

UCLA

UCLA Electronic Theses and Dissertations

Title

What's the Use of Race? Investigating the Concept of Race in Higher Education

Permalink

<https://escholarship.org/uc/item/4vd3p81v>

Author

Johnston, Marc Phillip

Publication Date

2013

Peer reviewed|Thesis/dissertation

UNIVERSITY OF CALIFORNIA

Los Angeles

What's the Use of Race?

Investigating the Concept of Race in Higher Education

A dissertation submitted in partial satisfaction of the
requirements for the degree Doctor of Philosophy
in Education

by

Marc Phillip Johnston

2013

© Copyright by
Marc Phillip Johnston
2013

ABSTRACT OF THE DISSERTATION

What's the Use of Race?

Investigating the Concept of Race in Higher Education

by

Marc Phillip Johnston

Education

University of California, Los Angeles, 2013

Professor Jane E. Pizzolato, Chair

What's the use of race and does race matter? These two questions serve as the foundation for this dissertation comprised of three studies examining: (1) how scholars *use* race in their research and how their decisions matter for the way race is interpreted; (2) how students make meaning of race (as a social construct) during a time when genetic technologies are increasingly being *used* to identify one's racial ancestry; and (3) how *useful* race seems to college students and their sense of identity. Specifically, Study 1 examines race in higher education scholarship through a systematic review of three peer-reviewed journals over five recent years. Content analysis of 261 race-related research articles on college students reveals multiple racial applications within authors' framing, operationalizing, and interpreting of race, as well as inconsistencies that may send implicit and explicit messages reinforcing the essentialist nature of race. Study 2 explores meaning making of race among traditionally-aged college students ($n=39$) in a purportedly "post-racial" and "post-genomic" (i.e., post-Human Genome Project) era. Constructivist grounded theory methods allowed for an emergent

understanding of how students' experiencing of and learning about race contribute to their meanings, which serve as lenses in which to see race mattering on multiple levels and within various contexts. Study 3 examines the constructs of "race," "ethnicity," and "culture" and their relative importance within the identities of Asian American college students. Exploratory qualitative interviews with a sample ($n=52$) of Asian American college students across two institutions with varying demographic profiles allowed for the development of a Multidimensional Model of Asian American Identity (M^2A^2I) that outlines how race and ethnicity may function differently as Asian American students encounter contexts that force them to answer various identity-based questions. Overall, findings from the three studies offer implications for improving race-related research and student services in higher education. Specifically, recommendations are made for reducing racial essentialism and for better aligning research and practice with students' ideas about race and identity within changing sociopolitical contexts.

The dissertation for Marc Phillip Johnston is approved.

Walter R. Allen

Mitchell J. Chang

Yuen J. Huo

Jane E. Pizzolato, Committee Chair

University of California, Los Angeles

2013

Dedicated to my family, especially my nieces and nephews. Dream BIG.

TABLE OF CONTENTS

ABSTRACT OF THE DISSERTATION.....	ii
LIST OF TABLES AND FIGURES.....	viii
ACKNOWLEDGEMENTS.....	ix
VITA.....	xiii
CHAPTER 1: INVESTIGATING THE CONCEPT OF RACE IN HIGHER EDUCATION	1
Introduction.....	1
Statement of the Problem.....	4
Research Focus and Rationale.....	6
Purpose and Scope of the Research.....	7
Key Terms and Language.....	10
Significance.....	11
CHAPTER 2: RACIALIZED RESEARCH IN HIGHER EDUCATION: EXAMINING HOW SCHOLARS APPLY RACE AND ETHNICITY IN RESEARCH ON COLLEGE STUDENTS	13
Introduction.....	13
Literature Review.....	14
Race and Higher Education Research.....	14
Approaches to Racial Research.....	16
The Race Debate(s).....	18
Research Focus.....	20
Methods.....	20
Content.....	21
Procedures.....	22
Limitations.....	25
Findings.....	26
Applications of Race and Ethnicity.....	26
Interpreting Racial Applications.....	33
Discussion.....	39
Implications.....	43
Conclusion.....	44
CHAPTER 3: WHEN RACE MATTERS: COLLEGE STUDENTS' MEANINGS OF RACE IN A POST-RACIAL AND POST-GENOMIC ERA.....	46
Introduction.....	46
Background and Literature Review.....	48
The Problematic Persistence of Biological Race.....	49
The Benefits of Racial Diversity.....	52
Research Focus.....	54
Conceptual Framework.....	55
Methods.....	57
Sample.....	57
Data Collection.....	58
Data Analysis.....	60
Findings.....	61
Meanings of Race are Varied.....	62

How Meanings Developed	63
Reasoning Through Race Matterng	69
Discussion.....	75
Limitations and Areas for Future Research	78
Implications	80
Conclusion	81
CHAPTER 4: THE UTILITY OF RACE AND ETHNICITY IN THE MULTIDIMENSIONAL IDENTITIES OF ASIAN AMERICAN COLLEGE STUDENTS	83
Introduction	83
Literature Review	86
Asian Americans and Stereotypes.....	87
Operationalizing Race and Ethnicity	89
Asian Americans and Group Dynamics	90
Research Focus.....	92
Conceptual Framework.....	93
Methods	95
Sample.....	96
Data Collection.....	98
Data Analysis	99
Findings	101
Race and Ethnicity are Useful Constructs	101
Contexts Influence Utilization of Race and Ethnicity in Identity Claims	104
The Multidimensionality of Race and Ethnicity for Asian Americans	109
Discussion.....	112
Limitations and Areas for Future Research	117
Implications & Conclusion.....	118
CHAPTER 5: CONCLUSION.....	122
Introduction	122
Connecting the Three Studies	124
Biological Race Thinking Persists.....	124
The Influence and Importance of Scholarly Authority	125
Contexts Count.....	127
The Power of Language.....	129
Joint Implications	131
Areas for Future Research.....	134
Conclusion: Race is Complex.....	135
Appendices	137
Appendix A: Study 2 Interview Protocol.....	137
Appendix B: MAP Interview Protocol	139
References	140

LIST OF TABLES AND FIGURES

Tables

Table 1: Distribution of Research Articles on Students Using Race and/or Ethnicity	23
Table 2: General Applications of Race	27
Table 3: Operationalizations of Race as an Analytic Variable	30
Table 4: Interpretations of Race and/or Ethnicity.....	33
Table 5: Transparency of Collecting Racial/Ethnic Data for Enumeration.....	37
Table 6: Usage of Racial and Ethnic Terminology.....	38
Table 7: Study 2 Cited Participants with Background Information.....	58
Table 8: Meanings of Race.....	62
Table 9: Study 3 Cited Participants with Background Information.....	98

Figures

Figure 1: A Visual Representation of Racial Meanings	77
Figure 2: Model of Multiple Dimensions of Identity with Added Considerations	94
Figure 3: Multidimensional Model of Asian American Identity (M ² A ² I).....	114

ACKNOWLEDGEMENTS

There are many acknowledgements to make so I will begin with several acknowledgements that must be made. In Chapter 4, you will find a reprint of Jones and McEwen's (2000) Model of Multiple Dimensions of Identity. I acknowledge the reprinting permission granted from the American College Personnel Association (ACPA), One Dupont Circle, NW at the Center for Higher Education, Washington, DC 20036. This dissertation was completed while working as a Graduate Student Researcher with UCLA's Office of Residential Life. I acknowledge ORL for providing the financial resources to support me through this dissertation process. Two other sources of funding supported this dissertation research. I acknowledge the University of California Center for New Racial Studies for a research grant to conduct the second study. Additionally, I received the Marion Wells scholarship (2009-10) and Philip J. Clark Memorial Award and Scholarship (2012-13), which served as financial support and recognition to get me through the first and final stages of this degree. I also acknowledge Christopher Michael Gomez for his speedy creation of the graphical representation of the Multidimensional Model of Asian American Identity found in Chapter 4.

There are so many people to thank for being good company throughout this journey. First, I must thank my advisor and dissertation chair, Jane Pizzolato, for always believing in me (and my sometimes "out there" ideas) and for pushing me to believe in myself. Your brainpower, energy, and funding support made this all possible. I look forward to continuing our work together as colleagues in the field. Second, I could not have asked for a more generous committee: Mitchell Chang, Walter Allen, and Yuen Huo. Mitch, thank you for asking me to join your RAC my first year, for providing the space to explore racial conceptions for my research in 299A&B, and for allowing me to TA this sequence with you while writing the dissertation. Shadowing you and working through issues with my peers' research were invaluable for improving my own thinking and writing. Walter, thank you for offering a whole course on "Race

and Higher Education” which was influential during my first year at UCLA and formed the foundation for much of this dissertation. Your insights throughout my time at UCLA (from RAC, to co-instructing 299C, to pushing my dissertation to new heights) demonstrate the type of scholar I hope to become someday. Yuen, thanks for allowing me to take your Social Psych research methods course, and for serving as my “outside” committee member. Your insights provided new perspectives on my work in higher education.

Outside of my formal committee, I had many scholars who at various points helped me work through the ideas behind and interpretations of this dissertation research. I would like to thank Ann Morning, Rashmita Mistry, Thomas Philip, Angela Hudson, Reginald Daniel, Nolan Cabrera, Valerie Lundy-Wagner, Mike Bastedo, Sue Dynarski, Tabbye Chavous, Benita Barnes, and Shaun Harper. Special thanks to Kevin Eagan for help in making sense of statistical techniques, and to my colleagues in the UCLA Institute for Society and Genetics, especially Aaron Panofsky, for their helpful feedback on Chapter 3. Additionally, I have gained much from taking various Research Apprenticeship courses (RACs), and want to acknowledge the feedback generated through RACs with Mitch, Walter, and Jane during my time at UCLA. Thanks also to my colleagues in ORL for your support throughout this process. I especially thank Lori Vogelgesang for being such a flexible supervisor and for providing important feedback on my research interpretations.

I want to also thank the many people who supported my research efforts, from helping to recruit participants, to housing me at conferences, to just being interested in and affirming of what I was doing. Thank you: Danthai Xayaphanh, Socorro Carrizosa, Maria Moore, Karen Francis-Begay, Marlyn Mills, Christy Quiogue, Windi Sasaki, Jenny Kressel, Andy Ceperley, Craig Schmidt, Bobby and Judy Tighe, Tanesha Barnes, Bindi Patel, Chris Stipeck & Jon Sandurs, Dominick Berkery, Usha Brooks, John Taborn, Eric Hamako, Betsy Brown, and Christa Porter, with special thanks to Staci Gunner for showing me what perseverance looks like

and Amanda Tachine for keeping me mindful and in the moment.

For those mentors that have paved the way for me, especially Kris Renn, Kevin Nadal, Dina Maramba, Connie Tingson-Gatuz, Liliana Mina, Nettavia Curry, Rudy Guevarra, Jenny Lee, Judy Kiyama, Michelle Espino, and my McNair mentor, John Lee: Thank you for being fantastic role models and showing me what's possible. To the brothers of Sigma Lambda Beta Fraternity, Inc., thank you for guiding me to become a Gentleman and a Scholar. To my Multiracial Network (MRN) family, thank you for keeping me grounded and for energizing me. And thanks to my friends from the Gates Millennium Scholars read with APIASF, especially Nikki Modi, Kavitha Sreeharsha, and Lan Quach, for sharing in such an intense process that reminded me of why I pursued this degree in the first place.

Research is a team sport. I have had many teammates through this process, helping expand my own thinking and ultimately helping to make this research better. Thanks to Tu-Lien Nguyen, Avery Olson, Alli Kanny, A.J. Lee, Casey Ozaki, and of course, Jane Pizzolato for your collaborations on the MAP project data used in Chapter 4. I've had the privilege to work with amazing colleagues on projects that influenced this dissertation in many ways, including David Kasch, Fanny Yeung, Sharon Chia Claros, Christine Mata, and Prema Chaudhari. Thanks especially to Chelsea Guillermo-Wann for allowing me to collaborate with you on your dissertation. Thinking through some very complex (mixed) racial issues was invigorating. Most importantly, I want to thank the legendary "Haters" crew: Felisha Herrera, Juan Garibay, Luis Giraldo, and Gina Garcia. Finding you all my first year at UCLA was a game changer. Looking forward to many more collaborations to come. A special thanks to the best dissertation buddy ever, Gina Garcia. Not only have you inspired me to remember that I can always do more, no matter how busy/tough life might get, your feedback and brain power helped me through some of the darkest points on this dissertation journey. Thank you.

Last, but certainly not least, I want to thank my family, both the Johnston & Cañedo, and

Guerrero families. I've strived to make you proud and you've reminded me of this goal every step of the way. With your continued support, I look forward to following in the professorial footsteps of my great-grandfather, Herbert Gaurke, and my aunt, Katherine Ramsland. And to the love of my life, Brian: Thank you for putting up with so much during this process. This dissertation is as much yours as it is mine, although I know you are embarking on your own dissertation journey soon. I can't wait to be there for you, just as you always were for me.

Thank you.

VITA

Education & Experience

- 2003 B.S., Human Biology
Michigan State University, East Lansing, MI
- 2004-2006 Academic Specialist, Office of Supportive Services
Michigan State University, East Lansing, MI
- 2006 M.A., Student Affairs Administration
Michigan State University, East Lansing, MI
- 2006-2007 Program Administrator, Center for Multicultural Education & Programs
New York University, New York, NY
- 2007-2009 Director, Asian Pacific American Student Affairs
University of Arizona, Tucson, AZ
- 2009-2010 Graduate Student Researcher, Department of Education
Assistant Resident Director, Office of Residential Life
University of California, Los Angeles
- 2010 M.A., Education (Higher Education & Organizational Change)
University of California, Los Angeles
- 2010-2013 Graduate Student Researcher, Office of Residential Life
University of California, Los Angeles

Select Publications & Presentations

- 2003 Johnston, M. P., Lee, D. J., & Strom, T. Q. (November). *The use of race in psychological diagnostics*. Paper presented at the 12th Annual Ronald E. McNair Scholars National Research Conference, Delavan, WI.
- 2004 Nadal, K. L., & Johnston, M. P. (June). *Making our voices heard: Marginalized identities in the Asian Pacific Islander community*. Presentation at the National Conference on Race and Ethnicity in American Higher Education, Miami, FL.
- 2005 Renn, K. A., Ozaki, C. C., & Johnston, M. P. (March). *Hapa student organizations: Case studies in multiracial identity, leadership, and identity politics*. Presentation at the National Association of Student Personnel Administrators Annual Conference, Tampa, FL.
- 2006 Pizzolato, J. E., Johnston, M. P., & Norman-Reed, T. R., & Mina, L. (October). *Supporting high-risk students' academic identity development*. Paper presented at the National Academic Advising Association Conference, Indianapolis, IN.

- 2007 Nadal, K. L., Pituc, S., Johnston, M. P., & Esparrago, T. (April). *Supporting marginalized communities within higher education: Experiences of Filipino American graduate students*. Paper presented at the Association for Asian American Studies National Conference, New York, NY.
- 2008 Ozaki, C. C., & Johnston, M. P. The space in between: Issues for student organizations and advising. In K. A. Renn & P. Shang (Eds.) *Biracial and multiracial college students*. New Directions for Student Services, 123. San Francisco: Jossey-Bass.
- 2009 Johnston, M. P., Tachine, A. R., & Lee, J. J. (November). *Mixed messages: Examining faculty and staff perceptions of diversity during university change*. Paper presented at the Association for the Study of Higher Education Annual Conference, Vancouver, BC, Canada.
- 2010 Johnston, M. P., & Nadal, K. L. Multiracial microaggressions: Exposing monoracism in everyday life and clinical practice. In D. W. Sue (Ed.), *Microaggressions and Marginality: Manifestation, Dynamics and Impact* (pp. 123-144). New York: Wiley & Sons.
- 2011 Garcia, G. A., Johnston, M. P., Garibay, J. C., Herrera, F. A., Giraldo, L. G. When parties become racialized: Deconstructing racially themed parties. *Journal of Student Affairs Research and Practice*, 48(1), 5-21.
- 2011 Herrera, F. A., Garibay, J. C., Garcia, G. A., & Johnston, M. P. (November). *Documenting attitudes toward the undocumented: A multi-level analysis of student views on denying undocumented immigrants access to public education*. Paper presented at the Association for the Study of Higher Education Annual Conference, Charlotte, NC.
- 2012 Pizzolato, J. E., Nguyen, T-L. K., Johnston, M. P., Wang, S. Understanding context: Cultural, relational, and psychological interactions in self-authorship development. *Journal of College Student Development*, 53(5), 656-679.
- 2012 Kasch, D., & Johnston, M. P. (April). *Everyday racism and the ubiquity of social media: An examination of cyber-microaggressions on college campuses*. Paper presented at the American Educational Research Association Annual Meeting, Vancouver, BC, Canada.
- 2012 Guillermo-Wann, C., & Johnston, M. P. (November). *Investigating theory and research on multiracial college students in a "post-racial" era: Towards an integrative model of multiraciality in the campus climate for diversity*. Paper presented at the Critical Mixed Race Studies Conference, Chicago, IL.
- 2013 Johnston, M. P., & Yeung, F. PF. (April). *Campus racial climate and the Asian American experience: Differences across racial groups and after a racially-biased incident*. Paper presented at the American Educational Research Association Annual Meeting, San Francisco, CA.

CHAPTER 1: INVESTIGATING THE CONCEPT OF RACE IN HIGHER EDUCATION

Introduction

This dissertation is grounded within the seemingly contradictory discourse that at one end claims the United States has reached a so-called post-racial era (i.e., one where race does not matter anymore) given common interpretations of recent events as evidence of racial equality (e.g., President Obama's election, increases in interracial marriage and multiracial populations). On the other hand, this discourse perpetuates the maintenance of race as a central concept for organizing people, institutions, and structures within U.S. society. As witnessed in the media attention to President Barack Obama's racial identity during his ascension to the top political post, our nation saw the potential of being in a post-racial moment, one where the racial discrimination of the past could be transcended; Yet, the attention on him being the first *black* president, signifies just how much race still matters.

At the same time, institutions of higher education continue to struggle with long legacies of racial exclusion, discrimination, and reproduction. Anderson (2002) noted how African Americans¹ were "virtually excluded" from U.S. higher education until after the Civil War, due to legal mandates in southern slave states and institutionalized racism in northern free states. As access slowly increased, black and other racially minoritized² students were still met with discriminatory practices and unwelcoming campuses, further reproducing hierarchies across racial lines (Allen & Jewell, 1995; Brayboy, 2005; Harper, Patton, & Wooden, 2009; Shotton, Lowe, & Waterman, 2013; Solórzano, Villalpando, & Oseguera, 2005; Teranishi, 2010). Despite strides made toward parity among different racial groups, recently there has been a move away from race-targeted initiatives (e.g., outreach, transition, and support programs) and toward a

¹ Although there are no generally agreed-upon rules for capitalization of racial terms, I take on Renn's (2000) perspective of not capitalizing inherently racial categories (i.e., black, white) in order to "minimize the notion of racial categories as immutable entities" (p. 399).

² Similar to Harper (2012), I use the language of "minoritized" and "racialized" to call attention to the active ways certain groups have been raced and made to be minorities in U.S. society.

broader operationalization of diversity outside (or in place) of race (Cobham & Parker, 2007). For example, offices that were once geared toward supporting “minority” students became “multicultural” and summer bridge programs designed for assisting the transition to college for underrepresented students of color changed eligibility criteria to be based solely on income status (Cobham & Parker, 2007). When coupled with the increasing backlash against and attacks on affirmative action (Allen, 2005; Orfield, Marin, Flores, & Garces, 2007), this movement away from race consciousness presents a curious case for higher education scholars and administrators: How do we more effectively *use* race while striving to move beyond the *racism* of the past?

The answer to this question lies in piecing together a larger puzzle of racial issues in higher education, on which this dissertation aims to provide some clarity. Although numerous studies in higher education use race-related variables in analyses (e.g., race as a control variable; Chang, Denson, Saenz, & Misa, 2006); examine student experiences or issues from particular racialized groups (e.g., African American students and HBCUs; Allen & Jewell, 2002) or apply Critical Race Theory (a wide-ranging theoretical approach that centralizes race and racism within analyses) to understanding some phenomenon (e.g., racially themed parties; Garcia, Johnston, Garibay, Herrera, & Giraldo, 2011), this dissertation aims to get at the roots of race itself, by investigating the underlying phenomenon of race across multiple aspects of higher education (i.e., research, meaning making, and identity development) and multiple constituents (i.e., scholars and students).

The rationale for and approach to this dissertation stems from a need to better understand the various ways race gets used and how useful race seems to be in U.S. higher education. One form of how race gets used is through racial essentialism, which deals with beliefs about what makes someone a certain kind of race, reflecting some sort of hidden or underlying essence (often biological), which is shared by all members of that race (Haslam,

Bastian, Bain, & Kashima, 2006). When racial groups are essentialized, they are viewed as having a uniting essence that is unchangeable, inborn, natural, discrete, and informative about the people within that group (Chao, Chen, Roisman, & Hong, 2007; Haslam et al., 2006; Jayaratne et al., 2006; Keller, 2005; M. J. Williams & Eberhardt, 2008). These essentialist views often result in or correlate with a higher amount of stereotype endorsement and prejudice than non-essentialist views (Hong et al., 2004; Prentice & Miller, 2007; M. J. Williams & Eberhardt, 2008). Indeed, others have theorized that this essentialist notion of race is at the foundation of racism (Fredrickson, 2002). Although the essence in essentialism cannot always be determined, increasing evidence suggests that genes are often used as an “essence placeholder” (Dar-Nimrod & Heine, 2011). As scholars and students navigate a higher education landscape increasingly infused with advancements in genetics, this dissertation explores potential relationships among race, research, genetics, identities, and essentialism to investigate the central question: What’s the use of race? This question serves to guide three different studies examining how scholars *use* race in their research, how students make meaning of race during a time when genetic technologies are increasingly being *used* to identify one’s racial ancestry, and how *useful* race seems to college students and their sense of identity.

