial/ethnic background
- From 81%-100% of my racial/ethnic background

What was the racial composition of the high school from which you graduated?

- Less than 20% of my racial/ethnic background
- From 20%-40% of my racial/ethnic background
- From 41%-60% of my racial/ethnic background
- From 61%-80% of my racial/ethnic background
- From 81%-100% of my racial/ethnic background

Appendix B

Identity Centrality Measures

Racial Centrality

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

1 = strongly disagree to 7 = strongly agree

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

Gender Centrality

People may think about their gender identity in different ways. Please respond how much you agree or disagree with the following statements.

1 = strongly disagree to 5 = strongly agree

1. Overall, my gender has very little to do with how I feel about myself. (RS)
 2. In general, my gender is an important part of my self-image.
 3. Being a member of my gender group is an important reflection of who I am.
 4. I have a strong sense of belonging to others in my gender group.
-

Note. RS = reverse-scored item.

Appendix C

Identity Exploration & Commitment Measures

Racial Identity Exploration

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

1 = strongly disagree, 2 = somewhat disagree, 3 = somewhat agree, 4 = strongly agree

Exploration

1. I have spent time trying to find out more about my own racial/ethnic group, such as history, traditions, and customs.
2. I think a lot about how much life will be affected by my racial/ethnic group membership.
3. In order to learn more about my racial/ethnic background, I have often talked to other people about my ethnic group.
4. I really have not spent much time trying to learn more about the culture and identity of my racial/ethnic group. (RS)

Commitment

1. I have a clear sense of my racial/ethnic background and what it means to me.
2. I am not very clear about the role of race/ethnicity in my life. (RS)

Note. RS = reverse-scored item.

Gender Identity Exploration

People may think about their gender identity in different ways. Please respond how much you agree or disagree with the following statements.

1 = strongly disagree, 2 = somewhat disagree, 3 = somewhat agree, 4 = strongly agree

Exploration

1. I think a lot about how my life will be affected by my gender.
2. I have spent time trying to find out more about issues related to gender and its role in society, such as reading about gender issues in history, politics, or the news.
3. In order to learn more, I have talked to other people about gender issues.
4. I really have not spent much time trying to learn more about gender issues. (RS)

Commitment

1. I have a clear sense of what my gender membership means to me.
2. I am not very clear about the role of gender in my life. (RS)

Note. RS = reverse-scored item.

Appendix D

Interpersonal Discrimination Measures

Daily Hassles

The next questions ask you to think about race and gender as it relates to experiences that some people have in their daily lives.

Please indicate whether you have experienced each event at least once in the past year in your campus community—because of your race, your gender, or both—by checking the box or boxes.

You can check more than one box for each event if it applies to you. How often have you experienced...

1 = because of your race, 2 = because of your gender, 3 = because of both your race and gender, 4 = happened for some other reason, 5 = did not happen

1. Being ignored or overlooked
 2. Being treated rudely or disrespectfully
 3. Being accused of something or treated suspiciously
 4. Others reacting to you as if they were afraid or intimidated
 5. Being observed or followed while in public places
 6. Your ideas or opinions minimized, ignored, or devalued
 7. Overhearing or being told an offensive joke or comment
 8. Being insulted, called a name, or harassed
 9. Others expecting your work to be inferior
 10. Not being taken seriously
 11. Being left out of conversations or activities
 12. Being treated in an overly friendly or superficial way
 13. Other people avoiding you
 14. Being stared at by strangers
 15. Being laughed at, made fun of, or taunted
-

Appendix E

Classroom Inferiorization Scale-Race

Think about your own experiences in your classes, particularly those related to your major or intended major. In your classes, how often...

1 = almost never, 2 = not very often, 3 = sometimes, 4 = fairly often, 5 = very often

1. Do professors call on you less than others because of your race/ethnicity?
 2. Have you heard your racial/ethnic group referred to in a derogatory way?
 3. Have fears of representing your racial/ethnic group in a negative way discouraged you from participating in class?
 4. Did you feel that others were taking your opinion as speaking for all members of your racial/ethnic group?
 5. Do professors grade or evaluate your work more harshly than others because of your race/ethnicity?
 6. Do professors grade your assignments less critically than others because of your race/ethnicity?
-

Classroom Inferiorization Scale-Gender

Think about your own experiences in your classes, particularly those related to your major or intended major. In your classes, how often...

1 = almost never, 2 = not very often, 3 = sometimes, 4 = fairly often, 5 = very often

1. Do professors call on you less than others because of your gender?
 2. Have you heard your gender group referred to in a derogatory way?
 3. Have fears of representing your gender group in a negative way discouraged you from participating in class?
 4. Did you feel that others were taking your opinion as speaking for all members of your gender group?
 5. Do professors grade or evaluate your work more harshly than others because of your gender?
 6. Do professors grade your assignments less critically than others because of your gender?
-

Appendix F

Indicators of College Adjustment

Academic Engagement

Please think about your classes over the last academic year and respond how true each statement is of you in general.

1 = not true of me at all to 5 = very true of me

Academic Curiosity

1. I participate when we discuss new material.
2. The first time professors talk about a new topic, I listen very carefully.
3. My mind wanders when my professor starts a new topic. (RS)
4. I never seem to pay attention when we begin a new subject. (RS)
5. When reading for class, I ask myself questions to make sure I understand what it is about.
6. I talk with people outside of class about what I am learning in my classes.
7. I often read or do assignments to learn more about topics from my classes.

Academic Persistence

1. I work hard when we start something new in class.
2. If I don't understand something I read for class, I go back and read it over again.
3. I study at home even when I don't have a test.
4. When I run into a difficult question, I try even harder.
5. If I do badly on a test or assignment, I work harder next time.
6. When I come to a problem I can't solve right away, I tend to give up. (RS)
7. If I can't get a problem right the first time, I just keep trying.

Note. No Time 1 (Fall) data for this measure. RS = reverse-scored item.

Appendix G

Academic College Competence

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

1 = much less, 2 = somewhat less, 3 = about the same, 4 = somewhat more, 5 = much more

1. Do my schoolwork quickly and efficiently
 2. Write good papers for my courses
 3. Do well in advanced math and science
 4. Logical, analytic thinking
 5. Develop new skills and abilities
 6. Do very well at my coursework
-

Appendix H

Psychological Well-Being

The questions below relate to how people think about themselves generally. Select the number that best describes your agreement or disagreement with each statement.

1 = strongly disagree, 2 = sort of disagree, 3 = disagree a little, 4 = agree a little, 5 = sort of agree, 6 = strongly agree

Autonomy	I am not afraid to voice my opinions, even when they are in opposition to the opinions of most people	My decisions are not usually influenced by what everyone else is doing	I tend to worry about what other people think of me (RS)	I often change my mind about decisions if my friends or family disagree (RS)
Environmental Mastery	In general, I feel I am in charge of my life	The demands of everyday life often get me down (RS)	I am quite good at managing the responsibilities of my daily life	I often feel overwhelmed by my responsibilities (RS)
Self-Acceptance	In general, I feel confident and positive about myself	If I could, there are many things about myself that I would change (RS)	I like most aspects of my personality	For the most part, I am proud of who I am

Note. RS = reverse-scored item.

Appendix I

Institutional demographics at commencement of the study (Fall 2012)

	College A	College B	College C	College D	College E
Undergraduate Enrollment	29,000	39,000	6,000	19,000	20,000
% African American	4.4%	7.2%	1.3%	12.2%	23.2%
% European American	63.5%	79.4%	84.4%	71.6%	49.85%
Acceptance Rate*	28.6%	65.7%	75.5%	84%	77.3%
Number of Black Women in Sample from Respective Institution	171 (29%)	278 (47%)	7 (1.2%)	114 (19%)	17 (3%)

Note. *Acceptance rate based on most recent academic year available (2016) for each institution; provided to give general indication of college selectivity.

Appendix J

Representation of survey completion by wave

	Year 1 (2012-2013)		Year 2 (2013-2014)		Year 3 (2014-2015)		Year 4 (2015-2016)	Year 5 (2016-2017)
	Fall	Spring	Fall	Spring	Fall	Spring	Spring	Spring
	Cohort 1	T1	T2		W3		T3	W5
Cohort 2			T1	T2		W3	T3	W5
Cohort 3					T1	T2	W3	T3

Note. T = Time. Time 1 = Fall of women's first year across cohort. Time 2 = Spring of women's first year across cohort. Time 3 = Spring of women's junior year across cohort. Time 1, 2, and 3 corresponded to Wave 1, 2, and 4 in the CASIS data collection.

Appendix K

Demographic characteristics of full sample of Black women at Time 1

Category	N	
Ethnicity	African American	441 (88%)
	African	28 (6%)
	Caribbean American	14 (3%)
	Biracial	7 (2%)
	Other	11 (2%)
Sexual Orientation	Heterosexual	470 (94%)
	Gay/Lesbian	3 (0.6%)
	Bisexual	20 (4%)
	Other	6 (1%)
Hometown Profiles	Urban/Metropolitan	230 (46%)
	Suburban	136 (27%)
	Small Town/City	117 (23%)
	Rural	15 (3%)
Racial Composition of Home Neighborhood	< 20% Black	93 (19%)
	20-40% Black	81 (16%)
	41-60% Black	68 (14%)
	61-80% Black	70 (14%)
	81-100% Black	188 (38)
Household Income	Below 5K	19 (4%)
	5K-45K	181 (36%)
	45K-75K	111 (22%)
	75K-105K	74 (15%)
	105K-135K	29 (6%)
	135K-165K	8 (2%)
	165K-205K	9 (2%)
	205K+	17 (3%)
	Don't know	34 (7%)