Although this dissertation focuses on underlying notions of the utility of race in higher education, it does not negate the importance of work that examines group-based differentials in access to and outcomes of higher education or the other race-related research noted above. This dissertation seeks to accomplish similar goals of improving higher education toward achieving equity for different racially minoritized groups. However, it takes a different approach that aims to help improve the ways that race gets enacted through future research and practice. By better understanding the varied ways that race gets operationalized and made sense of, this dissertation seeks to provide educators, researchers, and policy-makers new ways of thinking through the implications of programs, studies, and policies that are designed to improve

equitable outcomes for students from all racialized groups. Thus, the central goal of this dissertation is to examine the phenomenon and dynamics of race through three related studies: a content analysis of the ways race may be reinforced as real (reification) within higher education journals (Study 1); a grounded theory study on the meanings students make of race within post-racial and post-genomic discourses (Study 2); a qualitative analysis of how Asian American college students claim the importance of race and ethnicity in their multidimensional identities (Study 3). Together these studies offer a broad approach to investigating the concept of race among multiple constituents (i.e., scholars and students), within various aspects (e.g., empirical research, identity development), and considering changing sociopolitical contexts (i.e., post-racial and post-genomic) of higher education.

Statement of the Problem

Race continues to be one of the most contentious, yet critically important, topics in higher education. Debate persists over whether and how to use race (and its related constructs) in higher education. When it comes to the term *race* in higher education, most scholars will readily agree that race is a “social construct,” created and maintained through social structures rather than something innate or biological. Where this agreement usually ends, however, is on whether or not race is real. At the same time that some scholars are convinced that race is not real since it does not exist in any biological sense (American Anthropological Association, 1998), others maintain that the ways race affects societal outcomes makes it a social reality (Smedley & Smedley, 2005). Furthermore, arguing against the realities of race opens up arguments that race is not real and that it does not matter, limiting understandings of how race and racism still affect individuals’ and groups’ life chances, especially in terms of access to and success in higher education.

Adding to this debate is the fact that the terms *race*, *ethnicity*, and *culture* are often used interchangeably or without clear definitions, potentially leading to conceptual confusion related

to racial constructs (Cokley, 2005; Moya & Markus, 2010). For instance, despite the so-called “academic consensus” that race is a social construct (Morning, 2011), recent research has shown that without an explicit definition, race is often implicitly understood as something biological (e.g., Strom, Lee, Trahan, Kaufman, & Pritchett, 2009). The idea that race is biological may also be perpetuated by increasing claims that one can offer up a DNA sample to test her or his “true” racial heritage (Omi, 2010).

Being able to decipher one’s race through genetic tests seems reminiscent of the beliefs in biological race prevalent during the eugenics movement of the early 20th century, since eugenicists used their rudimentary understandings of genes as racial essences and related them to differences in outcomes, such as mental ability (Montagu, 1964; Selden, 1999). Although the term *eugenics* usually conjures up historical wrongdoings that culminated and died with Hitler and the Holocaust, recent scholarship suggests that this type of racial thinking prevalent during the eugenics movement persists in more individualized forms (e.g., personal reproductive choices) rather than state-sponsored policies (Dar-Nimrod & Heine, 2011; McCabe & McCabe, 2010). However, we know very little about what this racial thinking might look like within contemporary higher education and how it may be influenced by scholarship on or experiences with race. When the biological concept of race has been used to justify such historical atrocities as the enslavement of people of African descent in the Americas and the holocaust in Nazi Germany (Cornell & Hartmann, 2007), as well as foundations for more contemporary arguments against racial integration and affirmative action policies (Scott, 1997), more attention must be given to understanding the ways higher education may perpetuate this problematic way of thinking about race. As urged by Roberts' (2011) recent warning that “the ideology of race as a natural division between human beings that is written in our genes will have devastating political consequences” (p. 296), the time is now for further investigations into

the underlying meanings and dynamics of race in higher education so that our society's future leaders can help prevent such devastating consequences from occurring.

Research Focus and Rationale

This dissertation is poised to take the field of higher education in new directions for understanding race. The central claim of this dissertation research is that we (as higher education scholars) need new ways of engaging in the study of race in higher education if we are to solve the puzzle of persistent racial inequities and racist acts on college campuses. Part of this work is not necessarily new, but rather a need to revisit some of the historical influences on current understandings of the concept of race. These influences include the ways biological race was reinforced through the scientific racism prevalent in the early 20th century eugenics movement, the inadequacy of replacing race with potentially more politically appealing constructs like ethnicity, and the potential resurgence of biological race thinking in an era that increasingly looks to genetics and other biological sciences for answering questions about human nature, including racial differences (Morning, 2011; Roberts, 2011). By investigating how higher education scholars may unintentionally reinforce biological and deficit interpretations of race in their work, how students think about race in this era of post-genomic and post-racial possibilities, and how a particular racialized group of students (i.e., Asian Americans) distinguish between racial constructs in making claims about their identity, this dissertation elicits new ways of doing race-related research and practice in higher education that (1) better addresses the foundational aspects of the way racism manifests in and influences higher education; and (2) better aligns with how students themselves make meaning of race and racial identity.

In conducting this research, this dissertation also aims to provide clarity on the often messiness of conducting race-related research. Given the scholarly and popular discourse above, I derive three tensions that support the need for this dissertation research. First, as indicated in the optimism of recent post-racial claims, there seems to be increasing popular and

scholarly desire to move beyond the confines of race. At the same time, however, the concept of race and boundaries of racial groups continue to get reinforced by both research and practice. Second, individual-level race (and ethnicity) identification claims seem increasingly important to some individuals and groups while decreasingly so for others. Third, while advances in genetic technologies may have helped to debunk the myth that race is something biological, this new science may have also resulted in beliefs that race is not “real” and therefore does not affect different people’s life chances. It is these overarching tensions in the discourse regarding race that this dissertation focuses upon, with each of the three studies aimed at offering some clarity toward improving future higher education research and practice.

Purpose and Scope of the Research

In making these intended contributions, this dissertation consists of three separate yet interrelated studies on the concept of race in higher education. In Chapter 2, *Study 1: Racialized Research in Higher Education: Examining How Scholars Apply Race and Ethnicity in Research on College Students*, I investigate the state of higher education scholarship in terms of how scholars conceptualize and apply race-related constructs in their research on college students. Given the nature of racial reification, or the ways race as an abstract idea (not real) becomes concrete (real) through thought and discourse (Duster, 2005), this study examines how the uses of race in higher education scholarship may reify race and promote racially essentialist views of college students. To that end, I conducted a content analysis (Krippendorff, 2012; Weber, 1990) of three higher education peer-reviewed journals over five recent years (2007-2011), with the inclusion criteria being all articles that included racial terms (e.g., race, ethnicity, black, Filipino) in empirical studies of college students. Taking a similar approach to Harper’s (2012) analysis of how scholars interpret race-related findings in their research, I look more holistically across the articles to engage not only how scholars interpret race, but the

potential implicit and explicit messages they may be sending throughout their articles, including their framing and operationalization of race.

The findings from this content analysis serve as the foundation for the other two studies. Specifically, *Study 1's* (Chapter 2) key contribution to the overall dissertation is how race gets applied to different groups of students, who these groups are, and what implicit or explicit messages about race are given through the scholarly discourse. The potential process of reification through research, which sends the message that race is something biological or essentialist, will be revisited in Chapter 3 by asking the question: How do students make meaning of race, given their varied experiencing of and learning about race? Additionally, the potential inconsistencies in applying different racial constructs to different racialized groups of students, including Asian American students who have been made to be invisible in much higher education research (Museus & Kiang, 2009), will be revisited in Chapter 4 by asking the question: Are the ways that race gets applied to college students consistent with Asian American students' identity-based claims about race (and ethnicity)?

In Chapter 3, *Study 2: When Race Matters: College Students' Meanings of Race in a Post-Racial and Post-Genomic Era*, I zoom in explicitly on the meanings of race students make within a post-genomic (i.e., post-Human Genome Project) and purportedly post-racial era. At the same time that the idea that "race is socially constructed" may come easily to many "millennial" college students, these same students may find themselves desiring to offer up DNA samples for testing of their "true" heritage (read race), while also voting on ballot measures to deny civil rights to members of some minoritized racial groups. This interplay between race, genetics, and politics has historical roots, yet continues to resurface in contemporary examples. For instance, genetic technologies are increasingly being used to make claims about one's racial ancestry, the race of suspected criminals, and reasons for racial disparities in social outcomes (Roberts, 2011). This study builds upon my preliminary study ($n=18$) that explored

college students' racial conceptions (Johnston, in press), or the underlying notions of how race contributes to human differences and from where those differences stem. Participants used genetic evidence to both support and refute claims about the biological nature of race. In line with constructivist grounded theory methods (Charmaz, 2006), I employed theoretical sampling (the addition of data to fill out the emerging theoretical categories) to interview more students (total $n=39$) toward better understanding the relationship between their meaning making of race and genetics.

The unique contexts in which Study 2 takes places (two institutions with high percentages of Asian American students) and the overrepresentation of Asian Americans in the sample, help inform the third study, which focuses more specifically on Asian American students and identity. In Chapter 4, *Study 3: The Utility of Race and Ethnicity in the Multidimensional Identities of Asian American College Students*, I examine how the constructs of race and ethnicity function within Asian American college students' understanding of their identity and development during college. Using data from a larger project investigating college students' understandings of their own identity and development through a new Modeling Assessment Protocol (MAP; Pizzolato, Johnston, Olson, & Nguyen, 2010), this study explores the phenomena of race and ethnicity as dimensions of social identity that may become salient to students based on context (S. R. Jones & McEwen, 2000). I focus on Asian American college students for several reasons, including the constructed nature of the pan-Asian category and the potential ability to easily distinguish between race (e.g., Asian) and ethnicity (e.g., Filipino). Taking the Asian American subsample ($n=52$) from a larger study ($n=101$) of college students' perspectives on identity and development, Study 3 investigates the potential relationships between students' understandings of race and ethnicity, students' cognitive development, and the role of different contextual influence, in how students answer different identity-based questions (e.g., "Who am I?"). I propose a new Multidimensional Model of Asian American

Identity that can be used for future research on Asian American college student development as well as applied to practice with Asian American students.

Key Terms and Language

Writing about the socially constructed nature of race is not without challenges of potentially contradicting this claim through the language used. However, I believe keeping “race” in quotations throughout this dissertation would not only be distracting, but may prevent the reality of race in the lived experiences of individuals who are racialized from becoming apparent (Warmington, 2009). Therefore, I use the terminology associated with racialization, the dynamic ways that individuals and groups are made to be different races (Omi & Winant, 1994), throughout the dissertation. This usage includes changing terms like “racial minority” and “multiracial student” to “minoritized racial group” and “multiracially-identifying student” to continuously disrupt static notions of race being biologically essential or discrete (see also Guillermo-Wann & Johnston, 2012). Additionally, the following key terms will be used throughout the manuscript.

- **Race:** Moya and Markus (2010) contend that race is not something that people are or have, but rather, race is “a doing – a dynamic set of historically derived and institutionalized ideas and practices that: sorts people into groups according to perceived physical and behavioral human characteristics that are often imagined to be negative, innate, and shared; associates different value, power, and privilege with these characteristics; establishes a hierarchy among the different groups; and confers opportunity accordingly; and emerges: when groups are perceived to pose a threat (political, economic, or cultural) to each other’s worldview or way of life; and/or to justify the denigration and exploitation (past, current, or future) of other groups while exalting one’s own group to claim an innate privilege” (p. 21). This definition of race is important since it incorporates the historical and power-related dynamics of race, which are simultaneously constant, yet ever-changing.
- **Ethnicity:** In contrast to the definition of race above, Moya and Markus (2010) operationalized ethnicity also as “a doing” but one that “allows people to identify, or be identified, with groupings of people on the basis of presumed, and usually claimed, commonalities, including several of the following: language, history, nation or region of origin, customs, religion, names, physical appearance and/or ancestry group; when claimed, confers a sense of belonging, pride and motivation; can be a search of collective and individual identity” (p. 22). This definition of ethnicity appears to offer individuals and groups more agency in determining their ethnicity, in comparison to race that seems more externally constructed and applied.

- **Racial Essentialism:** The belief in the “innate” human characteristics of racialized groups in the definition of race above speaks directly to racial essentialism. Although essentialist thinking has lost favor and is often looked down upon in philosophies of race (Glasgow, 2009; Zack, 2002), essentialist race thinking “presupposes that one has various heritable, unchangeable racial features that are fixed no later than the moment one is born” (Glasgow, 2009, pp. 66-67). Thus racial essentialism is thinking and believing in the innate-ness of race; that a person is a certain kind of race because of some underlying (often biological) essence (Haslam et al., 2006).
- **Racial Reification:** The process by which an abstract thing becomes concrete is known as reification, and thus, the ways that race as an abstract idea is made to become more concrete relates to the process of racial reification (Duster, 2005). Much of this work is in science, where despite a long history of disciplines working toward making race more of an abstract construct, the ways race gets operationalized often makes it more of a concrete reality.
- **Racism:** When dynamics of power and privilege are added to essentialist notions of people as particular races, racism manifests (Fredrickson, 2002). This manifestation can occur on multiple levels, including at individual (e.g., between people), institutional (e.g., through laws and policies), and cultural (e.g., where societal norms devalue the cultures of particular racial groups) levels (J. M. Jones, 1997). Comprehensively, Garner (2010) described racism as “a multi-faceted social phenomenon, with different levels and overlapping forms. It involves attitudes, actions, processes, and unequal power relations. It is based on the interpretations of the idea of ‘race,’ hierarchical social relations and the forms of discrimination that flow from this. Racism is not confined to extreme cases, but is present in a whole continuum of social relations” (p. 18).
- **Post-racial:** Although the term post-racial has often been used by media outlets and by scholars critiquing media stories, a definition for the term is hardly ever offered. A common thread seems to be that society has moved beyond or past race and that race no longer matters (Barnes, 2009; J. Lee & Bean, 2010). Therefore, post-racial is used throughout this dissertation to signify one way of thinking about the larger implications of race within the broader society.
- **Post-genomic:** Sundar Rajan (2011) described the shift from a genomic era to a post-genomic one after the sequencing of the Human Genome Project in 2001. In the genomic era, the scientific and commercial community focused on the “question of what information resides within genomes” with the shift to the “post-genomic” era now focusing on “what one might *do* with that information in scientifically and commercially valuable ways” (p. 198).

Although these are not the only ways to define these terms, the definitions provided have been selected from the literature to best reflect the overall goals of this dissertation and how the terms are employed throughout.

Significance

Although the topic of race has received attention within higher education scholarship (e.g., affirmative action policy, racial identity development, campus racial climate), the persistence of racial disparities and racist acts on campuses across the nation warrant new

ways of thinking about race in higher education. This dissertation posits racial essentialism as a potential precursor not only to negative intergroup attitudes (Shulman & Glasgow, 2010), but also to problematic ideologies associated with eugenics. Although this dissertation does not aim to explore eugenic ideologies, it offers an understanding of the phenomenon and dynamics of race in higher education that could help scholars and administrators better incorporate race in their research and practice to prevent the perpetuation of the essentialist racial thinking associated with eugenics. By investigating the state of the field in terms of how scholars apply race in their research on college students, exploring how college students make meaning of race in changing contexts, and outlining a new model of identity for an under-researched racial group (i.e., Asian Americans), the findings from this dissertation are poised to make a significant impact on the field of higher education.

CHAPTER 2: RACIALIZED RESEARCH IN HIGHER EDUCATION: EXAMINING HOW SCHOLARS APPLY RACE AND ETHNICITY IN RESEARCH ON COLLEGE STUDENTS

Introduction

Despite living in a time some argue to be a post-racial era (see Tesler & Sears, 2010, for a review), where race supposedly no longer matters in determining one's life chances, disparities across racial and ethnic groups continue to be a central finding in scholarship on access to and achievement in higher education (Allen, Kimura-Walsh, & Griffin, 2009; Alon & Tienda, 2007; Harper et al., 2009; Massey, 2006; Solórzano et al., 2005; Teranishi, 2010). Additionally, the centrality of college student racial and ethnic identity development as a focus of higher education scholarship (Evans, Forney, Guido, Patton, & Renn, 2010; Torres, Jones, & Renn, 2009), suggests that race and/or ethnicity are still important for understanding the lives of college students.

Within much of this scholarship, the terms *race*, *ethnicity*, and *culture* are often used interchangeably or used without clear definitions, potentially leading to conceptual confusion related to racial constructs (Cokley, 2005; Cornell & Hartmann, 2007; Moya & Markus, 2010). For instance, despite common scholarly claims of an interdisciplinary consensus that race is a social construct, recent research has shown that many scientists disagree about the nature of race (Morning, 2011) and that without an explicit definition, race is often implicitly understood as something biological (e.g., Strom et al., 2009). For instance, Strom et al.'s (2009) systematic review of research studies in counseling psychology demonstrated wide ranging operationalizations of race that seemed to perpetuate beliefs in innate differences among racial groups (e.g., not defining race often sends an implicit message that there are inherent biological differences between racial groups). Are these same messages being sent in racialized research on college students?

This study begins to answer this question by investigating the process of racial reification, or the ways race as an abstract idea (not real) becomes concrete (real) through thought and discourse (Duster, 2005), in higher education scholarship. This process may lead to thinking that race is biologically real, which may promote racially essentialist views of college students (i.e., believing that college students' race may be attributed to an underlying essence that is shared among all members of that racial group). Given that this type of racial thinking serves as a foundation for scientific racism and atrocities associated with the pseudoscience of eugenics, it seems important to consider how higher education research may promote (implicitly or explicitly) problematic notions of race and racial groups. The purpose of this study then, is to investigate how researchers frame, operationalize, and interpret racial constructs in their research on college students, and how these applications may reify race and promote racially essentialist views of college students. To that end, I conducted a content analysis (Krippendorff, 2012; Weber, 1990) of three higher education peer-reviewed journals, reviewing all articles that included racial constructs (e.g., race, ethnicity, specific population/group names) in empirical studies of college students over the years 2007-2011, toward better understanding how race (in its multiple forms) gets applied and should be applied by scholars of higher education.

Literature Review

Race and Higher Education Research

Race continues to play a critical role in American higher education, evident in the attention received in scholarship areas such as racial disparities in access and achievement (e.g., (Allen et al., 2009; Guillory & Wolverton, 2008; Solórzano et al., 2005; Teranishi, 2010), racial identity development and dynamics among college students (e.g., Chavous, 2000; McEwen, 2003; Pope, 2000; Renn, 2004a, 2008; Rowley, Sellers, Chavous, & Smith, 1998; Shek & McEwen, 2012), and policies and specialized programs that take race into account (e.g., Anderson, 2002; Cobham & Parker, 2007; Garces, 2012; Perna, Rowan-Kenyon, Bell, Thomas,

& Li, 2008; Renn, 2009). Other scholarship has focused on better understanding campus racial dynamics and campus climate related to racial diversity (e.g., Garcia et al., 2011; Hurtado, Milem, Clayton-Pedersen, & Allen, 1998; Milem, Chang, & Antonio, 2005; D. A. Williams, Berger, & McClendon, 2005). Much of the recent higher education scholarship around race has focused on the premise that students' experiences with diversity provide educational benefits (Hurtado, Dey, Gurin, & Gurin, 2003; Milem, 2003). For instance, experiences with racial diversity have been shown to foster critical thinking skills and reduce prejudice among college students (e.g., Antonio et al., 2004; Chang, 1999, 2002; Denson & Chang, 2009; Terenzini, Cabrera, Colbeck, Bjorklund, & Parente, 2001). The large body of literature on this topic has even offered the ability to conduct multiple meta-analytical studies (e.g., Bowman, 2010, 2011; Denson, 2009). For example, Bowman (2010) used a sample of 17 studies (77,029 students total) in his meta-analytical study on how college diversity experiences influence cognitive outcomes, such as critical thinking and problem solving skills.

Although this body of literature on racial diversity is vast and compelling, it is not without critique. In a review of the study of diversity, Baez (2004) posited that there is a problematic "underlying narrative" on studies that measure the benefits of diversity:

The underlying narrative in these studies seems to be that individuals are *racially different*, and after accepting that *fact*, researchers then figure out how to measure that *fact*. Because these studies focus on what can be measured, they fail to explain what *race* is in its irreducible complexity, what produces and sustains it, and why (and in what ways) it has come to be taken as *fact* (p. 290, emphasis in original).

As Baez suggested, continuing to conduct research from a viewpoint that races are real limits our understanding of the complexities associated with how races are formed and potentially maintained through the ways research on race is conducted. Similar concerns exist in other fields, including psychology, where Betancourt & López (1993) argued that the "loose" ways in which race is used to explain differences between groups not only limits understanding the

multiple factors that actually could contribute to the differences, but also leads to interpretations of findings that stimulates and reinforces racist notions of human behavior.

Since higher education is an area of study rather than a discipline, scholars of higher education may be in a unique position to flexibly incorporate multidisciplinary approaches to better understanding racial dynamics (Torres et al., 2009). However, Harper's (2012) recent review of ten years of race-focused research articles across seven higher education journals demonstrated that scholars lack interpreting race-based findings through a lens of racism. Instead, scholars tended to minimize racism as a potential explanation for racial differences in their findings, which may be due to Harper's finding that out of 255 studies analyzed, only five articles used Critical Race Theory (CRT) as a lens for approaching race in their research. If not using CRT, what other approaches to race-related research seem best for scholars to use and when?

Approaches to Racial Research

The modern "scientific" classification of human beings is usually credited to Carolus Linnaeus, the Swedish naturalist who originated the taxonomic classification system in the eighteenth century (Corcos, 1997; Morning, 2011). During this time, Linnaeus and other taxonomists, like German medicine professor Johann Blumenbach, classified humans into four to five larger groups, which comprise the so-called "ethnoracial pentagon" (i.e., black/African, white/European, red/Indian, yellow/Asian, brown/Hispanic; Hollinger, 1995) still roughly used in science research today (Roberts, 2011; Smedley, 2007; Zuberi, 2001). In her extensive review of the origins of the idea of race, Smedley (2007) argued that these 18th Century classifications have had lasting impact since they set up beliefs regarding the permanence and rigidity of group differences (e.g., grounded in biology), which were linked to physical characteristics and purported behavioral traits. These classifications also became easily hierarchical and the fact that they were created by renowned scientists legitimized the classifications of difference as part

of the “natural” order (Smedley, 2007). Even as a more modern concept of race grew from Europeans’ attempts to classify and organize the populations they encountered in the expansion of their empires (Montagu, 1964; Smedley, 2007), the historical classifications became embedded in how different people have become racialized, ultimately solidifying whites/whiteness at the top of the U.S. racial hierarchy through laws and slavery (Roediger, 2008).

Since these early classifications, race has been one of the most controversial subjects studied by scholars across a wide range of disciplines as they debate whether races actually exist in the biological sense (e.g., Koenig, Lee, & Richardson, 2008; Risch, Burchard, Ziv, & Tang, 2002; Roberts, 2011), whether race is something that is real (e.g., Glasgow, 2009; Leonardo, 2005; Morning, 2009), and whether race matters in determining life, social, and educational outcomes (e.g., Allen & Chung, 2000; Bonilla-Silva, 2010; D’souza, 1995; Feagin, 2006; Steele, 2010; Wilson, 1980). The notion that races are biologically different has had major historical implications, especially during the late 19th century and early 20th century when social Darwinism and eugenics were prevalent beliefs among scientists (Cornell & Hartmann, 2007). These pseudosciences promoted the idea that disparities between racial and ethnic groups were largely due to biological differences and groups who prospered were seen as genetically superior (i.e., more “fit”). Moreover, this biological understanding of racial superiority of certain groups has led to the rationalization not only of racist beliefs toward, but also actions against (e.g., enslavement, genocide) those groups deemed “naturally” inferior (Cornell & Hartmann, 2007; Montagu, 1964). This biological construction of race has been rejected by entire disciplines (e.g., American Psychological Association, 2003), most notably seen in the American Anthropological Association’s (1998) statement that, “human populations are not unambiguous, clearly demarcated, biologically distinct groups.” In spite of these unequivocal

rejections, there is still considerable debate across disciplines about how to define, apply, and interpret various racial constructs.

The Race Debate(s)

The ongoing debates in academia and popular culture about race usually stem from whether or not race is real (Glasgow, 2008). This debate often equates to distinguishing race as either biologically-determined (real) or socially-constructed (not real). However, recent discussions on race and pharmacogenetics (Omi, 2010) and use of DNA in crime scene investigations and ancestry testing (Roberts, 2011) represent just a few areas where race may not be so easily distinguished in either/or terms. For instance, in 2005 the U.S. Food and Drug Administration approved *BiDil*, a drug used to treat congestive heart failure. The interesting thing about this particular drug was its approval only for African American patients, resulting in it being named the first “ethnic drug” (Kahn, 2007). Sociologists have argued that this state-sponsored ascription of racial groups as medically different is a critical marker for a potential return of biologically essentialist notions of race (Duster, 2005; Omi, 2010; Roberts, 2011). Despite these “armchair” approaches by scholars to understanding the changing nature of race (Glasgow, 2008), further research is needed to better understand if and how these varying notions of race manifest in empirical higher education research. Focusing on higher education research is especially important given the ways in which racial applications in education research may perpetuate stereotypes related to intelligence and race (e.g., Herrnstein & Murray, 1994), potentially limiting both scholars’ and practitioners’ scope of how education can and should be improved to eliminate racial disparities.

But what is race? This question about the nature of race has also been the topic of much scholarly debate over various ways to conceptualize, define, and interpret race in academic research (Helms, Jernigan, & Mascher, 2005; Markus, 2008; Morning, 2011; Omi, 2010; Renn, 2004b; Smedley & Smedley, 2005; Zuberi & Bonilla-Silva, 2008; Zuberi, 2001).

For instance, the racial categories used in social scientific research may unintentionally contradict the social constructionist view and reinforce biologically essentialist views of race (Prentice & Miller, 2007; Strom et al., 2009). Specifically in education research, Allen, Suh, Gonzalez, and Yang (2008) reminded readers that “a significant body of work promotes, directly or indirectly, theoretical explanations of the racial achievement gap that are biased, racist, and ultimately dehumanizing” (p. 217). The authors argued for the importance of research interpretations that “do not reify racial groups as static ‘things’ that produce ‘causal effects’” (p. 234). Despite their argument, racial theorizing seems largely absent from the field of higher education. Although some recent scholarly advances have been made in critical perspectives on race and equity in higher education (e.g., a recent Special Issue of *the Review of Higher Education*; Bensimon & Bishop, 2012), others argue that even scholarship using Critical Race Theory still lacks racial theory (e.g, Cabrera, 2013). Indeed, Allen et al. (2008), critiqued education “research that does not emphasize [racial] theory and methodology since, failing to place statistical patterns in broader sociohistorical context, such quantitative methods-driven research often reproduces unchallenged racist theories and methodologies” (p. 218). This study aims to get a better sense of the status of the field of higher education in terms of its applications (framing, operationalizing, and interpreting) of race, and whether they may unintentionally be reproducing racist explanations.

Two systematic reviews of higher education and student affairs research help to frame the current study. First, in Banning, Ahuna, and Hughes' (2000) 30-year review of the *Journal of Student Affairs Research and Practice* (formerly the *NASPA Journal*), the authors analyzed 72 race-focused articles (23% of all published articles) and found changing trends in which racial and/or ethnic groups and topics were focused upon. Second, Harper's (2012) systematic review of seven journals over ten years (1999-2009) analyzed 255 race-focused articles (those that had race in the title or abstract; no percentage of all studies provided), finding that authors

tended to interpret racial findings through “anything but racism.” Both of these studies help to highlight what race in higher education research looks like, but since they each analyzed only studies that explicitly focused on race and/or ethnicity (e.g., had race in their titles), there is a missing piece of the puzzle regarding what race looks like for studies that are not race-focused. Therefore the current study focuses on the various ways a broader range of scholars apply (i.e., frame, operationalize, and interpret) race in higher education research on college students.

Research Focus

Although the roots of racial ideology run deep within our national consciousness (Omi & Winant, 1994), this study seeks a contemporary understanding of the ways race gets applied in higher education research on college students by examining empirical research articles from five recent years by asking, what’s the use of race in higher education research? In order to answer this question, this study examines the state and status of the field of higher education through a content analysis of empirical research published in three prominent higher education journals. The study closely follows the methods from Harper’s (2012) analysis of race-focused research in higher education. However, unlike Harper’s study, which focused solely on the discussion sections of race-focused articles, the present study examines all empirical articles on college students (whether or not race-focused) that included race anywhere in the entire article, from five years and three journals, in order to examine the applications (i.e., frame/rationale, operationalization, and interpretation) of race within higher education research through two research questions:

- (1) What are the applications of race within higher education research on college students?
- (2) What are the implicit or explicit messages these applications may be sending?

Methods

This study is a content analysis of race-related research in three higher education journals over five recent years. According to Krippendorff (2012), “content analysis is a

research technique for making replicable and valid inferences from texts (or other meaningful matter) to the contexts of their use” (p. 24). Given that the goal of this study is to assess the state of the field of higher education in its race-related research, using content analysis as a guiding methodology seemed logical given the large number of articles to be analyzed and the importance of validity and replicability in the analytical procedures. When conducting a content analysis, Weber (1990) outlined the importance of decision making around (1) selection of content; and (2) coding procedures in order to achieve reliability in the form of reproducibility. These two aspects of the methods are discussed in further detail below.

Content

To examine the applications of race in higher education research on college students within five recent years, three prominent higher education research journals were selected: *The Review of Higher Education (TRHE)*, published quarterly, the *Journal of Higher Education (JHE)*, published six times a year, and the *Journal of College Student Development (JCSD)*, published six times a year. These journals were selected to reflect the broad area of higher education scholarship given their size of circulation, the competitive nature of their review and publication process, and their readership targeting various professions in higher education (e.g., higher education faculty and student affairs administrators). These journals were also selected as part of the core higher education journals with relatively high prestige and utilization (Bray & Major, 2011; Hutchinson & Lovell, 2004; Silverman, 1987). All three journals had relatively similar 5-year impact factors (*JHE*: 1.926, *JCSD*: 1.277, *TRHE*: 1.186) in the 2010 *Journal Citation Report* (Institute for Scientific Information, 2010). Since one goal of this study was to elucidate how scholars of higher education operationalize race in their research on college students, these three journals seemed to be appropriate places to situate such an inquiry, especially since they have relatively large circulations and selective acceptance rates through a competitive peer-review process. Although *JCSD*'s scope may look different from the other two higher

education research journals, its inclusion is integral since the focus of the study is on applications of race in research on college students (broadly defined – including students at 2-year and 4-years institutions, incoming college students, recent graduates, and graduate students). All research articles (not including editor’s notes, ASHE presidential addresses, or review articles) appearing in the three journals between 2007 and 2011 (*TRHE* Volume 30, Number 2 through Volume 35, Number 1; *JHE* Volumes 78-82; *JCSJ* Volumes 48-52) were incorporated into this review.

The exploratory nature of the current study suggested that a cross-sectional approach to reviewing the articles would be sufficient to meet the study’s goals. My interest was in gauging where higher education scholars are in terms of applying and interpreting racial constructs in their research and not necessarily with trends over time. Therefore the five-recent-year constraint on this current study seemed appropriate, especially since other reviews of higher education research have demonstrated the stability of methodological approaches within a five-year span (e.g., Goodwin & Goodwin, 1985; Hutchinson & Lovell, 2004).

Procedures

The coding of articles consisted of two parts: initial coding for inclusion in the study, and content analysis coding. First, all of the published articles were reviewed in each of the three journals and coded for the following inclusion criteria: (1) they were empirical (meaning data were used), (2) they included individual-level student data (e.g., had students as participants, used students as the unit of analysis); and (3) they included race (or a race-related construct) in its framing, analyses, or interpretation. Since race is most often defined as a descriptive characteristic of persons or groups of people, the second inclusion criterion was an important consideration for being able to examine whether and how race was used. Moreover, as I coded for whether race was included, I used memoing to create an initial list of potential codes to be

used in the second round of coding related to how race was being applied in the article’s framing, methods, or interpretation sections.

In total, 423 published articles were reviewed for the initial criteria for inclusion in the study, with 49.6% ($n=210$) from JCSD, 30.5% ($n=129$) from *JHE*, and 19.9% ($n=84$) from *TRHE*. Of these, 61.7% ($n=261$) fit all the necessary criteria (described above) for inclusion in this study and were subsequently coded for applications and meanings of race. Table 1 outlines the numbers of articles from the current study that fit these criteria from the three journals over the five years.

Table 1: Distribution of Research Articles on Students Using Race and/or Ethnicity ($N=423$)

Journal	Total Articles Reviewed*	# Empirical Articles	# with individual student-level	# with student-level and race	% Included of Total
<i>Journal of College Student Development</i> (JCSD)	210	206	194	172	81.9
<i>Journal of Higher Education</i> (JHE)	129	116	62	50	38.8
<i>The Review of Higher Education</i> (TRHE)	84	69	43	39	46.4
Total	423	391	299	261	61.7

*Note: Total does not include editor’s notes, ASHE presidential addresses, book reviews, nor *JCSD*’s special 50th Anniversary issues (Volume 50, Issue 6).

After the articles were determined to be included in the study, a second round of coding commenced. This coding used a combination of methods, including using computer aided autocoding (Krippendorff, 2012) in HyperRESEARCH 3.0.2, and open coding techniques (Strauss & Corbin, 2008), to create an initial codebook that reflected the following aspects of each article: (1) how the article applied race in its methods (i.e., operationalization), (2) why race was applied (i.e., framing/rationale); and (3) how race was interpreted. Each article also received a holistic code for whether there seemed to be consistency between the framing, operationalization, and interpretation of race. Furthermore, I coded for how the terms “race” and “ethnicity” were used throughout the article, how this information was collected, and which

groups were included in the study. This coding happened through several iterative processes. The initial list of codes from the first round of coding for inclusion criteria helped to frame the types of information I was looking for as I entered into open coding with a subset of 10% of the articles taken from all three journals. Instead of using a strictly *a priori* coding scheme, I focused on gathering a wide variety of potential codes on how race was being applied throughout the articles, memoing extensively throughout the process.

After this 10% were coded, I had a list of over 103 codes across various groups of codes (e.g., framing, operationalizations, interpretations). Revisiting my memos and comparing different types of codes, along with peer debriefing, allowed me to consolidate and group the codes into a semi-final codebook. For instance, after peer debriefing with an expert in quantitative methods in higher education research, applying race as a “predictor” was deemed quite similar to applying race as a “background variable” or “independent variable.” Thus, these codes were collapsed into a final code of “APPLY - IV/Background.” This process resulted in a semi-final codebook that shared with an external auditor who had expertise in the area of diversity issues in higher education to discuss face validity of the various ways race could be applied and interpreted in articles. Several suggestions were made to improve the codebook until a final codebook was constructed. The final codebook was then used to code the remainder of articles as well as recode the initial 10% subset.

The use of computer aided coding helped to ensure trustworthiness (Krippendorff, 2012; Weber, 1990). The autocoding feature of HyperRESEARCH pointed me to each instance that the terms “race,” “racial,” or “racism” were used within an article. I also autocoded for usage of “ethnic” and “minority” and “of color.” Lastly, I autocoded for racial group terms like, “Caucasian” and “African” and “Native American” among others. Being able to pinpoint every instance of these terms was helpful for making sense of the different ways race could be applied throughout each article and across articles. Although I did not use additional methods for trustworthiness in

interpretation, such as having an additional coder to assess inter-rater reliability, each article was reviewed at least two times (i.e., reviewed for inclusion in the study, reviewed for coding of racial usage), with 10% being reviewed three times. Reviewing the articles multiple times, along with extensive memoing along the process, provided confidence that I was deeply enmeshed within each article and my interpretations were trustworthy.

Limitations

Before outlining this study's findings, there are several limitations that should be considered when interpreting the study's claims. First, I want to acknowledge my own positionality and standpoint and how that undoubtedly colors my interpretations within a content analysis study (Krippendorff, 2012). As a multiracially-identified male, completing this study toward fulfillment of my dissertation (i.e., still being an emerging scholar), I recognize how my own racial, ethnicity, and scholarly identities may have influenced what I found to be interesting points to focus upon in terms of racialized research. Second my decisions to not have an additional coder to address inter-rater reliability adds another limitation to this study. I did attempt to address this limitation by adhering to the methodological guidelines of content analysis and incorporating other forms of trustworthiness outlined above.

Third, as an emerging scholar, I also recognize that I am not in the position to be critiquing my colleagues in how they do research. Therefore, I follow Harper's (2012) reasoning about not naming specific authors when critiquing of researchers' decisions and interpretations of the effects of racism in their research. By not naming particular articles, I add another limitation about the transparency of this study; however, I believe the benefits outweigh this limitation. I do, however, provide some exemplars for potential ways to frame, operationalize, and interpret race in research, although these are not the only examples that could have been chosen. Fourth, this content analysis of scholars' applications of race cannot tap into the peer-review process each article underwent. For instance, if an author wanted to be more explicit

about the role racism may have played in the findings, the reviewers or journal editors could have recommended/required that term to be taken out of the manuscript. Lastly, this study only included research articles on students (including graduate students and incoming college students). Therefore research on other aspects of higher education (e.g., faculty, administrators, organizations) may look different in terms of applications of race.

Findings

This study sought to better understand how racial constructs are applied in research on college students and the potential meanings and messages these applications may (intentionally or unintentionally) be sending to readers.

Applications of Race and Ethnicity

Of the 261 articles, 161 (61.7%) incorporated quantitative methodologies, while 93 (35.6%) were qualitative, and 7 (2.7%) were mixed methods studies. Coding of the 261 articles demonstrated a wide variety of general applications of race (and at times, ethnicity) in higher education research. Table 2 outlines these applications, which mostly included using race and/or ethnicity to enumerate samples or describe the demographic contexts of studies, focusing the study on a specific racial or ethnic population, and applying race as an analytic variable, either attached to individual participants/groups or as a construct.

Overall, the applications centered around enumerating samples by race and/or ethnicity. Over three-quarters of the articles applied race in this way, with 18 of these articles only applying race as enumeration and another 22 articles only applying race to enumerate with demographic context. Across both quantitative and qualitative studies, the enumeration largely reflected racial and ethnic categories found on the U.S. Census, with Hispanic/Latino being weighted the same as other Census-recognized racial groups (i.e., African American/black, Asian American [with only a few studies disaggregating Pacific Islanders], Native American/American Indian, and white/Caucasian).

Table 2: General Applications of Race

Application and description (n=261)	#	%
<i>Sample Enumeration</i> Study used race and/or ethnicity to describe sample (and in a very few cases, population) characteristics	201	77.0
<i>Demographic Context</i> Study used to describe the demographic profile of the state, institution, particular program, etc.	85	32.6
<i>Specified Population</i> Study focused on a specific racial and/or ethnic population	61	23.4
<i>Author positionality/reflexivity</i> Author(s) includes how own race and/or ethnicity may influence study	18	6.9
<i>Weighting Responses</i> Weighting some groups or taking a random sample of one group to be more representative to the other groups.	11	4.2
<i>Identifying participants by race</i> Study only includes race by identifying quoted participants by their race	8	3.1
<i>Analytic Variable – Construct</i> Study included a race-related construct (e.g., campus racial climate) within analysis	49	18.8
<i>Analytic Variable – Comparative</i> Study focused on comparing different racial and/or ethnic groups within the sample	46	17.6
<i>Analytic Variable – Independent Variable/Background Characteristic</i> Study included race and/or ethnicity as an individual characteristic of sample and described as background characteristic and/or independent variable	45	17.2
<i>Analytic Variable – Control</i> Study used race and/or ethnicity as a “control” in statistical analysis	34	13.0

Note: percentages do not total 100 since a single article could have had several different usages. For instance, controlling for race often meant enumerating what those racial characteristics were in the first place.

These racial classification schemes researchers used largely mirrors what Hollinger (1995) described as the “ethnoracial pentagon” that reflects the five broad categorical groups corresponding to the racialized labels of black (African American), brown (Latina/o), red (Native American/American Indian), white (European American), and yellow (Asian American). Despite the changing demographics within the U.S. (evidenced in the separation of Native Hawaiian and Other Pacific Islander as its own racial group on the Census), the studies reviewed seem to continue articulating broad racial groups that are reminiscent of the 18th Century classification schemes of Linneaus and Blumenbach.

Similarly, race and/or ethnicity were often applied (32.6% of articles) when describing the demographic context in which the study took place. This description included such items as the demographic profile of the region, state, institution (sometimes as simple as stating it was a “predominantly white institution”), or a particular program (e.g., if sample was recruited from a program). For example, Fries-Britt and Griffin (2007) described the multiple levels of racial demographic context for their study:

Census data indicates that in 2000, there were over 5 million residents in the state in which the university is located, and the state’s racial/ethnic composition was 64% White, 28% Black, 4% Latino, 4% Asian, and .3% Native American (U.S. Census Bureau, 2000). State University enrolls approximately 35,000 students (25,000 are undergraduates), and just over 75% of undergraduates are in-state residents. Although not completely proportional, the undergraduate enrollment of State University somewhat mirrors the wider state population: 68.0% of undergraduates are White and 32.0% are minorities. Specifically, 12.0% of undergraduate students are Black, 14.0% are Asian American, 6.0% are Latino/Hispanic, and 0.3% are Native American (p. 512).

This exemplar describes in much detail both the state and institutional-level racial and ethnic demographics in which the authors’ study on high achieving black students took place.

The Fries-Britt and Griffin (2007) study cited above also fits another common application of race: Using race to focus the study on a specified racial and/or ethnic population (23.4%). A majority (55.7%) of these were qualitative studies that sought to explore more in-depth the lived experiences of the specified student group. An interesting point is which groups were the topic of focus within these specified studies. Twenty-eight (46% of the specified populations application of race) studies specifically focused on African American/black students, 14 (23%) on Latina/o or Hispanic students (including subgroups), eight (13.1%) on Asian/Pacific Islander Americans (including subgroups), six (9.8%) on white students, four (6.6%) on Native American/American Indian students, and two³ (3.3%) on multiracial or multiethnic students.

These specified population studies varied by methods: Of the 93 qualitative studies, 34 (36.6%)

³ Note: Literte's (2010) study was not included in this count since the study was not specifically on multiracial students, but rather on how these students were changing the landscape of student services; the sample included non-multiracial students and staff.

focused on specific racial or ethnic populations, while only 25 (15.5%) of the 161 quantitative studies had this specified population focus. Two of the seven mixed methods studies focused on a specific population.

Less often, but still prevalent among the qualitative studies, was using race and/or ethnicity to describe the author's positionality and/or interpretative frame. However, not many studies described this position, even when they included race in terms of the sample or context. Only 18 (19.4% of the 93 qualitative articles) included race/or ethnicity in describing researcher positionality or reflexivity. For instance, Palmer, Davis, and Maramba (2011) offered this exemplary statement:

Researchers' Positionality. For any qualitative study, it is important to discuss how the position of the researcher influences data collection, analysis, and interpretations (Jones, Torres, & Arminio, 2006). This research was conducted by two Black males and one Filipina American; one was affiliated with an HBCU and two were affiliated with a PWI when data were collected. We were motivated to focus on academically underprepared Black males because much of the recent literature on Black males has focused on high achievers, albeit at PWIs. As such, we wanted to provide a voice for Black males who persisted against the odds in an institutional context that has not been the focus of recent research compared to the number of studies published about Black students, specifically, Black males at PWIs. Collectively, we believe our identities and experiences in higher education, particularly as minorities who attended, were affiliated with, and/or conducted research on HBCUs, created a unique lens and position to understand the contemporary experiences of Black male students in a familiar context (p. 584)

By providing this statement, the researchers acknowledge the ways their own race may have influenced their study on black male students at HBCUs. Interesting to note, of the 18 articles that included race within positionality statement like the one above, 15 had race as a primary focus/main topic of the study and were on specified racial and/or ethnic populations. The other three studies were on another aspect of social identity (one on gender, two on sexuality). This inclusion seems appropriate for the identity-focused articles, but should not be limited to solely these types of articles. The fact that many other qualitative studies included different applications of race, but not within the positionality statement, may signal missed opportunities

to remind readers that race likely influences all interpretations (Zuberi & Bonilla-Silva, 2008), even when the study may not have specifically focused on race.