Appendix L

Means and standard deviations of primary study variables over time

	Time 1 M (SD) (n = 501)	Time 2 M (SD) (n = 325)	Time 3 M (SD) (n = 235)
Racial Centrality	5.18 (1.38)	5.15 (1.38)	5.50 (1.39)
Racial Exploration	3.01 (0.68)	3.06 (0.66)	3.23 (0.62)
Racial Commitment	3.21 (0.72)	3.20 (0.69)	3.35 (0.66)
Gender Centrality	3.44 (0.75)	3.65 (0.98)	2.67 (1.17)
Gender Exploration	2.54 (0.75)	2.67 (0.76)	2.83 (0.69)
Gender Commitment	3.19 (0.67)	3.17 (0.69)	3.23 (0.62)
Classroom Racial Inferiorization		3.20 (0.72)	3.17 (0.71)
Classroom Gender Inferiorization		3.36 (0.66)	2.55 (0.74)
Academic Competence		2.86 (0.68)	3.17 (0.66)
Academic Curiosity		3.17 (0.67)	3.29 (0.60)
Academic Persistence		2.13 (0.83)	2.33 (0.83)
Autonomy		3.84 (0.72)	3.81 (0.71)
Environmental Mastery		3.94 (0.87)	3.89 (0.88)
Self-Acceptance		4.42 (1.00)	4.67 (0.94)

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

Appendix M

Frequency counts for racial hassles over time

	Time 1	Time 2	Time 3
	(n = 501)	(n = 325)	(n = 235)
0	93 (19%)	118 (36%)	57 (24%)
1	32 (6%)	30 (9%)	12 (5%)
2	47 (9%)	31 (10%)	20 (9%)
3	56 (11%)	23 (7%)	20 (9%)
4	41 (8%)	25 (7%)	18 (7%)
5	49 (10%)	24 (7%)	25 (11%)
6	42 (8%)	17 (5%)	16 (7%)
7	30 (6%)	6 (2%)	10 (4%)
8	17 (3%)	7 (2%)	9 (4%)
9	17 (3%)	9 (3%)	10 (4%)
10	13 (3%)	9 (3%)	5 (2%)
11	14 (3%)	9 (1%)	8 (3%)
12	9 (2%)	2 (1%)	4 (2%)
13	8 (2%)	4 (1%)	5 (2%)
14	16 (3%)	13 (3%)	9 (4%)
15	17 (3%)	0	7 (3%)

Appendix N

Frequency counts for gender hassles over time

	Time 1	Time 2	Time 3
	(n = 501)	(n = 325)	(n = 235)
0	266 (53)	209 (64%)	144 (61%)
1	81 (16%)	37 (11%)	28 (12%)
2	60 (12%)	29 (9%)	25 (11%)
3	37 (7%)	16 (5%)	10 (4%)
4	16 (3%)	7 (2%)	11 (5%)
5	15 (3%)	10 (3%)	1 (0.4%)
6	9 (2%)	4 (1%)	4 (2%)
7	5 (1%)	5 (2%)	1 (0.4%)
8	6 (1%)	3 (1%)	3 (1%)
9	2 (0.4%)	0	3 (1%)
10	2 (0.4%)	2 (1%)	0
11	2 (0.4%)	3 (1%)	2 (1%)
12	0	0	1 (0.4%)
13	0	0	1 (0.4%)
14	0	0	1 (0.4%)
15	0	0	1 (0.4%)

Appendix O

Frequency counts for race and gender hassles over time

	Time 1	Time 2	Time 3
	(n = 501)	(n = 325)	(n = 235)
0	167 (33%)	123 (38%)	60 (26%)
1	63 (13%)	35 (11%)	23 (10%)
2	44 (9%)	16 (5%)	21 (9%)
3	32 (6%)	28 (9%)	14 (6%)
4	29 (6%)	12 (4%)	21 (9%)
5	41 (8%)	15 (5%)	10 (4%)
6	22 (4%)	14 (3%)	12 (5%)
7	23 (5%)	16 (5%)	10 (4%)
8	26 (5%)	12 (4%)	10 (4%)
9	3 (0.6%)	10 (3%)	9 (4%)
10	10 (2%)	5 (2%)	9 (4%)
11	6 (1%)	5 (2%)	3 (1%)
12	10 (2%)	3 (1%)	5 (2%)
13	4 (0.8%)	2 (1%)	6 (3%)
14	4 (0.8%)	10 (3%)	6 (3%)
15	17 (3%)	19 (6%)	16 (7%)