Another prominent application of race and ethnicity among the articles analyzed was that of an analytic variable (88 articles or 33.7%), which had several different applications. Of these 88 articles, 38.5% include race as a variable in order to compare different racial and/or ethnic groups within analyses. These studies were also often quantitative studies using large datasets that could separate the data into different groups for separate analyses. Applying race as an analytic variable was also evidenced in studies that compared different racial and/or ethnic groups by operationalizing race in various ways. Table 3 outlines the various operationalizations of race as an analytical variable (i.e., used as a comparative variable, independent variable, or control variable).

Table 3: Operationalizations of Race as an Analytic Variable

Operationalization and description (<i>n</i> = 88)	#	%
<i>Dummy Coding for Each Racial and/or Ethnic Group</i> Study focused on comparing different racial and/or ethnic groups within the sample	30	33.0
<i>White as Referent Group</i> White or Caucasian students were used as the reference group within analysis	27	31.8
<i>Collapsing into binary white vs. minority/students of color</i> Multiple groups were enumerated but recoded into a binary variable between white students and minority/students of color.	18	21.6
<i>Interaction Variables</i> Including interaction terms that included race and/or ethnicity or "cross-products" with race	14	15.9
<i>Comparing URM vs. Whites and/or Asians</i> Multiple groups were enumerated but recoded into a binary variable between white and/or Asian students and those who were identified as Underrepresented Racial Minorities (URM).	6	8.0
<i>Excluding groups in analyses</i> Racial and/or Ethnic groups (e.g., Native American students) excluded/dropped from analyses usually due to low sample sizes. 10 NA, 5 Mixed, 2 Asian, 1 Black exclusions	17	18.2

Note: percentages do not total 100 since a single article could have had several different operationalizations, especially studies that contained multiple analyses.

As outlined in Table 3, when researchers desired to include race as an analytic variable to compare different groups, the separate racial groups that were often enumerated in descriptive analysis of the sample could be collapsed together in different ways.

Operationalizations included having white vs. collapsed student of color comparisons due to wanting to maintain relatively similar sample sizes for statistical power. When studies did not group their sample into this binary way of viewing race, they often used dummy codes for each group. However, this operationalization could result in excluding/dropping certain groups from the statistical analyses due to small sample sizes.

Out of the 17 studies that described excluding/dropping certain groups from analyses, Native Americans were excluded in 11 of these articles, mixed race or multiracial students were excluded in five, while broadly defined Asian students and African American/black students were each excluded twice. Examining these instances further, out of the 17 articles, 11 excluded groups because of the methods utilized (e.g., needing to drop groups from the sample due to small cell sizes), three studies did so due to the focus of the study, and three others did not explain why certain groups were excluded. One particular example included Lundberg's (2007) study on Native American college student learning using a sample of students who identified as "American Indian or Other Native" ($n=643$) drawn from a national dataset of over 20,000 students who took the *College Student Experiences Questionnaire (CSEQ)* between 1998 and 2001. However, Lundberg stated that, "In an attempt to focus exclusively on Native American students, those who indicated another racial/ethnic affiliation in addition to their Native American race/ethnicity were not included in the analysis" (p. 408). Here, multiracial Native American students were excluded from the sample due to the author's desired focus to study students who solely identified as Native American, which could be interpreted that these students are racially "pure" from an essentialist standpoint.

Why race was applied. Part of better understanding the applications of race included getting a sense of why researchers applied race in their research, which aligned with authors' rationales or frames for incorporating race. Four major reasons emerged from the coding, including articles that reviewed literature suggesting that race and/or ethnicity should be applied

(65.5%), articles where race and/or ethnicity were the main focus or purpose of the study (37.5%), the theoretical or conceptual framework used in the study suggested (and sometimes required) the inclusion of race and/or ethnicity (24.1%), and lastly, studies where race and/or ethnicity were included because the researchers conducted purposeful sampling in order to diversify their sample by race and/or ethnicity (5.0%). However, there were 59 articles (22.6%) that applied race but did not offer rationale for why.

When race and/or ethnicity served as the main topic or focus of an article (e.g., race was in the title, the article was about a specific racial or ethnic group, or race was a part of the purpose or research questions), it makes sense that race would be included. Additionally, it seems appropriate that articles outlining how race has been shown to be important in the literature would also apply race in the current study. For instance, Kuh, Cruce, Shoup, Kinzie, and Gonyea (2008) explained their rationale for applying race and ethnicity in their study:

Race and ethnicity along with family income are especially important because the nature of the undergraduate experience of historically underserved students can differ markedly from that of majority White students in Predominantly White Institutions (PWIs) (Allen, 1999; Gloria, Robinson Kurpius, Hamilton, & Willson, 1999; Rendon, Jalomo, & Nora, 2000) (p. 542).

Here, the literature demonstrates that race and ethnicity seem to differentially impact the experiences of white students and students of color on predominantly white campuses (presumably due to experiencing the campus climate differently rather than the students being inherently different). When the conceptual or theoretical frameworks suggested including race in the study, it was often by way of conceptual models like Astin's (1993) Inputs-Environments-Outcomes (IEO) framework that suggests that students' background characteristics (including race and ethnicity) count as inputs that need to be controlled for in order to be able to appropriately assess the impact of the environment. Other studies included campus racial climate as a particular conceptual framework, which often overlapped with race and or ethnicity being the primary focus. Only three of the studies reviewed included Critical Race Theory as a

particular framework or lens, which is similar to Harper’s (2012) finding that only five studies employed CRT.

Interpreting Racial Applications

In order to answer the second research question, authors’ interpretations (or lack thereof), as well as the meanings attached to different levels of consistency, transparency, and language usage were exemplified to assess both implicit and explicit messages about race.

Authors’ implicit and explicit interpretations. In addition to analyzing the ways articles were framed to understand why race was applied in the article, analysis of the findings, discussion, and limitations sections of the articles allowed for better understanding if and how authors were interpreting their applications of race. As outlined in Table 4, there were wide variations in how the applications of race were in turn interpreted by the authors (if at all).

Table 4: Interpretations of Race and/or Ethnicity

Interpretation and description (<i>n</i> = 261)	#	%
<i>Environmental factors</i> Interpretation included how environment contributed to race-related outcomes	83	31.8
<i>Limitations based on race</i> Author(s) included race when describing limitations of the study (e.g., sample not represented of the racial population, not transferable to other racial groups)	71	27.2
<i>Significant racial and/or ethnic group differences</i> Study found significant difference between racial and/or ethnic groups	57	21.8
<i>Group heterogeneity</i> Study allowed for interpretations of or explicitly described within racial group differences	50	19.2
<i>Oppression as interpretation</i> Oppression related to race and/or ethnicity (e.g., racism, discrimination) included in interpretations	44	16.7
<i>No racial differences found</i> Study found no differences among racial and/or ethnic groups	29	11.1
<i>Cultural differences</i> Interpretation referred to cultural differences as potential interpretations for race-related findings	26	10.0
<i>Not interpreted/discussed</i> Study included race, yet did not include in discussions or limitations	88	33.7

Note: percentages do not total 100 since a single article could have had several different interpretations, especially in discussions of multiple explanations for significant findings or studies that contained multiple analyses.

Although almost a third (31.8%) of these studies attributed racial differences to environmental factors, more often were studies that did not discuss or explicitly interpret racial findings at all (33.7%). By not explicitly interpreting racial applications, authors leave this up to individual interpretation. For instance, in describing the sample, one study stated, “The GPAs of African American students were lower by .5 points on a 4-point scale than participants from other racial and ethnic backgrounds.” Yet, the author did not discuss why nor attribute this difference to any environmental factors. This lack of interpretation and discussion of race could subsequently be interpreted as implying that racial groups are inherently different (and in this example, that one group in particular is low-achieving).

Additionally, when significant differences were found between groups, some studies showed evidence of interpretations that were more explicit and deficit-oriented (i.e., racial differences were related to cultural differences). For instance, one study included this explicit interpretation of the findings:

This study also shows that Hispanic students are 11% less likely to obtain their bachelor’s degree within six years, regardless of their educational pathways (Model 1 of Table 8)... The needy minority students who leave original institutions because of financial concerns may need transfer policies that target them for assistance throughout their college years.

In this example, the claim that educational pathways do not help explain Hispanic students’ less likelihood of obtaining their degrees may send the message that there is something “wrong” with Hispanic students and that they “need” additional resources.

On the other end of the spectrum of racial interpretations were those that explicitly included oppression. In this exemplar found in Bahr's (2010) study on mathematics preparation and outcomes, racial differences are interpreted up front without reifying racial groups as inherently different. Bahr stated,

At the outset, it is clear that any racial disparities in mathematics preparation and achievement may be attributed to a number of well-documented expressions of socioeconomic inequality, such as academic tracking, lower levels of parental capital, and the poorer quality of primary and secondary schools in neighborhoods characterized

by a high percentage of minorities... Thus, race itself is not a cause of the disparities; rather, it is the many correlated facets of inequality that lead to lower preparation and achievement among historically disadvantaged racial groups (p. 212).

This example and others explicitly interpreted that differences between groups or experiences within groups may be due to oppression related to race and/or ethnicity (16.7%). Important to note is that interpretations of the influence of oppression was not necessarily dependent on authors' explicit inclusion of terms such as "racism" and "racist." In total, 22.2% of the 261 articles included the terms "racism" or "racist," which is similar to Harper's (2012) finding that 21.6% of his 255 articles analyzed mentioned "racism" or "racist." Here, these terms were used in different places within the articles (e.g., in the literature reviewed) with only 37 (14%) specifically including racism in their interpretations of the research findings. Why would authors include racism in the literature reviewed and not in the discussion? This discrepancy relates to the types of inconsistencies of race found within individual articles.

Inconsistencies of race. Another form of how race could send implicit messages within the studies related to how consistent authors were between framing/rationales, operationalizations, and interpretations of race in their research. If inconsistently applying race across one study, authors may be unintentionally confusing racial concepts or explanations for why race matters or does not matter in their research. Overall, there were widespread inconsistencies within individual articles between why race was applied, how it was operationalized, and how it was interpreted. As discussed in the methods, after these aspects were coded, each article received a holistic consistent/inconsistent code. Consistency meant race was discussed in the framing/rationale, which matched the ways race was operationalized within the study, and also related to how race was discussed/interpreted by the author(s). When any of these three items were missing (e.g., race was applied as a variable but not discussed in the findings, race was operationalized but without rationale) or when the three parts did not seem to match each other (e.g., reviewed literature suggested racism as a

potential explanation while interpretations related to more essentialized notions of race), the article was deemed inconsistent. In total, 150 (57.5%) articles received an inconsistent code, while 111 (42.5%) were found to be consistent across the framing, operationalization, and interpretations of race.

One sub-pattern that emerged from the “inconsistent” studies appears to be when the only application of race was sample enumeration, yet there was not rationale given for why (e.g., no literature reviewed said race might be important to the answering the research questions). Although some (19.2%) of the studies that enumerated their samples by race and /or ethnicity briefly mentioned that the sample was roughly representative of the institution, the majority of studies did not provide much rationale for why they enumerated by race or ethnicity. Knowing the sample demographics seems helpful, but without proper rationale, it may also send an implicit message that perpetuates the idea that students of different racial/ethnic backgrounds are essentially or inherently different (Baez, 2004). Enumeration without any rationale seems like it could imply that race is a fixed characteristic of students that must always be noted and controlled for when possible.

Two reasons seem to emerge to help explain why inconsistencies seemed so prevalent among studies, which were issues of transparency and racial terminology usage. A lack of transparency in how racial and/or ethnic data was collected may also relate to why there may be an inability to determine consistency. For instance, of the 201 studies that included race and/or ethnicity when enumerating samples, 82 (40.8%) did not mention how the demographic information was collected for the studies (see Table 5).

Table 5: Transparency of Collecting Racial/Ethnic Data for Enumeration

Level of Transparency (n=201)	#	%
<i>No mention of how racial and/or ethnic data were collected</i>	82	40.8
<i>Participants “self-identified” their race and/or ethnicity</i>	70	34.8
<i>Study used a “demographic form” to collect data but actual question not described</i>	48	23.9
<i>University records or officials were used to identify race and/or ethnicity</i>	23	11.4
<i>Study described explicitly how race and/or ethnicity was collected</i>	13	6.5

Note: percentages do not total 100 since a single article could have mentioned several ways of collecting race, for instance, some studies mentioned participants “self-identified” race on a “demographic form”

Although very few studies (6.5% of the studies that enumerated race) offered a level of transparency explicitly describing how racial data were collected, Mayhew and Engberg (2010) offered an exemplar for what this transparency might look like:

Information on race was collected using a multiple response category asking students, “How do you identify yourself racially/ethnically?” Students were asked to respond to this question using the following response categories: 1 = African-American/Black, 2 = Asian/Pacific Islander (includes the Indian subcontinent), 3 = Hispanic/Latino/Chicano, 4 = Native American/American Indian/Alaskan Native, 5 = White/Caucasian (persons having origins in Europe, North Africa, or the Middle East). Students who circled more than one response category were labeled as “Biracial” for analyses. Those who provided no information concerning race or ethnic identification were classified as “No Race Given.” Using this variable as a base, indicator variables were created and used in the regression models. For these models, White students were analyzed as the reference group (p. 471).

By offering this level of transparency, researchers add to the trustworthiness and replicability of their studies. The finding that almost 41% of the studies that enumerated race were not transparent in how this racial data were collected may also send an implicit message that race is not “self-identified” which could lend itself to race being reified as something biologically essentialist or an innate characteristic that is fixed and static throughout students’ lifetimes.

The other potential reason why race seemed so inconsistently applied within articles also could be related to inconsistent usage of racial terminology. Although many studies used a

conflated “race/ethnicity” term within their studies, there were more inconsistencies in usage of racial terminology than consistencies (see Table 6). For instance, the conflated term “race/ethnicity” might be used in certain parts of the article but not others (with no apparent reason for the different usages). For example, the exemplar from Mayhew and Engberg (2010) above mentioned collecting “race” information, yet the authors’ survey actually asked students to respond to a conflated racial/ethnic identity question.

Table 6: Usage of Racial and Ethnic Terminology

Terminology Usage (n=261)	#	%
<i>Race and Ethnicity are used inconsistently</i>	82	31.4
<i>Race and Ethnicity are used in nuanced ways throughout article (e.g., “race and/or ethnicity” used to reflect “Hispanic” as a Census ethnic [non-racial] category)</i>	56	21.5
<i>Race and Racial used consistently</i>	36	13.8
<i>Race and Ethnicity are conflated (i.e., “race/ethnicity”) consistently</i>	33	12.6
<i>Ethnicity and Ethnic used consistently</i>	31	11.9
<i>Group names used only</i>	17	6.5
<i>Minority or “of Color” used only</i>	6	2.3

There were wide variations in terminology, especially in relation to the terms race and ethnicity. And when these terms were used within a single article, they did not seem to be used consistently. Some used race and racial, others consistently used ethnicity and ethnic, while the majority used these interchangeably or inconsistently, often conflating race/ethnicity at some points, while using singular terms in others with no clear indication why. Only a few studies explicitly acknowledged the complexity associated with nuanced racial terminology, or defined the terms in a footnote. For instance, Stewart (2009) offered this footnote for grounding racial and ethnic identifiers in the perspectives of participants:

The terms *Black* and *African American* are used together in this article when describing the racial/ethnic composition of the study participants in the manner in which they

described themselves. The questionnaire each participant completed prior to being interviewed asked them to self-identify their race and ethnicity. Participants could write in whatever descriptor they preferred; no preset list of choices was given to them. In response, some students chose to respond Black for both race and ethnicity, others chose African American for either or both descriptors, and still others responded Black for race and African American for ethnicity. I did not feel it appropriate to choose just Black to describe the group racially when that term did not have meaning for all the students in the study. Likewise, African American as a racial or ethnic descriptor was not meaningful for all the students. Therefore, when referring to the racial and ethnic composition of the students who participated in this study, they are referred to as *Black and African American* (p. 253, emphasis in original)

Similarly, Chaudhari and Pizzolato (2008) provided this rationale before explaining their focus on “multiethnic” vs. “multiracial” students, “Before examining developmental models, it seems important to distinguish between the terms race and ethnicity. The distinction between race and ethnicity is unclear in much identity development research, where race and ethnicity are used interchangeably” (p. 444). Acknowledging this complexity seems important for disrupting status quo notions of race and ethnicity. However, the majority of studies did not offer these types of nuanced views of race and ethnicity, which could result in reinforcing essentialist notions of race.

Discussion

This study investigated how scholars apply racial constructs in their research on college students and how the potential messages of these applications may reify race and promote racially essentialist views of college students. Given the historical legacy of how research methods have been used to categorize and oppress certain groups of people (Zuberi & Bonilla-Silva, 2008; Zuberi, 2001), examining the various ways race gets applied seemed important for getting a sense as to whether or not higher education scholars contribute to this type of racial reification through their research. This study expands upon Harper’s (2012) systematic review of race-focused research in higher education. Although Harper invoked Bonilla-Silva and Baiocchi’s (2001) claim of “anything but racism” to explain scholars’ interpretation of race-related findings, this study situates scholars’ interpretations within more holistic views of racial applications, including frames/rationales, operationalizations, and overall consistencies.

Additionally, incorporating studies that were not race-focused, yet still included race, helps to elucidate the ways race has potentially become an essentialized category of difference, commonly used in research (even non race-specific research), yet not usually well-described in transparent and complex ways.

Applications of race in higher education research on college students seem to vary greatly across the studies analyzed, with enumeration of samples by race and/or ethnicity as a central application of race common across a majority of studies. Yet, this enumeration reflects potentially stagnant categories, such as the ethnoracial pentagon offered by Hollinger (1995). By providing more nuanced notions of race and ethnicity and being explicit in interpretations of racial findings, scholars can help to truly send a message that race is socially constructed and a function of power and oppression, and therefore, limit the type of essentialist thinking around race that can be found in much of the historical research in education that came out of the U.S. eugenics movement (Selden, 1999; Winfield, 2007; Zuberi, 2001). However, the findings also demonstrate that these types of nuanced applications of race do not seem widespread across the studies.

What might be needed for the field of higher education are new ways of thinking about race, that will hopefully transcend into the ways scholars conduct research, including how they conceptualize, collect, operationalize, and interpret race. While most studies used race as an individual characteristic that could be grouped together to create and compare racial groups, the finding that almost a third of the studies interpreted racial findings to be related (in part of in full) to environmental factors demonstrates a de-essentialized explanation of racial differences. However, the finding that this explanation was only present in less than a third of the studies is concerning. Moreover, fewer studies specifically mentioned racism as a part of these potential environmental factors, which is consistent with Harper (2012). These consistent findings on the minimization of race signal that scholars should contemplate further the role racism may play in

their studies in order to continue to identify the potential barriers to racial equity across higher education. Yet, the findings from this study do demonstrate that the idea and potential influence of racial discrimination can still be relayed without using the term *racism*. Is there a benefit to naming a certain phenomenon as “racist” or a product of racism? It may be that the term “racist” seems to carry such a heavy load behind it that its usage may actually not be as productive as authors hope, especially if the term may turn reviewers/readers off from actually considering their findings.

What this study demonstrates is not just the importance of interpretations of race-related findings to racism (Harper, 2012), but how the decisions scholars make in terms of the methods and interpretations may actually be essentialist and therefore could be implicitly racist. Examining two sets of findings, the applications of race in terms of focusing studies on specified populations, and the excluding/dropping of certain populations from statistical analyses, specifically Native American students, may help to elucidate these issues. Out of the 61 studies that specifically focused on certain populations, only four (6.6%) were on Native American students. On the other hand, out of the 17 studies that excluded/dropped certain groups from analyses, 11 (65.7%) excluded Native Americans. This common exclusion of Native Americans, who are already a largely invisible population in education research (Brayboy, 2005), should be a major concern for the field of higher education. Such invisibility perpetuates stereotypes and misconceptions of American Indian students as existing only in the past or through mascot imagery, which have detrimental effects on American Indian students (Fryberg, Markus, Oyserman, & Stone, 2008). This form of racism (i.e., making certain racial groups invisible) is something that seems within the control of scholars of higher education and must be considered further in methodological decisions.

Moreover, the findings from this study demonstrate that some scholars’ implicit and explicit interpretations can send messages that essentialize minoritized racial and ethnic groups

of students as deficient. These deficit-oriented studies continue to perpetuate problematic notions that minoritized students are less [qualified, intelligent, adaptable] than majority students (often including white and Asian American – although there is inconsistency in this positioning of Asian Americans as well). However, the findings show that these messages of deficiencies were only present in a small minority of studies analyzed, which hopefully signals that scholars publishing in higher education journals are moving in a positive direction toward orienting their studies in equity-minded ways.

Interestingly, many studies used the conflated “race/ethnicity” noun or “racial/ethnic” adjective (e.g., to modify “group”) when describing their samples. Although previous scholarship has warned against conflating these two terms (e.g., Markus, 2008), these authors’ usage may not necessarily be because of some confusion on the distinctions or that scholars believe they are interchangeable, but may actually be due to an understanding of “Hispanic” as a Census “ethnicity,” while the more common usage is similar to other racial groups. Therefore, when enumerating samples, Latina/o or Hispanic are described in the same manner as other racial groups, which would relate to why using a conflated “race/ethnicity” would seem appropriate.

In all, the findings from this study demonstrate a variety of different ways that scholars apply race in their research on college students. With this variety is evidence that scholars have choices and flexibility in how they apply race in their work; there is not just one way to do race-related research. However, all decisions can send messages, whether intentionally or unintentionally, about the nature of race in higher education. The field must continue to wrap our collective minds around the complexity associated with race in order to address the persistent racial disparities that haunt the field. This complexity seems better than potential reifications of race and essentialist (and deficit-oriented) explanations for why disparities exist.

Implications

This content analysis of scholars' applications of race offers several implications for both conducting future research as well as teaching about race and research methods. Since enumeration of study samples by race and/or ethnicity was a central application, more attention needs to be given to why. If scholars just enumerate by race (and usually gender) without rationale, what message might this send about these already essentialized categories? The findings demonstrate that racial enumeration without rationale may be sending a message about the fixedness and innateness of race. Therefore, in future research, authors should be more explicit about why they are including race in their studies. Moreover, it would be a false argument to suggest that articles do not need to enumerate by race. Even if an author tried this approach (with rationale being not wanting to essentialize race), reviewers and journal editors would likely require this information. Requiring racial information without accompanying rationale may unintentionally contradict the importance for including this information in the first place (e.g., perpetuating essentialist notions of race while trying ameliorate racial disparities).

Incorporating the potential perspectives of peer-reviewers and journal editors adds another important piece of making sense of racial applications in higher education research on college students. In addition to reviewers potentially requiring the enumeration of samples by race and ethnicity, they should also be making sure that scholars do a good enough job combing the literature in order to include rationale for why race would be important to know within their sample. Without this framing, race may be maintained as an essentialized characteristic of college students that must be identified (and potentially controlled for). Furthermore, when race is included in the study, reviewers should focus on if and how race is being interpreted in the discussions and/or limitations. Often, scholars reporting the sample in terms of race and ethnicity, may have mentioned that one group was overrepresented, but then

did not include this in any discussion of limitations. Researchers must make explicit what they think might be a limitation of their applications of race.

If the field is to become more complex in its applications of race that are more nuanced yet consistent, there likely needs to be a culture change within the way the field conducts research. This would need to begin with how students are taught about race and research methods, as well as how they are socialized into the field. Perhaps part of the limited attention and depth being paid to race within many of these studies could be attributed to a lack of attention to teaching about race and racism within higher education graduate programs, and methods courses in particular. Although recent attention is being given to better understanding how higher education graduate students are socialized or taught about race during their programs (including current studies in progress by Shaun Harper and colleagues), it is unclear what types of information emerging scholars are being given on how to operationalize race. As I reflect on my own (and fairly recent) graduate level methods course, I remember having some conversations about how the coding of racial groups may affect our results, but there were no deeper discussions about how we could (and should) be thinking about and operationalizing race in our research more complexly.

Conclusion

As scholars from various disciplines, such as psychology (Markus, 2008) and sociology (Morning, 2009) attempt to deepen their understandings of race in research, higher education scholars must also examine their usage and reporting of racial constructs. This study provides a foundation for further exploration by outlining how race is currently applied in published articles over five recent years. Explicit interpretations of racial differences as being a function of racism occurring in the environment is one way to reduce any “status quo” understandings of race and related disparities and experiences with discrimination, especially if an underlying interpretation of race may imply essentialist notions of racial groups. This study calls for new

methods for capturing and interpreting the constant, yet ever-changing, racial issues affecting higher education.

CHAPTER 3: WHEN RACE MATTERS: COLLEGE STUDENTS' MEANINGS OF RACE IN A POST-RACIAL AND POST-GENOMIC ERA

Introduction

Despite claims of being in a so-called “post-racial” era (i.e., one where race does not matter anymore) given common interpretations of recent events as evidence of racial equality (e.g., President Obama’s election, increases in interracial marriage and multiracial populations, etc.), race continues to be a central organizing concept used by individuals, as well as by institutions and structures within U.S. society. Concurrently, advances in genetic technologies have resulted in U.S. society becoming increasingly fascinated with genes and DNA (Nelkin & Lindee, 2004; Reardon, 2005) resulting in claims about living in a “post-genomic” era (i.e., post-Human Genome Project). Sundar Rajan (2011) described the shift from a genomic era to a post-genomic one after the sequencing of the Human Genome Project in 2001. In the genomic era, the scientific and commercial community focused on the “question of what information resides within genomes” with the shift to the “post-genomic” era now focusing on “what one might *do* with that information in scientifically and commercially valuable ways” (p. 198).

This ostensibly post-genomic moment can be seen in several recent examples of the infusion of DNA testing into higher education initiatives. In the summer of 2010, the University of California at Berkeley initiated its annual shared learning experience by asking incoming students to “Bring Your Genes to Cal” and sending out DNA saliva testing kits to over 5,000 incoming freshmen and transfer students, with the goal of generating discussion on “nutritional genes” (Hebbar, 2010). This type of testing has also been increasingly used for racial ancestral/genealogical purposes (Nelson, 2008; Royal et al., 2010), including researchers at Cornell University who in February 2011 launched a “Genetic Ancestry Project” where a random sample of 200 undergraduates could get their DNA tested to learn about “their ancestor’s human origins and migrations” (Ramanujan, 2011). Similarly, the “DNA Discussion Project” at

West Chester University in Pennsylvania uses DNA ancestry testing to engage the campus in discussions of diversity (Foeman, 2008). Although project organizers claim it encourages understanding of “the construction of race,” others suggest that these DNA tests can actually reinforce college students’ thinking of racial categories as biologically constructed given the ways genetic technologies are used to provide students with racialized percentages indicating their ancestry (e.g., “9 percent West African”; Harmon, 2007; Omi, 2010).

So what is so wrong with biological race thinking? Believing that racial groups were biologically different served as the foundation for racist laws, institutions, and behaviors that claimed validity in the supposed “evidence” presented by various scientific approaches (Fredrickson, 2002; Montagu, 1964; Smedley, 2007). These claims were extremely prominent during the early 20th century eugenics movement, where scientific racism and desires for racial purity converged to influence quota-based immigration laws (e.g., the “National Origins Act” of 1924; Black, 2003), anti-miscegenation laws preventing racial mixing (e.g., the “Virginia Racial Integrity Act” of 1924; Lombardo, 2008), and the infusion of eugenic beliefs into an already racialized system of education (e.g., identifying and sorting “gifted” white students and “at-risk” racially and racially minoritized students and subsequent rationalizations; Winfield, 2007). At the heart of these eugenic wrongdoings was an essentialist belief in races as biologically/genetically distinct; thus, scientifically affirming the separation between (and subsequent exclusion of specific) so-called races (Roberts, 2011).

Although the eugenics movement has long passed and the biological concept of race well-refuted (American Anthropological Association, 1998; Gould, 1996), academic discourse suggests a recent “rebiologization” of race (Omi, 2010) and potential “perfect storm” for a return of eugenics (McCabe & McCabe, 2010) given technological advancements and desires to use those technologies within this post-genomic era. As college students encounter these genetic advancements (e.g., within laboratories at research universities), these students may not

understand the history of eugenics and potential ramifications for the decisions they may make based on such genetic technologies. When coupled with post-racial claims, this discourse presents an imperative to investigate how current college students make meaning of race and genetics so that higher education may be better informed on how to educate students toward more equity-minded racial thinking and behaviors, and desires to ameliorate persistent racial inequities instead of rationalizing them through genetic explanations.

Therefore this study aims to investigate contemporary forms of racial thinking among traditional-aged college students (the so-called “millennials”), who have too readily been labeled “post-racial” by news outlets due to their open-mindedness to and acceptance of diversity while coming of age alongside Obama’s presidency (Apollon, 2011). Given that most “post-racial” claims conclude that race “no longer matters” this study begins with asking college students whether or not race matters to them. Through constructivist grounded theory methodology, I explore how students’ claims about race mattering are tied to the meanings they make of race (developed through experiences with and learning about race), as well as their understandings of genetics. By better understanding the everyday perceptions of race and genetics among our society’s future leaders and scholars, this research may inform new ways to approach teaching the social realities of race in changing sociopolitical (e.g., post-racial and post-genomic) contexts.

Background and Literature Review

This study is grounded in the history of the early 20th century eugenics movement and its potential influence on contemporary forms of racial thinking. At the root of the type of racial thinking during the eugenics movement were beliefs in racial essentialism, or thinking that someone is a certain kind of race because of some sort of hidden or underlying (often biological) essence that is shared among all members of that race (Haslam et al., 2006). Eugenicists used their rudimentary understandings of genes as racial essences and related

them to differences in outcomes, such as mental ability (Dar-Nimrod & Heine, 2011; Montagu, 1964; Selden, 1999). The eugenics movement laid the foundation for the persistent racist arguments about genetic differences in intelligence across racial lines (e.g., Herrnstein & Murray, 1994; Jensen, 1969). The connection between eugenics and education has been documented by Winfield (2007), who argued that since the U.S. schooling system and curriculum were first created during a time when a great deal of U.S. society (intellectuals, academics, scientists, doctors, and even lay people) believed in eugenics, its ideology has persisted within our current education system. As witnessed with increased testing due to No Child Left Behind, Winfield outlined how the ideas associated with testing and sorting students into different tracks – labeling some as “gifted” and others as “at-risk” or “special” – constitutes a major essentialist way of thinking about human capacity for learning (Winfield, 2007). The message communicated is that some genetic and hereditary determinate makes some students (often along racial lines) more talented than others.

Given this concerning history of how biological and essentialist racial thinking played out in educational practice and policy, it seems important to note the various ways this type of thinking may persist, especially in contemporary contexts with increasing advancements in genetic technologies, including so-called “ethnic DNA tests” used across institutions of higher education. Therefore, this literature review focuses on outlining various forms of racial thinking as well as how experiencing racial diversity impacts students.

The Problematic Persistence of Biological Race

The literature on race is filled with scholarly debates and dilemmas over various ways of conceptualizing and defining race in academic research (Duster, 2005; Markus, 2008; Morning, 2009; Moya & Markus, 2010; Omi, 2010; Renn, 2004b; Smedley & Smedley, 2005). Despite general agreement among social scientists and educators that race is a social construct, notions of races as biologically determined and distinct entities persist, as Omi (2010) stated, “Notions

of innate racial differences haunt the ongoing debate about the political and social meanings of race” (p. 349). In psychology, Markus (2008) argued that this biological concept of race was a major influence on the field’s ambivalence toward race being viewed as both a positive source of pride, community, and identity, as well as a source of prejudice, discrimination, and racial oppression. Similarly, Moya and Markus (2010) contended that conversations and new technologies surrounding “race [being] in our DNA” reinforce “centuries-old notions that race is a biological entity inside people’s blood or bodies” (p. 15). Reviewing anthropological and historical uses of race, Smedley and Smedley (2005) clarified that even though biologically based racial groups are “fiction,” contemporary scientific research continues to perpetuate notions of immutable racial groups (and their disparate social outcomes) based on perceived biological or genetic factors. While most of this literature examines scholarly “armchair” theorizing about race (Glasgow, 2009), it seems important to also examine everyday persons’ lay understandings of race, especially college students, who will be increasingly called upon to employ their understanding of race to serve as citizens of a diverse democracy (Hurtado, 2007). Therefore, this study examines current college students’ understandings of the biological/genetic concept of race and whether these understandings play into their thinking about whether and how race matters.

One instance in which college students might be asked to reason through the biological concept of race is with the DNA tests occurring on college campuses reviewed in the introduction of this study. Indeed, Daniel (2006) discussed how biological understandings of race could be reified through the new technologies associated with the “ethnic DNA test.” These tests compare an individual’s various genetic markers to frequencies of these markers in population groups and are used to infer geographical origins (i.e., racial or ethnic backgrounds) and/or aid in family history research (see also Nelson, 2008). While optimistic that these tests

would actually help people understand that racial purity (and therefore, racial essentialism) does not exist in any genetic sense (Daniel, 2006), Daniel (Daniel & Haddow, 2010) later described:

Another caveat of the current DNA tests is that they tend to conflate geography with ancestry and culture. This can be easily interpreted by the lay public and even by some less conscientious scientists as a proxy for race at a time when the same new genetics is arguing that race has no basis in science. Indeed, the terms “ancestry” and “genetic diversity” have emerged as alternative ways to refer to differences that have historically come to be known as racial ones... Whether scientists discuss the variations in terms of geography or ancestry, the end result is that race and racial differences are resurrected as concrete biological facts, encoded within human DNA. (p. 330-331)

As outlined above, differences between scientific and lay understandings of technologies exist, and can be particularly confusing when undeniably racial language gets used in different contexts and interpreted in different ways.

This type of interplay between scientific and popular discourse can be seen in a potential paradox that exists regarding race and genetics. At the same time that the coding of the Human Genome Project allowed for the genetic technologies to demonstrate scientific proof that race does not exist in any biological sense (McCabe & McCabe, 2008; Reardon, 2005), the language used to describe genetic populations and the increasing popularity of genetic ancestry tests may actually be re-inscribing beliefs in genetic differences across racial/ancestral groups (Roberts, 2011). How racial language can be interpreted in different ways can also be seen in the college student development literature, as Renn (2004b) described the “paradox” of how research on mixed race students may unintentionally reinforce notions of scientifically discrete racial groups. For instance, terms like “biracial” may promote the idea that there are two distinct races that have been mixed (biologically), or due to creating “multiracial” as its own distinct and discrete racial group (see also Osei-Kofi, 2012). Yet, what seems especially important to consider is how students come to develop these different interpretations and meanings of race and racial language, which could relate to the types of experiences they have with racial diversity.

The Benefits of Racial Diversity

Scholars have well documented the beneficial impact of campus diversity, especially for student learning and related outcomes (Chang, 1999, 2002; Gurin, Dey, Hurtado, & Gurin, 2002; Hurtado et al., 2003; Milem, 2003). Much of this empirical research has been in response to threats against race-based admissions criteria in hopes of building a compelling interest for institutions of higher education to create and maintain racially diverse campuses (Chang, Witt, Jones, & Hakuta, 2003). Revisiting this debate, Bowman (2010) used a meta-analytical approach to systematically review the extant literature on the influence of college diversity experiences on cognitive outcomes, such as critical thinking and problem solving skills. Using a sample of 17 studies (77,029 students total), Bowman found that the type of diversity experience (e.g., informal interactional diversity, diversity courses, etc.), the type of cognitive outcome (i.e., skills vs. tendencies), and the study design (e.g., experimental, surveys, inclusion of controls, etc.), all contributed to variability in reported effects on cognitive outcomes. In terms of types of diversity experiences, Bowman (2010) found that interpersonal interactions with racial diversity had significantly higher effects on cognitive development than interactions across nonracial diversity (e.g., across gender diversity), diversity courses, or diversity workshops, reinforcing the argument that just having compositional diversity (i.e., numbers of *different* racial groups) is not enough for accessing the positive benefits of diversity that come from actually experiencing diversity through interactions (Milem et al., 2005). It may be that these informal interactions help students from various racial backgrounds see that they are not that *different* in reality.

The question of who benefits the most from racial diversity experiences has also been examined in the literature. In another meta-analysis of 16 quantitative studies, Denson (2009) found that cross-racial interaction (both in and out of the classroom) was important to reducing racial bias for all students, although white students appeared to benefit more from diversity

when compared to students of color. Similar to Bowman's (2010) findings, the conditions of these experiences also influenced the outcomes. Denson's analysis demonstrated that curricular and co-curricular diversity interventions that included facilitated cross-racial interactions exhibited stronger effects on reducing racial bias than interventions that only used pedagogical approaches to expand students' content-based knowledge of other groups. An important mediating mechanism included in Denson's study was cognitive processes, or what she described as the ways in which people think about others. When these others are racially defined, the cognitive processes may reflect a student's underlying meaning making of race. In Denson's study, these processes were viewed as intermediate steps between the interventions and the outcomes, without a clear indication if or how a student may have developed these processes. This study posits that the meanings students make of race may serve as these intermediate processes, and therefore seeks to answer how these meanings are developed.

Reviewing two quantitative meta-analyses for the current study not only provides evidence that the scholarship on the benefits of diversity is large enough to support these types of meta-analyses, but also suggests the importance of additional qualitative studies to investigate more deeply some of the quantitative findings. For instance, the studies by Bowman (2010) and Denson (2009) provide much insight into how various types of diversity experiences differentially influence outcomes, yet questions still remain as to why cross-racial interactions seem so valuable. As Bowman (2010) stated, "more research is needed not about whether racial diversity has an impact but about how, for whom, and under what conditions" (p. 23). This study takes an initial step toward answering this call by exploring college students' meaning making of race itself, which may be helpful for future research on the mediators and moderators of the benefits of racial diversity.

In focusing on college students' meaning making of race, the current study also builds upon social psychological and sociological literature on lay theories of race (Hong, Chao, & No,

2009) and racial conceptions (Morning, 2009). In their review of studies related to underlying meanings of race, or what they termed “lay theories of race,” Hong et al. (2009) outlined important differences when comparing individuals who endorsed an essentialist theory of race (i.e., attributing biological or genetic “essences” to determining race and related group-based traits) to those who held a more social constructionist view of race. Each lay theory served as a lens in which racial phenomena and racial differentials were interpreted. Although Hong et al.’s review demonstrated the psychological processes for why lay theories matter for how individuals interpret racial interactions, the authors only cursorily discussed what influenced which lay theory was used (e.g., primes from media, endorsement of cultural norms). Therefore, it is unclear how these lay understanding of race may develop, especially for college students as they likely experience and learn about race in diverse ways.

Research Focus

In a previous exploratory study (Johnston, in press) on college students’ lay understandings of race, or racial conceptions (Morning, 2009), I found four unique conceptions (social, cultural, biological, power) students used to help make sense of racial phenomena. However, as I returned to “the field” to collect additional data in line with constructivist grounded theory, I found that these conceptions of race seemed inadequate for interpreting how students were reasoning through whether or not race mattered. Indeed, investigating conceptions seemed to remain largely as intellectual exercises (i.e., asking students to define race). What I attempted to do in this follow up study was to further explicate students’ meanings of race by focusing on how students have experienced race and claim whether or not race matters. By going back into the field and collecting additional data, I was able to better fill out the emerging theoretical relationship between meanings of race and students’ understandings of genetics. Furthermore, by asking more direct questions about students’ experiences with race and how it

matters to them and society, I was able to gain a better picture of the meanings they made of race as a phenomenon.

As the literature outlined above suggests, college students have various lay understandings of race that have been shown to influence a number of intergroup attitudes and behaviors. In this study, I focus less on lay theories or conceptions of race, and more on how students' make meaning of race within a sociopolitical context claimed to be both post-racial and post-genomic. Focusing on meanings and mattering helps to ground students' understandings in experience, rather than potentially asking students to recall information they have learned in classes. Using semi-structured interviews with 39 undergraduate students across two campuses, I move toward a substantive grounded theory of college student racial thinking focusing specifically on the relationship between race mattering and genetic understandings. Two broad research questions guide this study:

- (1) How do college students make meaning of race?
- (2) How is this meaning making informed (if at all) by post-racial and/or post-genomic discourse?

Conceptual Framework

In line with constructivist grounded theory methodologies, this study intended for an emergent understanding of racial thinking grounded in participants' experiences rather than pursuing a *a priori* theory. However, the project is also sensitive to a widely used framework that helps me embrace the complexities of race: Racial Formation Theory (Omi & Winant, 1994).

The effects of DNA race/ancestry testing could be viewed as manifesting from what Omi and Winant (1994) call a racial project, or the simultaneous "interpretation, representation, or explanation of racial dynamics [with] an effort to reorganize and redistribute resources along particular racial lines" (p. 56). The concept of racial projects comes from Racial Formation Theory, which Winant (2000) outlined as an "approach" to studying race and racism, positing three main perspectives: (1) the instability and politically-contested *meaning* of race and content

of racial identity; that (2) stem from intersections or conflicts of racial “projects” that combine elements of representation/discourse with those of structures/institutions; and (3) at these intersections exists interpretations (or articulations) of the meaning of race from various perspectives (e.g., individual vs. organizational, global vs. local).

Within particular discourses or practices, the meanings of race are connected to “the ways in which both social structures and everyday experiences are racially organized” through these racial projects (Omi & Winant, 1994, p. 56). Examples of racial projects include more “macro-social” processes, such as those found within the political spectrum, including neoconservatives’ “colorblind” politics (Omi & Winant, 1994). There are also more “micro-social” level racial projects, that “operate at the level of everyday life” at often unconscious levels that reinforce “common sense” notions of racial meanings (Omi & Winant, 1994). For the purposes of this study, I posit that the ways genetic discourse gets enacted to either refute or reinforce biological race thinking may come from divergent racial projects that use the same “evidence” to explain the concept of race differently. Although Racial Formation Theory inherently rejects the idea that race is something biological, I take the stance of Nelson (2008) that “rejecting a reductive understanding of ‘race’ as genetic fact should not preclude investigations into the ways in which biological discourses contribute to racial formation processes beyond the lab and the clinic” (p. 761).

Therefore using this theory seemed helpful for interpreting how college students might understand some of the potential ways DNA testing interacts with the meanings they make of race. The theory also helps to bridge the micro-level processes that students encounter (e.g., interpersonal experiences with race) and macro-level processes and discourse (e.g., the broader claims made about post-raciality after President Obama’s election) that students must also navigate in their meaning making of race.

Methods

This study is part of a larger mixed methods project that explored how college students understand the concept of race on campus. In line with constructivist grounded theory methodology (Charmaz, 2006), an exploratory preliminary study (Johnston, in press) examined college students' racial thinking, finding core categories of: (1) using genetics as evidence to back up divergent claims about biological race; and (2) race mattering in different ways. Through theoretical sampling (the addition of more data to fill out the pilot study's emerging theoretical categories), I recruited more participants toward filling out these categories until saturation (when no new data added further theoretical insights) was reached (Charmaz, 2006). Constructivist grounded theory seemed useful for both (1) understanding the phenomenon of race through the meanings that participants have constructed given their subjective interactions with the world (in this case, one that is post-genomic and purportedly post-racial); and (2) moving beyond description of each individual's racial thinking toward broader understandings of the dynamic and complex relationships between students' understandings of race and genetics.

Sample

The sample included 39 undergraduate students recruited from two large, public, research institutions (within the same state university system) on the U.S. West Coast. The self-selected participants (responding to email listserv and flyer announcements) were predominantly female (27) and racially diverse (17 Asian American, 8 white/Caucasian, 6 Latina/o, 4 black/African American, and 4 mixed-race, which were *my* major groupings of how participants responded to an open-ended demographic question about how they racially identified). The overrepresentation of Asian Americans likely reflects the institutions' compositional diversity (while no racial group is the numerical majority, Asian Americans are the largest racial group at each institution), as well as my own positionality as an Asian American-identified researcher (see positionality statement below). All class years were represented (2

First-years, 7 Sophomores, 10 Juniors, 15 Fourth-years, and 5 Fifth-years) as well as a variety of majors (ranging from engineering to linguistics). Cited participants⁴ (in order of appearance) are included in Table 7, along with their open-ended racial identification response, my racial categorization/grouping, year in college, and major(s).

Table 7: Study 2 Cited Participants with Background Information

Pseudonym	Self-identification	Racial Group	Year	Major
Russell	Multiethnic	Mixed	3 rd Year	Sociology
Bob	Chicano	Latino	4 th Year	Chicana/o Studies
Dracula	Asian; Korean	Asian	4 th Year*	Biochemistry
Emma	Mexican American	Latina	2 nd Year	International Development
J.B.	Filipino-American	Asian	3 rd Year*	Psychology
Natasha	Indian American	Asian	4 th Year	Religion & Geography
Fred	Filipino	Asian	4 th Year	Chemistry
Ian	Black	Black	4 th Year	Ethnic Studies
Melanie	Mexican & Portuguese	Mixed	5 th Year	Human Development
Melodie	Hispanic, Latina	Latina	5 th Year	General Biology
Victoria	Mexican	Latina	3 rd Year	Human Development
Coffey	Afrikan American	Black	4 th Year	World Arts & Culture
Brenda	Filipina	Asian	4 th Year	Political Science
Annie	Indian (Asian) American	Asian	4 th Year	International Studies / Economics
Marie	Indian	Asian	4 th Year*	Human Development
Christy	White / European descent	White	4 th Year*	Sociology
Sally	I am white	White	4 th	Bioengineering
Gwen	Mixed	Mixed	3 rd Year	Political Science / International Relations
Melissa	White	White	4 th Year*	History & Psychology
Constantine	Latino (Mexican)	Latino	5 th Year	Psychology & Human Development
Ace	Korean-American	Asian	3 rd Year	Management Science
Gustava	Thai	Asian	3 rd Year*	Chemistry
Amanda	Multiracial	Mixed	4 th Year	Physiological Sciences
J.	Filipino	Asian	5 th Year	Human Development

**indicates transfer student*

Data Collection

Data were collected through a demographic questionnaire, brief survey (including a quantitative measure of racial conceptions; M. J. Williams & Eberhardt, 2008), and one-on-one interviews. The current study focuses exclusively on the qualitative interviews, with

⁴ All pseudonyms were self-selected by participants

demographic data used only to help identify any potential patterns. These interviews consisted of several introductory and background questions to establish trust (Seidman, 2006), followed by a protocol modified from Morning's (2009) study on racial conceptions in order to focus on higher education and knowledge of genetics (Appendix A). The combination of open-ended questions (e.g., asking students to define race) and closed-ended questions (e.g., asking whether participants agree or disagree with a statement that "there are biologically distinct races within the species homo sapiens") allowed for gathering both exploratory and confirmatory data. The semi-structured nature of the interview included frequent probes (i.e., follow-up questions to elicit detail or clarification of participants' responses), making it possible to investigate the nuances of respondents' views, including the arguments, claims, and values comprising the meanings they made of race. Furthermore, later interviews were used to focus more intentionally on filling out the emerging theoretical categories of how students developed their meanings of race within post-racial and post-genomic contexts. All participants received a \$10 gift card for the interviews that lasted between approximately 45-90 minutes.

Because data were collected through face-to-face interviews, I want to acknowledge my positionality and its potential influence on the research process. During data collection, I worked as a graduate research assistant for a student affairs unit on one of the campuses in which several of the participants also worked. Though my position was a graduate student role with no supervision responsibilities, some participants may have still viewed me as being a part of the staff and possibly tailored their responses to appear a certain way (the unit has a strong stance on the importance of social justice and inclusion). Also, being a multiracially-identified Filipino American man with racially-ambiguous physical features may have played a role in who opted into the study (e.g., note the overrepresentation of Asian American participants), as well as how students responded to me during the interview. I noticed this potential influence because in my initial interviews, I tried to limit the presence and influence of my own racial

identity by not talking about my racial background. Several participants seemingly waited to ask me about my heritage until after the interview concluded, which made me realize that some of them may have been curious about my race during the entire interview. Therefore in the following interviews, I inserted my own identity toward the beginning of the interviews when it made the most sense (e.g., after participants shared their own identities).

Data Analysis

Data analysis consisted of open and axial coding techniques, constant comparative analyses, and simultaneity of data collection and analysis (Charmaz, 2006; Glaser & Strauss, 1967). Although the racial conceptions literature was helpful for coding of initial categories in the preliminary study (Johnston, in press), I encountered difficulty coding some of the racial conceptions when students discussed race being about ancestry. Was ancestry something biological or cultural? Morning (personal communication, March 16, 2011) suggested that the interpretation depended on what and how participants were talking about race, for instance, in terms of genealogical origins and lineage (biological) or transcendence of heritage and customs (cultural). As I moved forward with theoretical sampling and the addition of more data, this distinction between biological and cultural seemed less helpful for how students seemed to understand whether or not race mattered. Therefore, race as ancestry seemed to be its own stand alone category of racial meaning, since it often hinged upon both biological and cultural assumptions that students held about heredity. As I moved forward with analyzing the data in new and emergent ways, my interpretations moved further away from racial conceptions and toward more grounded meanings students made of race.

In adding additional participants, I used extensive memoing and then open coding of both the interviews and my memos to develop an initial coding scheme and to direct further data collection. As new data were added, I used constant comparisons to update the previous codes and toward filling out emerging theoretical categories. After subsequent revisions through

further constant comparisons with new insights from additional interviews, I established the final coding scheme that was used to re-code all interviews. Since the previous study's (Johnston, in press) protocol did not prompt specifically for the influence of genetics, the emergent theoretical categories from the newly collected data helped to fill out potential gaps in the original data. To aid in the management of the coding process, I used the qualitative software program HyperRESEARCH 3.0.2 to code all interviews.

To ensure trustworthiness of the study's findings, I employed several strategies recommended for assessing the "goodness" of qualitative research (Arminio & Hultgren, 2002; S. R. Jones, Torres, & Arminio, 2006). First, adhering to my epistemological (constructivist) and methodological (grounded theory) assumptions provided a source of goodness. Second, I used peer debriefing with three colleagues, one with expertise in qualitative methods, another with expertise in racial issues in higher education, and another with expertise on the relationship between genetics and society, guided by the question of "Could other reasonable researchers make these same claims?" (Arminio & Hultgren, 2002, p. 457). Although few, in the instances where my interpretations and claims did not seem consistent with theirs, we worked through the data to revise the claims toward being "more probable." By incorporating these techniques, I felt confident that my interpretations were trustworthy.

Findings

This study examined the ways college students made meaning of race within a sociopolitical context that is claimed to be both post-racial and post-genomic. Findings are presented by outlining the multiple meanings of race students endorsed and how students developed these meanings. In order to answer the second research question, I report findings on how students' reasoned through whether or how race mattered (signaled by post-racial claims that race does not matter) and how this reasoning related to students' understandings of genetics (through post-genomic discourse about DNA ancestry tests).

Meanings of Race are Varied

As participants responded to questions about defining race and responding to whether biologically distinct races existed, it became clear that both across participants and within participants themselves, there are a variety of meanings of race. However, there seemed to be one dominant meaning for each individual participant when asked to reason through whether or not race mattered. Table 8 outlines the six unique forms of racial meanings, along with descriptions, exemplars, and the number of participants with predominant meanings.

Table 8: Meanings of Race

Meaning	Description	Exemplar	N
Race as embodiment	Race is viewed largely based on how bodies get marked as certain races (e.g., by skin color, hair texture, etc.), and the categorization that occurs based on these markers.	I feel like race is socially constructed based on someone's appearance and their ancestry. So depending on someone's skin tone, skin color, physical attributes and their ancestry and heritage, someone's race is determined... And a lot of times... they just look at your looks and they say, "oh, he's this or that." (Russell)	10
Race as power	Race is directly tied to historical and contemporary forms of power and oppression (at multiple levels).	"I honestly feel like [race] is a way to keep hegemony alive. And I feel like the elite class uses it to subordinate others. (Bob)	9
Race as culture	Race is seen as being a function of the traditions, customs, or values of particular groups of people.	I think race matters to a certain extent because race is kind of like a reflection of your culture, the racial culture that you have and with every racial culture, there are racial values that should be respected. (Dracula)	7
Race as ancestry	Race is viewed as resulting from lineage or heritage; closely linked with heredity and genetics.	I would say that race is associated more with like the country that you're associated with, your ethnic background, the blood that you come from, almost to say that the people that are your ancestors, almost biologically, but not completely biologically. (Emma)	6
Race as concept	Race is seen as something that resides mostly in one's mind as something conceptual/ intellectual, or not real.	As seen in US history, race has always been a topic of concern... but sometimes it feels as though racism is sensationalized in the media... I see like people playing the race card all the time... and it's also not okay to think that everything that goes wrong is because you're being discriminated against. (J.B.)	5
Race as identity	Race is seen as a function of individual or group identity; hinges on race being an identity choice.	I think race would have to come down to what, like it would be a group identity, as opposed to like a cultural identity. So what group, grouping of people that you identify with. (Natasha)	2

Although unique, these meanings were not mutually exclusive; they often overlapped. For instance, Russell's explanation of race (see Table 8) included both physical features (embodiment) and also claims about ancestry, yet he acknowledged that some people do not even take ancestry into account (and therefore, it seemed as though to him embodiment was a more dominant meaning of race).

How Meanings Developed

As I probed further for how students came to develop these meanings of race, I found that their experiences with race, as well as learning about race, both seemed to influence the dominant meaning of race they held. Below, I provide examples of what these experiences and learning looked like for participants.

Experiencing race influences meanings. Students in this study described multiple types of experiences with race, with distinctions between both their own experiencing of race and seeing others' experiences, as well as the magnitude of those experiences. Students' own experiencing of race consisted of both recalling significant racial events (e.g., experiencing overt racism) in one's life, as well as racial microaggressions.

Significant events seemed to shake the foundation of students' racial realities. They did not just experience these events; they were moved by them. These events could shape self-image and self-worth. When recalling these events, a common thread was that students could see themselves as being vulnerable to the threat of racism. This threat was most apparent when it resulted from or produced thoughts of death: the most severe form of vulnerability. For example, although he did not have many significant events personally, Fred recalled his one experience with racial discrimination during middle school when his friends and peers began calling him "Chinese" even though he is Filipino. This experience of not having his own identity validated, and dealing with family issues, resulted in him having thoughts of suicide as he wondered if anyone would notice if he was gone since they did not really see him.

And it came down to my thoughts that day, I was like, I wonder if people actually care about who I am and who I am as a person. And if I left or just disappear suddenly, would people really care if I was gone? So, that just came down to that and I really tied that back to being racially discriminated against in middle school

This experience allowed Fred to view race as a form of power that could be manipulated and influence the experiences and livelihood of others. Similarly, Ian, who experienced racial discrimination often as a black-identified man on his campus, recalled one specific significant event he described as “a life changing moment.” This significant event occurred when he found a noose hanging in the school’s library. Thoughts of death shook his core because the noose was life sized and he could “imagine a person in it.” Through this significant event, Ian was able to identify and connect the experiences of his parents, who were civil rights activists, to why he was able to make meaning of race as a function of power so well.

Melanie recalled her own experience with a significant event when she was studying abroad in Spain. While on a bus “full of Australians,” she described how someone brought up being a skinhead and the tensions that commenced. She saw it as “weird” to see how race gets brought up in different countries, which allowed her to make meaning of race as a concept, since it could be internalized differently across national contexts. Yet at the same time, she likely felt threatened in the given situation (i.e., being one of only a few Americans and people of color on the bus with a supposed “skinhead”) and that is why this event stuck out as being significant to her. These significant events can open students’ minds and provide new perspectives on the meaning of race.

Yet, experiencing race was not always in the form of significant events. Specifically, participants of color described multiple forms of experiencing racial microaggressions, those covert, subtle, everyday forms of discrimination based on race (D. W. Sue et al., 2007). These experiences seemed most salient and impactful when they came from close relationships, especially from those peers with which participants lived. For instance, Melodie recalled how her sophomore roommate told her she only got into their school because of affirmative action.

The “micro” in the term *microaggression* should not negate the amount of potential impact of such experiences (D. W. Sue, Capodilupo, Nadal, & Torino, 2008). For Melodie, who was highly involved in the Latina/o community at her school and made meaning of race as power, this experience with her roommate likely colored her views on whether racial affirmative action should be allowed in college admissions. Despite understanding how systems of inequality operate to disadvantage certain racial groups, she did not believe in affirmative action, stating that race should not even be collected on admissions forms.

Experiencing microaggressions seemed to not only influence students’ opinions, but could also change how students identified themselves. For instance, Victoria described changing her identification from Mexican American to solely Mexican because of her experiences with peers (people she lived with) from the residence halls.

...my first-year I found like people would isolate me for being Mexican... people that lived in my dorm were... of Asian descent and then they wouldn’t talk to me because I was Mexican or they would think I was my roommate because we were both Mexican. I was just like, “okay, this is not working” and that’s why I started going to MEChA and then that’s what helped me identify [differently].

The invisibility and isolation Victoria felt drove her to seek out a community of support, which she found in MEChA, a space that allowed her to develop her meaning of race as identity and claim specific identifiers for herself.

Within the contexts of these campuses, which were often publicly touted for being racially diverse (since no single group constituted a numerical majority), some students of color still experienced racial microaggressions related to being isolated in the classrooms. For instance, Coffey explained, “there have been numerous times where I have been like one of two or the only black student in the classroom” and being asked by professors to “speak on behalf of your people.” Coffey also experienced microaggressions living in the residence halls because,

Like as a black woman with your hair, living in the dorms, becomes an issue. People want to touch your hair and ask questions about it. You had your hair done one day and then the girl goes, “your hair grew so long.” Like, oh my God, just leave me alone. Don’t ask me to touch my hair.

These microaggressive experiences have been commonly found in the literature (e.g., (Solórzano, Allen, & Carroll, 2002; Solórzano, Ceja, & Yosso, 2000), but students from particular racial backgrounds continued to experience them even within a purported “post-racial” era and on a campus claimed by administrators to be racially diverse.

Experiencing race also consisted of those students who were able to observe others’ experiences with race, which often developed into connections among shared community as well as solidarity across groups. For instance, Brenda, who identified as Filipina and was highly involved in the Filipina/o community on campus, learned through experience why she should stand in solidarity with other groups who were the targets of a racist incident on campus.

So I realized like their struggle is my struggle and if that [incident] ever happened to Filipinos, like I would have acted the same way they did too as being deeply offended. Because at that time, I thought they were over exaggerating and now, I felt like ashamed that I thought that way.

Seeing another group’s struggle with a racist incident allowed Brenda to develop her meaning of race that was tied to her own ancestry as Filipina, but also connected to understandings of intergroup and power dynamics. Similarly Annie also felt that she mostly learned about race by seeing other students’ experiences with racial discrimination when she stated how she came to make meaning of race as power, stating “also just with students who have experienced racial discrimination and just learning from better understanding what it feels like to go through such experience.” In Annie’s and other participants’ cases, experiencing race, whether their own or in observing others’ experiences, offered new perspectives for learning about the meaning of race.

Learning about race influences meanings. Connected to how students experienced race was how they learned about race. Learning about race meant encountering content from classes, trainings and programs, or relationships, which also helped students make meaning of race in various ways. For instance, practically all participants had heard that race is a “social construct” with over half (20) of the participants repeating this phrasing verbatim without being

prompted. These participants could even identify the particular class or training from which they learned that phrasing. Annie described how participating in equity-based training as a resident assistant helped her “see society from a different perspective and your vision and your perspective is just so different. I can’t explain but it’s... empowering.” So in addition to how experiencing race could offer new perspectives on the meaning of race, new perspectives could also be gained from learning about race through trainings and workshops.

However, not all of these trainings prompted participants to gain new perspectives on race. For instance, Marie, who shared a similar self-identity to Annie (i.e., Indian), was also a resident assistant who went through equity-based training. However, Marie did not even recall the training as being influential for her thinking about race. Here, the differences in meanings of race between Marie (race as culture) and Annie (race as power), likely influenced how learning about race did or did not seem so impactful.

Students consistently described classes as particularly important places where they learned about race. However, they also held beliefs about how their peers were learning about race, which they believed differed by the types of classes required by different majors or schools. For instance, when I asked participants if they thought other students at their campus agreed or disagreed with whether or not there are biologically distinct races, their answers were often contingent on whether or not students were in a particular school (since different schools had different diversity requirements) or took a particular class. Christy articulated this belief when she recalled learning about race from a sociology class she took.

I think it would be a mix, but maybe a lot of people would agree [that there are biologically distinct races], just because you see this whole campus is diverse and so they kind of, not that they don't know any better, but I feel like the sociology class that I had just like ingrained that in my mind that race is just a social construct. So maybe they don't know that and yeah, more people on campus would agree with that.

For Christy, since this one course ingrained in her mind that race was “just a social construct” she felt that anyone else who took that sociology class would disagree with the statement that

there are biologically distinct races. Similarly, Sally discussed her learning from a required course in her respective school.

I'm pretty sure in [name of required course] we go over like race is not a biological concept and that's why I was immediately uncomfortable with this statement and then I just remembered that we had like a lecture on like race and biology. I don't know how other [schools] would say. But I feel pretty confident any like second or third year [in my school] will be able to say race is not a biological concept.

Indeed, classes seemed like important contexts in which students were learning about race. However, it was unclear how much students were just repeating things they have learned in classes (e.g., that race is "just" a social construct) or whether they were actually making meaning of race in different ways because of what they were learning. This level of articulating changes in meaning making and connecting those changes to classes seemed to be the case for some students. For example, Melodie discussed the importance of her ethnic studies class (which she initially took only to fulfill a requirement), because it opened her eyes to the subtle ways race matters. After that class she could now see how race has been constructed to matter:

Well I feel like my personal opinion is just, [race] does matter because it's been constructed to matter. So you know a lot of things do depend on race like even if it's unconsciously. You know, from my ethnic studies classes I've learned so much and honestly I can say that if it wasn't for like the requirement for like my specific college I wouldn't have, probably wouldn't have taken an ethnic studies course because I had never been exposed to it, didn't know what it was... And then like that's when I, my eyes got opened. I was like, wow like I never thought about all these things that we do unconsciously. So yeah I mean it does matter, you know they are just so subtle that you know you are not brought up to think about because that's just the way they are.

For Melodie, she was not just repeating that "race is a social construct" but could actually articulate how and why race mattered as a social construct.

Although students could identify particular classes or training which helped them to learn more about race, other students felt like their learning came mostly from relationships or informal processing. For example, Gwen, who admitted having not taken any ethnic studies

classes and therefore felt “not that well versed” on issues of race, credited her learning about race to her friends.

I think a lot of my learning actually comes from just having a wide group of friends here. One of my friends, he’s probably one of the best friends I’ve made here and he’s actually mixed. He’s half black, half white but he phenotypically looks black... He also worked at my job and we’re friends before so we would work for eight hours and because a lot of things would come up in work, we just do a lot of discussion about race and class and things like that. I think more than any class that I’ve taken that’s what I’ve learned from because I don’t have friends like that at home. It was really eye-opening

Gwen’s discussion of how she mostly learned about race from the informal discussions with her diverse group of friends suggests the importance of not only compositional diversity or diversity-related courses, but providing the contexts in which such informal processing can occur (Milem et al., 2005). In Gwen’s case, working in the same job offered the opportunity to connect with others to discuss race, which was more important to her than any class that she had taken. Similar to Melodie above, Gwen could also articulate different meanings of race (e.g., how her friend “phenotypically looks black”) including why race mattered based on the meaning she made of race as power.

Reasoning Through Race Mattering

It is important to note that no students claimed that they were living in a post-racial era where race no longer mattered. In fact, they generally saw this broader discourse of post-raciality as false, though several still hoped for a day when society would become past race. Generally, participants believed that race matters, but there were two main caveats: (1) Race mattered, but not to them personally; (2) Race mattered but should not matter. In explaining their positions on whether race matters, participants seemed to pull from their experiences with race and learning about race. More often than not, when participants reasoned that race mattered, they saw race as something negative. Thus, when they provided examples of how race mattered, they would explain that they themselves would not use race to matter (mostly in the form of judging people). For example, Melissa reasoned that race mattered in this way:

When I look at people it doesn't matter for me what race they are but I think it matters in the sense of some people will act differently towards them or towards people because of race and some people are racist and I mean that's why it matters like you have to consider their feelings like and consider what they are going through if they are being picked on in any way, I mean so I believe it matters.

Melissa believes race matters but not to her personally. The negative framing of race also likely influenced why most participants clarified that race should not matter, even though it does. For instance, Constantine reasoned that race mattered this way:

But I guess [race] matters... I know it matters politically and like federal government especially when like I guess hiring specific people to achieve a quota sometimes or even in college admissions with affirmative action laws and all that, so I guess it matters in that sense, but again, I feel that it shouldn't matter at the end of the day because we all live in this, I guess, wonderful world and we should protect it and work together as a group to make everyone happy.

Here, Constantine was able to distinguish between different instances where race matters, but ultimately thought race should not matter when viewed on a more worldly level.

Race matters on different levels. Whether or not race mattered also seemed related to what level students saw race operating. Although no participant thought that race never mattered, several would clarify that it did not matter sometimes. For instance, Dracula stated, "I think race matters to a certain extent because race is kind of like a reflection of your culture... but then at a certain threshold, we're all human beings and that's where humanity trumps the dividing lines." Ace also mentioned this distinction when he stated, "Well I mean on a humans aspect, a humans point of view, I would say [race] does not matter, because you know I can relate to any other human based off of what they do, you know, we eat, sleep, drink water." At the opposite end of the spectrum of level in which race was located, Gustava reasoned that "I honestly don't think it matters because when it comes down to it like we're all the same, we have the same DNA. There's nothing different." So in thinking about the human species level, which was both conceived as being broad but also microscopic in terms of shared DNA, race did not matter. But anything in between seemed to allow for race to matter. What seemed to be common among these participants who saw race not mattering at either a very macro (human

species) or micro (DNA) level, was that they held a predominant meaning of race as a concept or as something cultural.

On the other hand, students who held a power meaning of race seemed especially able to reason through race more deeply, seeing how race and racism operate on multiple levels. Ian described different levels of race mattering on his campus in terms of where people thought race and racism occurred, for instance as between individuals or at the level of institutions and systems of oppression:

The biggest problem with this campus is everyone sees racism as between people – that’s the hardest part to ask people, because interpersonal racism is a big problem on this campus. But people do not understand the institutional and systemic racism part of it. So a lot of people think it is personal like, “oh well, if I call you the N word, what is that going to do? You’re still in college,” things like this. “I have my freedom of speech,” which is the one thing I hate when people bring up.... that this is deeper than just like slurs that you’re saying to me. It has to do with like a background of racism within the university. It’s just that your interpersonal racism right now is exposing the fact that the university has never educated anyone on these issues. So I definitely think that it’s in people’s mind, it’s interpersonal and it’s most visible and relatable when it’s between people. But when it’s institutional and systemic, that’s a term that a lot of people don’t even understand.

Here, Ian connected his own experiences with race to how race matters differently to different people, based largely on the level in which they saw race and racism operating. Ian seemed to be able to see these multiple levels of race largely because of his meaning making of race as a function of power.

Racial authority. Another part of reasoning through and explaining race was students’ use of expertise and deference to authority. When participants did not feel confident backing up their claims, they often referred me to authority figures. In these cases, authority meant both science/scientists as authority, but also other individuals who could be viewed as experiential authority figures (or at least having more authority than themselves) on race. In terms of this experiential authority, participants who had not experienced racial discrimination often referred to their peers as having more expertise. At these campuses that had compositional diversity with high percentages of Asian and white students, these perceived experts in experiencing

race were mostly black and Latina/o students. They were seen as the real experts on race because they had experienced racial discrimination (presumably on a regular basis). For instance, Gwen acknowledged how she did not notice race on campus until she observed it for her black-identified friends:

For me, [race is] something that I've had to train myself to notice. I don't just feel it because I'm like from middle class suburbia. I can pass for white. I don't look too ethnic even though I am mixed... For me, I don't experience it, I more notice it for my friends. For example, the black students on this campus, there's not many of them first of all... And I definitely see why people of color tend to want to become part of [specific spaces on campus] because that is really a community that they can identify with. It's a lot easier to be tokenized here I've noticed if you're of color.

Here, Gwen recognized how she may “pass for white” and that may be a reason she does not feel she experiences race, especially compared to her friends of color. Yet, this reasoning seems to diminish the fact that she does have her own experiences with race, limiting her own potential authority on racial matters.

This idea of racial authority was also viewed in terms of scholarly authority. Scholarly experts included both professors and researchers (mostly in the realm of science – in response to questions about whether there was anything biological about race), but also at times, participants' peers in specific majors. When asked to respond to the biological race statement, Fred disagreed but was at first unsure why. Then he exclaimed, “I'm a science major here” and demonstrated his confidence in disagreeing with the biological race statement and backed it up with scientific evidence he learned from his biology classes.

However, the authority of science could also influence students' to think twice about the meanings they made of race. For instance, Bob made meaning of race as a function of power, yet he felt uncomfortable responding to whether he agreed or disagreed with the biological race statement, stating, “Like I took biology in high school and you learn that there's a pigment in your skin that you're born with, right? And that makes you who you are. So technically speaking, this isn't a false statement.” For Bob, the science that he learned in biology class

(albeit in high school) seemed authority enough for him to not be able to disagree with the statement, despite feeling uncomfortable doing so. The authority of science also made him question his own lay meaning made of race (i.e., his “theory”) as a function of power.

I feel like everybody just sees it as like, “oh well, it’s scientifically proven” and there’s such a load carried with that, the fact that it’s like proven with science... But here it’s saying there is actual, something that causes your skin to be a certain color, and that has a lot more credibility than you know my theory I guess.

As displayed in Fred and Bob’s examples above, differences between science and non-science majors seemed to emerge as students discussed their reactions to the biological race statement, as well as the idea of so-called “ethnic DNA tests.” Natasha, a geography and religious studies senior wanted to know how faculty experts in the sciences would respond to the statement.

I mean, it would be interesting to see what the faculty in like the hard sciences have to say about this, because I mean, again my mind jumps to genetics and things like that and I wonder if we’re actually experts in this or not... That is, because, you know, the statement brings biology into play, I wonder what the people who really do know biology would have to say about it. But I think, I mean, the geography professors from what I could tell would find problems with the statement. Definite problems. But, again, I wonder what the people who actually know what they’re talking about would have to say.

Natasha desired to know what experts in biology believed, rather than feeling confident in her own (or her geography professors’) authority.

Here students are able to see different amounts of racial authority, especially in the intellectual realm. Even though they individually experience race in different and compelling ways, they do not always see how they have their own amount of expertise. Amanda was able to use the knowledge she acquired as a physiological science major to reason that there are genetic differences between racial groups

There is like a gene coded for this and like... this like group of people tend to have this gene or whatever. [after my science classes] now I was just like, okay, like here is like straight facts so I can like show, like bust out my book and be like these are like different genes, whereas I guess before it was, oh yeah like it makes sense, we have like different eye colors, you know.

Similarly, Fred used his confidence in being a science major to reason that the DNA tests were scientifically true, but believed that the term “race” was the incorrect term to use stating, “if

scientists are strictly saying that it can be race, then that's going to really mix up with people... trying to say like understanding that testing can be done to identify race meaning that we are biologically, racially different." This question of language and the potential misuse of these tests could also likely be manifesting in how Dracula believed in the authority of DNA tests for determining race.

Scientifically, I think [the test is] awesome because that's like the scientific revolution booming in... I can see applications of it to be of a good use. One of my friends, she's really mixed. She has a lot of things going on in her in terms of racially or whatever. She wants to know if she qualifies as Native American, so, she wants to take the test to see.

Dracula explained further that her friend was having financial difficulties and that it would be very helpful for her to be Native American so she could qualify for what they misperceived to be specific scholarships for Native American students.

How students reasoned through both post-racial claims about race not mattering and post-genomic ideas about the validity of ethnic DNA tests, seemed to be related to their developing meanings of race. For instance, J. was able to clearly articulate how her experiences with race, her learning about race in classes, and her general lens in which she viewed the world, helped her to make meaning of race.

I think in my personal experience [race does matter], just because of the spaces that I associate with, like the [cultural center], ethnic studies classes, or even in my human development classes where biological differences are analyzed whether or not race is an actual relevant factor in these differences. And so I think it does and because of these exposures I feel like I have this lens... I kind of tend to see things in a racial lens because of the analysis from these different spaces. So, I think in my view it does. But I can also see for other students who are more apathetic or who may not even be aware that there are racial differences. Or maybe they are aware of the racial differences physically but not the actual impact of these differences in terms of student experiences, like my experience as a Filipino student versus a white student coming from Orange County or something. There is an intersection of all of these things and I see them play out in everyday instances. So I think I'm just more aware of it.

J.'s discussion of a "racial lens" helps to understand the ways meanings develop (from experiences with and learning about race), and how these meanings may function as lenses in which students are able to view race mattering on different levels. In J.'s case, she held a

dominant meaning of race as power, and so this meaning was the racial lens in which she could see not just racial differences, but how race matters, both in terms of biologically-relevant factors as well as in experiences.

Discussion

This study examined the meanings students make of race within a sociopolitical context claimed to be both post-racial and post-genomic. Expanding on the literature on college students' racial conceptions (e.g., Johnston, in press; Morning, 2009; M. J. Williams & Eberhardt, 2008), this study found that students have different meanings of race that develop through experiences with and learning about race. As students make these multiple meanings of race, they likely pull evidence from both content they have learned from classes, trainings, and relationships, as well as from their own experiences with race. Consistent with the literature on the benefits of racial diversity (e.g., Bowman, 2010; Chang, 1999, 2002; Denson, 2009), racial experiences (including informal interactions with racial diversity) seemed most influential for students' meaning making, rather than just content learned from classes. The findings also suggest that if students do not have enough racial experiences (either their own significant events and microaggressions, or observing others' racial experiences), they are likely only able to use evidence from their class-based learning in order to reason through race. When this occurs, two things seem to happen: Racial explanations remain largely in the intellectual realm, and students defer to experts as racial authorities.

Maintaining racial reasoning as an intellectual exercise detaches students from experience, which may also distance themselves from racial realities occurring on campus and in the broader society. Having students depend on experts as the authority on race, removes them from having to take action to help ameliorate racial disparities. This distancing may explain previous findings by M. J. Williams and Eberhardt (2008) demonstrating that college students who endorsed a more biological concept of race were less moved to take action

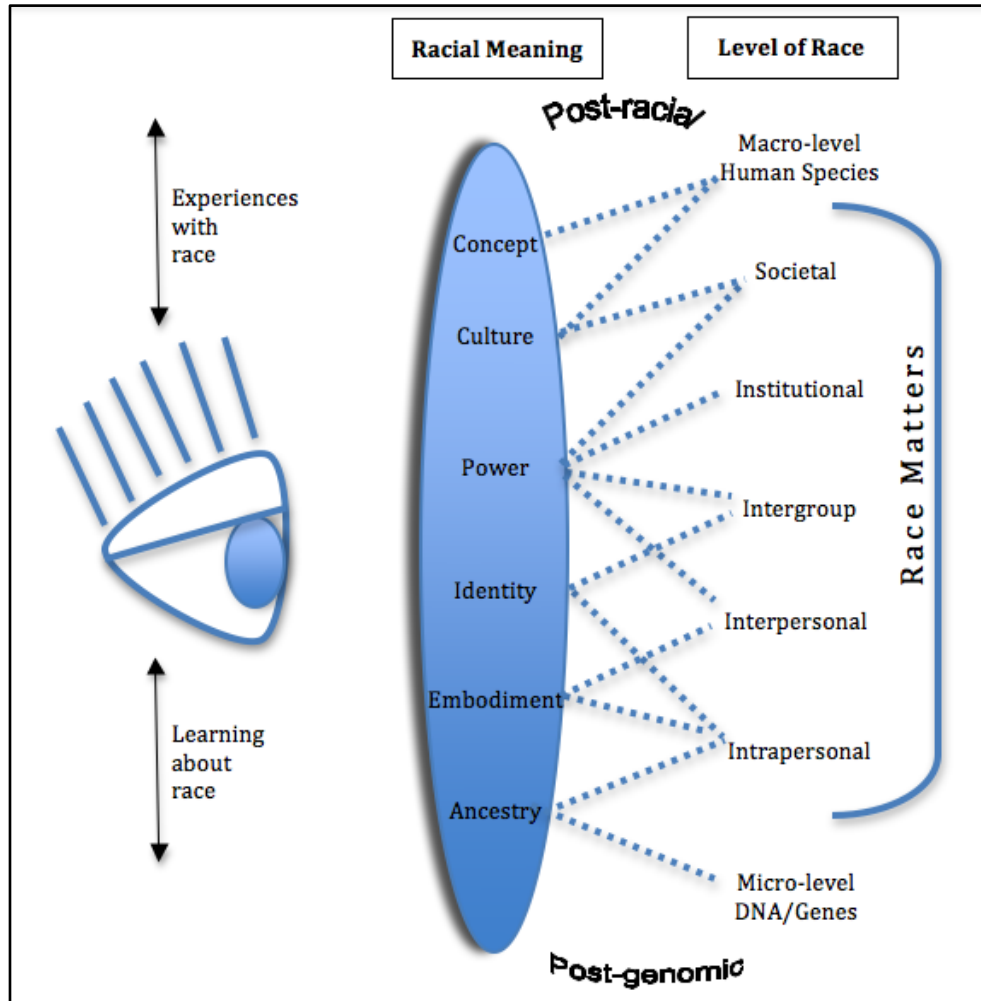
toward ameliorating racial disparities and also saw them as more insurmountable. If students, especially science majors, hinge on making meaning of race largely through evidence gained from their classes, they may not desire or feel empowered to take action, since they may not see their own level of expertise on the subject.

Findings from this study also add to the literature on lay theories of race (e.g., Hong et al., 2009). Although the ways lay theories function to influence individuals' interpretations of racial phenomena have been posited, the findings from this study help to advance understandings of how these lay theories may develop. Students who experience racism seem more likely to be able to connect their experiences with what they learn about race in their classes, and in turn, are able to reason through race using multiple meanings. Like J.'s example illustrates, students make meaning through lenses that are colored by unique racial meanings, aligning with different amounts of complexity, which allow them to be able to see race operating on multiple levels.

As visually represented in Figure 1 below, students' meanings of race seem to offer them different aspects of a racial lens in which to view the world. Different meanings lend themselves to allow students to see race mattering on different levels. In line with Racial Formation Theory (Omi & Winant, 1994), race operates on multiple levels, including more macro/societal levels, and more micro/interpersonal levels. When race is seen at the most micro and most macro levels, students seem to have easier access to claim that race does not matter. At a human species level, students claim race does not matter because we are all human. Sometimes they invoke DNA or genetics (at a very microscopic level) in order to also claim that race does not matter (biologically). This reasoning could equate to how advances in genomic technologies have been helpful for refuting the biological concept of race; yet may then be used to reason that race is not real (and therefore we should move past race). In the middle of the lens, there seems to be more depth in students' reasoning that race matters in different

ways, which could relate to why this complexity in meanings of race seems to allow students to see race operating on multiple levels, rather than a more myopic view of race.

Figure 1: A Visual Representation of Racial Meanings



In terms of experiencing and learning about race, influential experiences or learning likely allow students to view race through different parts of the lens. Through education, our eyes can be trained (or not trained) to see race in various ways. For instance, Ian’s example of finding the noose was a particular significant incident for him, but it was likely because he had already had his own experiences with racial discrimination, and learned about the racial struggles of his parents, which allowed him to see race through the deep part of the lens in terms of power. On the other hand, Christy also mentioned hearing about the noose incident

(although she did not see it in person like Ian). Yet she did not even think the noose had to do with race, stating, "It made me kind of think like, 'Oh, was that racist?' It's like a student couldn't take the pressure of classes. So, I was like, 'Oh, what did I get into? Are these classes going to be hard?' That was kind of my reaction to that." Here, racial meanings seem to be able to also influence whether or not an experience actually has an impact on changing students' perspectives on race.

This study also brings attention to the ways in which students are reasoning through race given post-racial claims that race no longer matters, yet believing in the validity of genetic tests to determine race. Dracula's example is particularly telling given her belief that her friend could prove she was Native American by taking a DNA test. Part of the reason Dracula had this misconception was not only in her deference to science as authority, but the fact that she had never met a Native American person. This lack of informal interaction likely meant she never had the chance to broaden her perspective on what it means to identify as Native American and what that identity actually gets people access to (e.g., not automatically receiving scholarships like she and her friend misperceived). It seems increasingly important, now more than ever, to help students understand the complexities of race outside of "just" being a social construct or just being an identity which can be claimed (with or without genetic "proof").

Limitations and Areas for Future Research

This study presents new lines of inquiry into the roles of learning about, experiencing, and making meaning of race for college students. However, this study has several limitations to be considered that lend themselves to future research. The small sample size across two institutions within the same university system, each with similar racial compositions, presents some limitations for transferability of the findings to other types of institutions. Additionally, the recruitment methods (through listserv solicitation and participant referral) did not allow for a response rate to be calculated, since the number of students who actually received the

recruitment email is unclear. Additionally, the fact that students self-selected to participate in a study on the “concept of race on campus” should also be considered. These students may have had a particular interest in race and thus, the findings may not be representative of the larger campus population. However, the fact that even this small self-selected sample had such varied experiences with and meanings made of race suggests that the current study may have only scratched the surface of investigating meaning making of race in higher education.

Despite these limitations, this study offers multiple avenues for future areas of research on racial meanings and mattering. First, since experiencing race seemed more influential for students’ meaning making than solely learning about race, more research should be done to better understand how learning can become experience versus just something cerebral. Part of this research seems in line with Denson’s (2009) findings that diversity courses with facilitated interactions were more influential for reducing racial bias than courses with just diversity content. However, further research is needed to unpack how learning could be made more like an experience, especially since course learning is a common denominator across all college students and institutional types. Institutions have the ability to impact meanings of race through academics even if solely through distance or online education, or for students who are only on campus for courses (e.g., not involved in extra-curricular activities). Future research should investigate what experiencing and learning about race looks like at different institutional types. Although the focus on this study was not on comparing the two institutions in the sample, future research investigating the role of unique campus racial climates and diverse learning environments (Hurtado, Alvarez, Guillermo-Wann, Cuellar, & Arellano, 2012) to learning about race (outside of just the benefits associated with such climates/environments) also seem like fruitful lines of inquiry.

Implications

The findings from this study offer multiple implications for practice. First, although students were adept at repeating that race is “just” a social construct, most lacked a critical meaning of how this mantra related to forms of power. Educators must rethink the ways in which race is taught in both classes and trainings. Indeed, having students understand that race is not biological seems important for moving past scientific racism, yet some students may too easily move from race as socially constructed, to reasoning that race is not real or does not matter. The teaching of race as a social construction needs to be able to assess what students take away from the learning, so that they do not solely leave college repeating a sound byte about the social construction of race. Second, in working with college students to develop complex meanings of race, educators must be able to ensure that all students feel validated as experts on race in their own experiences. Creating this consciousness about racial authority seems important to allow different students to engage in the types of conversations and experiences that can be influential for broadening their perspectives on race. Baxter Magolda's (2004) Learning Partnership Model (LPM) seems like a potential heuristic for this type of validation since its three principles (i.e., validating students as knowers, situating learning in students' experiences, and defining learning as mutually constructing meaning) could easily be applied to the helping students understand their own level of expertise when it comes to race.

Third, this study adds to the literature suggesting the importance of compositional diversity as a necessary, yet insufficient, factor for learning about and experiencing race in meaningful ways. For instance, Gwen reflected on how her experiences with informal processing of race with her diverse group of friends were most influential for her learning. Therefore, institutions should promote these types of informal interactions outside of just creating a compositionally diverse student body (e.g., through recruitment and admissions decisions) or just allowing diversity to be discussed as a part of classes. The experiential

learning that occurs through informal interactions seems most important to students' developing meanings of race. Fourth, student affairs educators may be especially poised to help the students they work with to understand the multiple meanings of race and how race operates on multiple levels since many educators have the opportunity to work one-on-one with student leaders to help them process through information. Challenging students to think more deeply about race and how it matters differently depending on racial meanings and levels of race, seems like an important task that student affairs educators should take on given the field's continued focus on issues of social justice.

Lastly, social justice education may need to take on the challenge of teaching students about the history of eugenics so they can become more critical consumers of genetic technologies. This study offers emergent relationships between how students make meaning of race, and how these meanings are developed from their experiences with and learning about race. As educators work to help students understand the complexities of race and how it still matters in society despite post-racial claims, there must also be attention paid to helping deconstruct notions of scientific authority. This seems especially true for science majors who may actually experience taking DNA ancestry tests for their science laboratory experiments.

Conclusion

As "ethnic DNA" testing becomes more popular across college campuses and students encounter post-genomic ideas about how they might be able to use that information in commercially valuable ways (Sundar Rajan, 2011), educators must help students understand the complexities related to race and to think critically about various meaning of race. The participants in this study demonstrated different abilities to view how race and racism operate on multiple levels within society and on their campuses. Although the discourse around being in a so-called "post-racial" era may add an additional hurdle for educators, our goal must be to help provide the types of contexts where students will both learn about and experience race in ways

that help them develop more complex thinking about the nature of race and how race continues to matter.

CHAPTER 4: THE UTILITY OF RACE AND ETHNICITY IN THE MULTIDIMENSIONAL IDENTITIES OF ASIAN AMERICAN COLLEGE STUDENTS

Introduction

Within the college student development literature, the topics of race and ethnicity have been investigated in the racial and ethnic identity development of multiple groups (Ortiz & Santos, 2009; Torres et al., 2009; for a review, see Evans et al., 2010) and as dimensions within students' multiple identities (Abes, Jones, & McEwen, 2007; Jones & McEwen, 2000). Despite this research, there is still debate about what exactly the constructs of race and ethnicity (and their respective "identity" components) represent, how they are distinguished, and which constructs are most appropriate to use when investigating college student development. The growing Asian American⁵ population offers one group of students in which the lines between race and ethnicity may be more apparent. According to the 2010 U.S. Census, 17.3 million people (approximately 6 percent of the total population) were classified as "Asian alone or in combination" with the "Asian alone" population demonstrating the fastest growth over the past 10 years (43 percent) compared to any other major race group (Humes, Jones, & Ramirez, 2011). This broader "Asian" category is often operationalized to represent "race" while ethnicity usually refers to the diverse subgroups representing national origin (e.g., Cambodian, Chinese, Filipina/o, Indian) or other heritage groups (e.g., Hmong, Khmer, Mien) within the pan-Asian label.

However, this clear distinction is not always so easily observed, as race and ethnicity are often conflated within higher education scholarship (see Study 1), resulting in a lack of clarity on distinctions between the terms among researchers. Furthermore, potential distinctions may

⁵ I use "Asian American" and "pan-Asian" interchangeably throughout this chapter. Although some might suggest using a broader term like "Asian Pacific Islander," I only name Pacific Islanders when most appropriate considering their unique histories and experiences (see Diaz, 2004 for a review), and since no Pacific Islander students were in this study's sample.

become even blurrier when contemplating how students themselves understand these constructs. For instance, some students could see race as something that is more inherent (e.g., ancestry) while others could view race as something that is externally applied by others (e.g., ascription; Johnston, Ozaki, Pizzolato, & Chaudhari, 2009). Others could make these same types of distinctions with ethnicity. Part of this lack of clarity may be due to a push for society to move away from using the term *race* given the historical atrocities (e.g., slavery, eugenics) committed in the name of race (Montagu, 1964; Smedley & Smedley, 2005). For some students, using “ethnicity” seems much more politically correct and they may adhere to and promote the idea of never using the term *race* (Johnston, in press). With this perspective, would “Asian American” then represent an ethnicity? And if so, what then would subgroups (e.g., Japanese, Sri Lankan, Vietnamese) signify?

This study attempts to answer these questions by examining how Asian American college students understand and distinguish between race and ethnicity within their multiple dimensions of identity (e.g., claiming race as salient but ethnicity as not, or vice versa). Additionally, the investigation offers the potential for understanding why students differentially claim race and/or ethnicity, which can ground the field’s usage of race and/or ethnicity in the perspectives and lived experiences of Asian American college students. In doing so, the findings offer important implications for theorizing Asian American college student identity development and improving practices that support Asian American students.

I focus on Asian American students in this study for several reasons. First, the constructs of race and ethnicity may be more practically distinguishable for Asian American students than other groups, with race referring to the broader “Asian” category, and ethnicity referring to specific subpopulations based on national origins or heritage groups. The disaggregation of ethnic groups within the Asian American racial category may be similar to how the broad terms of “Latino” or “Hispanic” can be broken down into specific subpopulations based

on national origins (e.g., Mexican, Puerto Rican, Cuban). However, the separation of “Hispanic” ethnicity from race through the two-question format used by the U.S. Census Bureau continues to cause confusion (Padgett, 2010). This confusion does not seem to happen for Asian Americans encountering these Census forms. Additionally, American Indians could also be considered a “race” yet tribal affiliations do not seem to get operationalized as ethnic groups, especially considering tribal sovereignty. Moreover, scholarly and popular discourse often frames black/African American solely as a racial group (C. D. Lee, 2003) with the only ethnic subgroups referring to recent immigrants from various nations in Africa or the Caribbean (Kasinitz, Battle, & Miyares, 2001; Waters, 1999). White Americans also have ethnic backgrounds, but these identities are claimed less often due to distance from immigration experience and general assimilation toward whiteness (Roediger, 2008). However, for Asian Americans, subgroups (e.g., Filipino, Taiwanese, Korean) are almost always cast as ethnicities and applied no matter the proximity of immigration experiences, while Asian is left to represent a broader racial label.

Second, the constructs of race and ethnicity have unique histories within the evolution of the Asian American community. The Asian American category/term came out of the 1960s Civil Rights movement that aimed to build a larger collective racial identity. This process was inherently racial (and not necessarily ethnic) as the purpose was to fight racism through a political process of building solidarity among an ethnically diverse population (Espiritu, 1992). And although the “Asian” racial label seems to have served its political purpose, the recent push from within this category has been to disaggregate data by subgroups (ethnicities), in large part to combat the “model minority” myth that stereotypes Asian Americans as largely successful and homogenizes the diverse groups within the broader category.

Third, studying the varied ways race and ethnicity might function within Asian American college students’ lives presents an interesting case for studying inter- and intra-group dynamics.

Identifying with a racial and/or ethnic category may reflect intergroup dynamics that tend to homogenize the diversity of Asian Americans. Subsequently this homogenization tends to marginalize less represented ethnic groups, and can result in individual subgroup identities being neglected by others (Flores & Huo, 2013). When these others are part of the pan-Asian “ingroup,” these intragroup dynamics that could result in an individual student feeling pushed away from identifying as Asian American and more toward one’s specific ethnic group (Nadal, 2004).

Fourth, Asian Americans continue to be misunderstood and under-researched in higher education scholarship due to perceptions of overrepresentation and myths of remarkable success (Chang, Park, Lin, Poon, & Nakanishi, 2007; Chang, 2011; Museus & Kiang, 2009; Teranishi, 2010). Better understanding the identity dynamics of this group of students will be helpful for understanding how race and ethnicity work in their identity development given the multiple groups with which one could claim or seek affiliation. Therefore, the purpose of this study is to investigate the utility of race and ethnicity in Asian American college students’ claims about who they are and how these constructs function within their understandings of identity.

Literature Review

Asian American students represent an important and growing population on college campuses (Chang, 2011; Ching & Agbayani, 2012; Museus & Kiang, 2009; National Commission on Asian American and Pacific Islander Research in Education [CARE], 2008, 2010). Within this growth, changing demographics of the diverse communities represented under the Asian American umbrella present the need for continued research to dispel the broad misconceptions about identity issues, academic achievement, and collective action for this population. Some potential reasons for the misrepresentation of Asian American college students may be the ways stereotypes get enacted through research, how race and ethnicity get

operationalized, and intragroup dynamics within the Asian American community, which may all contribute to how students answer various identity-based questions (e.g., “Who am I?”).

Asian Americans and Stereotypes

Although potentially considered a cliché topic in Asian American scholarship, the model minority myth persists through research and practice related to Asian American college students. This stereotype works to portray all Asian Americans as being well-educated and successful citizens in the U.S. (D. W. Sue & Sue, 2008; Suzuki, 2002). Suzuki (2002) traced the term “model minority” to its first appearance in print in a 1960 *New York Times Magazine* article “Success Story: Japanese American Style” by sociologist William Peterson, who argued that Japanese culture (with its family values and strong work ethic) saved the Japanese from becoming a “problem minority.” Over 50 years later, the *New York Times* is still publishing similar stories (although more nuanced) with the same stereotypes, for example in its recent opinion article titled, “Asians: Too Smart for Their Own Good?” (Chen, 2012), signaling just how deep this stereotype is ingrained into common notions of educational success.

Despite potential claims about positive perceptions of this stereotype, it is highly problematic for several reasons. First, this stereotype depicts Asian Americans as an entire group to be successful in America, overcoming discrimination through hard work, intelligence, and an emphasis on education and achievement. This image results in portraying Asian American students as academic “overachievers” who care more about grades than their own mental health, leading to potential perceptions of emotional isolation as part of a culture of academic overachievement, and ultimately being held to higher academic standards in elite college admissions (Chen, 2012; Espenshade & Radford, 2009). Second, holding one group up as the “model” discredits the continued struggle for civil rights since it implies that other groups should become silent and assimilate into the dominant culture and focus on academics rather than fighting for social justice. This discourse may influence beliefs that Asian Americans do not

experience race in the same way as other groups do, and therefore are not perceived as a “real” minoritized racial group, and potentially influences why they have not been focused upon in research (see Study 1; Museus & Kiang, 2009). Third, this stereotype continues to mask the incredible diversity that exists within the pan-Asian American community, leading to the denial of access to much needed services and resources for specific subgroups. This homogenization may affect how much members of ethnic subgroups are allowed to claim their ethnic backgrounds in different contexts.

The literature on higher education achievement tends to perpetuate this model minority stereotype. Most recently, a report from the Pew Research Center (2012) entitled, *the Rise of Asian Americans*, touted the “striking” educational success of recently immigrated Asian Americans, as well as the values placed on educational success by Asian parents, invoking Chua's (2011) “Tiger Mother” archetype as rationale for such success. The report fails to highlight in intentional ways who was counted as “Asian American” since they only surveyed the six largest Asian American ethnic subgroups (i.e., Chinese, Filipina/o, Indian, Vietnamese, Korean, and Japanese Americans). These research designs not only change the findings, but can send messages about the place of all Asian Americans within U.S. society. For example, studies demonstrating racial disparities in higher education access or achievement tend to focus on broad racial groups, often juxtaposing African American, Latina/o, and Native American students, or “Underrepresented Racial Minorities (URM)” against their white and Asian, or “majority” counterparts (see Santos, Cabrera, & Fosnacht, 2010, for an example). Using these broad groupings perpetuates the model minority stereotype and suggests that Asian Americans do not count as a minoritized racial group because they are not “underrepresented.”

Recent findings on the diversity and needs of Asian American college students (Chang et al., 2007; CARE, 2008, 2010) suggest this population of students has unique needs and challenges, combating popular notions that Asian Americans as a whole are a phenomenally

successful minority group. The perceived “overrepresentation” of Asian Americans in colleges and universities sets them up as “problem free” and reinforces their invisibility and lack of access to resources (Li & Wang, 2008; Museus & Kiang, 2009). Furthermore, this stereotype fails to attend to the issues of intragroup differences, such as southeast Asians and Koreans appearing to have greater mental health needs than others (Lau, Jernewall, Zane, & Myers, 2002), and southeast Asians often having less academic preparation than their East Asian and Indian counterparts (CARE, 2008). More research on Asian Americans within the landscape of race-related research is important and needed.

Operationalizing Race and Ethnicity

Given backlash against race being used in research since it may reify race as something biological (see Study 1), others have suggested using ethnicity as a more appropriate construct (e.g., Phinney, 1990). Markus (2008) proposed ethnicity as a potential source of meaning that can offer a sense of pride for both individuals and groups, with race being reserved for more negative impact on individuals and groups. More recently, Moya and Markus (2010) suggested the use of *race* when referring to how individuals are placed into “groups according to perceived physical and behavioral human characteristics that are often imagined to be negative, innate, and shared [and] associated differential value, power, and privilege with these characteristics” (p. 21), while *ethnicity* should be used when these groups are viewed more positively, for instance, when the grouping confers “a sense of belonging, pride, and motivation” (p. 22). Having these clarifications for potential differences between race and ethnicity is helpful since certain racial groups can at times be viewed as ethnic groups (and vice versa) depending on the focus of analysis (Cornell & Hartmann, 2007). However, viewing Markus’ distinction of race as purely negative does not mean race should no longer be focused upon in investigating college students’ lives, as race-specific research continues to be important for understanding the influence of racism and racial discrimination on college students (see Study 1). As Bonilla-Silva

(2010) argued, society's ascription of race plays a critical role in a person's opportunities within current societal contexts that promote ideologies of racial colorblindness or being "post-racial." This ascription is based largely on how one looks, or their (assumed) race, as opposed to whatever ethnicity they may claim.

Similar complications exist in other studies focusing on racial identity or ethnic identity. Some scholars (e.g., Cokley, 2007) have promoted use of *racial* identity when taking into account the influence of oppression and societal hierarchies based on race, while reserving *ethnic* identity for when studying the influence of cultural values, behaviors, or belonging. One example of how scholars in higher education distinguished between racial and ethnic identity comes from Ortiz and Santos' (2009) mixed methods study on the development of ethnic identity among Asian American, African American, Latina/o American, and white American college students. The authors provided an overview of the difference between race/racial identity and ethnicity/ethnic identity, with the former focusing on how outsiders categorize individuals and subject them to discrimination. Their study focused on ethnic identity, which included one's sense of belonging, attachment to, and identification with one's ethnic group. However, despite the focus on "ethnic identity" the authors used arguably "racial" categories to organize their findings into these broad groups, including Asian Americans. Additionally, focusing specifically on these seemingly positive aspects of ethnic identity may limit collective understanding of the potential impact of racial discrimination on a student's need to develop a sense of belonging to a group, whether a racial group or an ethnic group.

Asian Americans and Group Dynamics

The literature has outlined that racial and ethnic identity are important to Asian Americans' psychological well-being (e.g., Alvarez, 2002; Phinney & Alipuria, 1990; Yip & Fuligni, 2002). Although some recent literature has focused explicitly on ethnicity within Asian American college populations and their involvement (e.g., Ortiz & Santos, 2009; Rhoads, Lee, &

Yamada, 2002), more work is needed to elucidate the meanings of both race *and* ethnicity within Asian American college students' sense of self and group identity. Understanding these dynamics is especially important given the increasing diversity within this population and the fact that the foundational models of pan-Asian American identity were largely based off of specific ethnic groups like Chinese Americans (e.g., S. Sue & Sue, 1971) and Japanese Americans (e.g., Kim, 1981; Kitano, 1982).

The tension between who is represented within research and discourse on “Asian Americans” continues today and provides an important consideration for how current college students claim the terms *race* and *ethnicity*. For instance, in Nadal's (2004) model of Filipina/o American identity development, he suggested that there may be a point in which Filipina/o Americans reject an established Asian American racial identity in favor of a Filipina/o ethnic identity. Termed *ethnocentric realization*, this process was proposed to explain how Filipina/o Americans (and potentially other marginalized subgroups with the Asian American category; Accapadi, 2012) come to realize that their ethnicity is not valued or represented within the larger racial group (which tends to focus on east Asian Americans) and therefore reject being identified as Asian American and advocate for the needs of their specific ethnic group (in this case, Filipina/o Americans).

Related is the concept of *subgroup respect*, proposed by Huo and Molina (2006) as an indicator of the extent to which a broader common group (e.g., an institution) “acknowledges, accepts, and values each subgroup that makes up the whole” (Huo, Molina, Binning, & Funge, 2010, p. 428). In their research on diverse high school students, Huo et al. (2010) found that having one's ethnic subgroup respected was linked to more positive evaluations of common group (school) authorities and ethnic outgroup members, but only for Asian American, African American, and Latina/o students, and not for white students. As the authors concluded, “members of ethnic minority groups appear to pay particular attention to messages of inclusion

when forming social attitudes about the larger community in which they participate” (p. 433). More recently, Flores and Huo (2013) identified the negative effects of a specific instance of lacking subgroup respect, that of national origin identity neglect (e.g., being misidentified as another subgroup within the larger racial category) for Asian Americans and Latinas/os. For the purposes of this study, the common group may be conceived of as the larger Asian American racial group, while the subgroup may be one’s particular ethnic/national origin subgroup.

These potential group dynamics among Asian Americans are important to note because they may influence Asian American students’ identity-based claims. These claims are made when students answer (or are forced to answer) the central identity question of “Who am I?” (Markus, 2010). However, this question may not be the only one students ask themselves, especially when these intra-group dynamics are considered. Asian American students may also find themselves needing to answer other identity-based questions related to where they come from (e.g., national origin identity), and to what group(s) they belong. This adds an additional identity-based question of “Who are we?” that has been shown to be a key developmental question for students of color as they navigate others’ assumption about what it means for them to be a part of a minoritized racial group (Pizzolato, Nguyen, Johnston, & Wang, 2012). Therefore examining race and ethnicity in the identity-based claims of Asian American college students aims to bring clarity on when these terms are used to answer individual-based identity questions (e.g., who am I?) or group-based ones (e.g., who are we?), and what constitutes the group (i.e., a pan-Asian racial group or ethnic subgroups).

Research Focus

Given the varied ways race and ethnicity may play out in the lives of Asian American college students, this study seeks to offer some clarity on the constructs and their importance for Asian American college students’ sense of identity, with implications for the services/programs that support their healthy identity development. Therefore the purpose of the

study is to understand the dynamic roles that race and ethnicity play in Asian American students' understanding of their own identities, through two research questions

- (1) How useful do the terms "race" and "ethnicity" seem to be for Asian American students' understandings of their identity?
- (2) Why are the terms utilized in different ways by Asian American students?

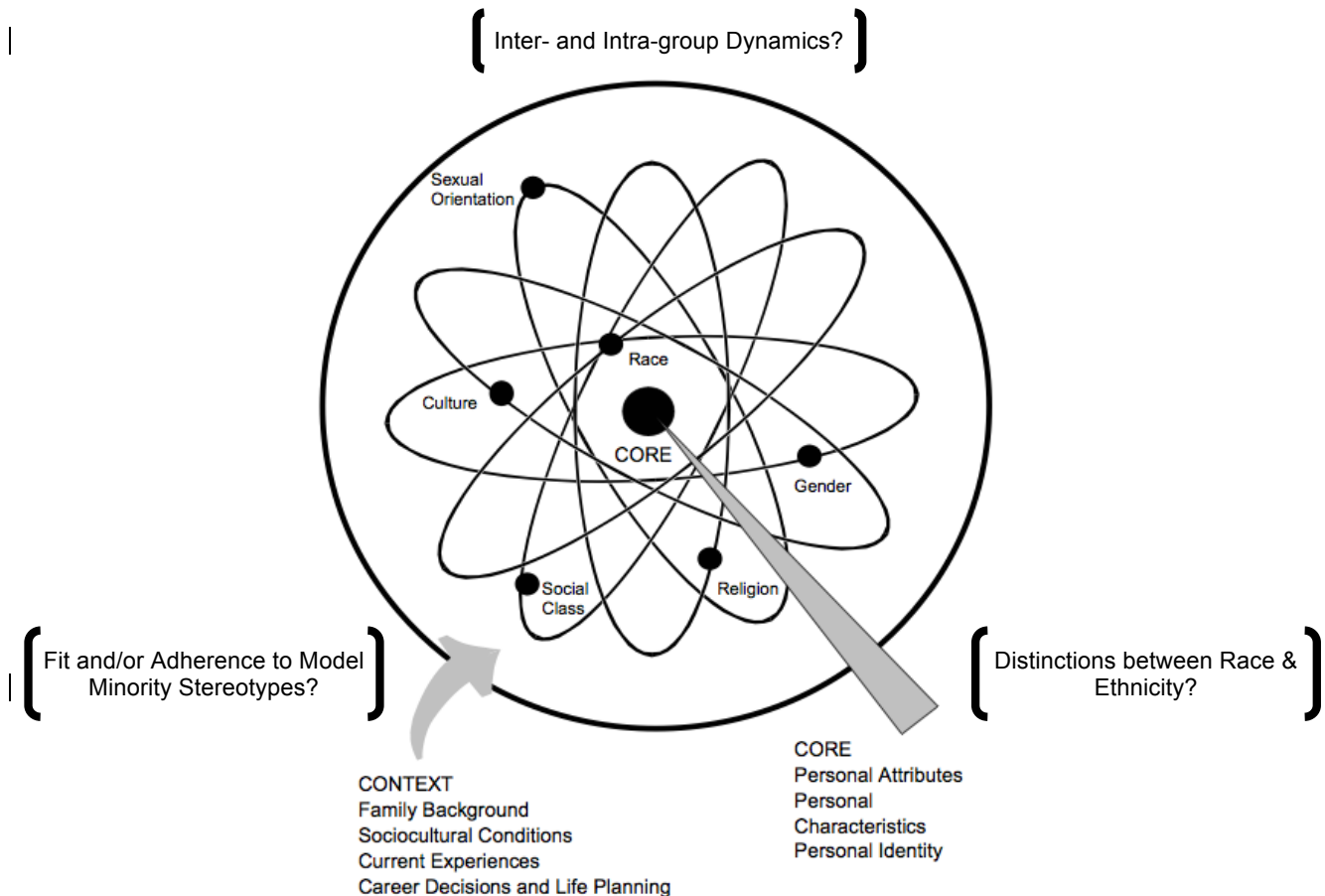
Conceptual Framework

This study attempts to bring together theoretical perspectives from social psychology and college student development. Allport (1969) described social psychology as "the attempt to understand and explain how the thought, feeling, and behavior of individuals are influenced by the actual, imagined, or implied presence of others," which may result from the individual's position or role "in a complex social structure and because of his membership in a cultural group" (p. 3; as cited in Lindgren, 1978). By focusing on the individual student, this study examines how the student makes meaning of both the larger constructs related to race and ethnicity in society, and multiple memberships in social identity groups (Tajfel, 1981).

Jones and McEwen's (2000) Conceptual Model of Multiple Dimensions of Identity (MMDI, see Figure 2) offers a framework for investigating the multiple social identities at the base of social psychology. The MMDI outlines the relationship between a person's core personal identity, several significant social identity dimensions, and contextual influences. The depiction is of a central core self, surrounded by intersecting circles or orbitals containing social identities of varying distance from the core. This distance represents salience of each identity, which is influenced by different contexts (Jones & McEwen, 2000). The model is helpful for understanding whether and why Asian American college students treat race and ethnicity as separate or distinguishable dimensions of social identity. Since social identity hinges on the idea of there being social groups in which one can belong (or seek belonging), this model also helps to examine which groups (i.e., a pan-Asian racial group or ethnic subgroup; Alvarez, 2002) seem most important to Asian American students and the role contextual influences (e.g.,

campus demographics, intragroup dynamics) play in their claims about who they are. For instance, a Filipina American student might get involved in a pan-Asian student organization only later to feel her unique experiences as Filipina are not valued in the larger organization. She may then seek belonging more intentionally in the Filipino American Student Association on campus, or create one if it does not already exist, which may depend on campus demographics.

Figure 2: Model of Multiple Dimensions of Identity with Added Considerations



[Adapted from Jones & McEwen (2000). Original MMDI graphic reprinted with permission from the American College Personnel Association (ACPA), One Dupont Circle, NW at the Center for Higher Education, Washington, DC 20036.]

Added to this model are three considerations outlined in the literature above that served as informal hypotheses (while also remaining open to emergent findings from the data) during data analysis. First, the model minority myth may help explain why some students may not

identify with the racial category of Asian American. If students buy into the stereotype and their self-perceptions fit the racial stereotype, they may more closely identify with the racial group. However, if their self-perceptions do not fit the stereotype, they may reject the racial label in favor of an ethnic one. Second, according to scholars (e.g., Moya & Markus, 2010) who promote the positive and negative distinctions between ethnicity/ethnic identity and race/racial identity, respectively, one might expect that students themselves might make these types of distinctions when claiming the importance of race or ethnicity to their identities. Namely, race may be claimed when students discuss negative identity experiences and ethnicity may be claimed in relation to more positive experiences. Third, claiming ethnicity could be due to a sense of ethnocentric realization due to a perceived lack of subgroup respect from the pan-Asian collective, or may have experiences of national origin identity neglect, which could influence stronger claims to their ethnic subgroup identity. Although these three hypotheses served as focal points of the analysis, the methods (described more fully below) allowed for other potential explanations to emerge.

Methods

The current study is part of a larger project that investigated diverse college students' understandings of their own identity and cognitive development during college. Using a protocol that asked participants to sort through a number of social identities, relationships, and contextual influences, the larger project's data were useful for investigating questions about race and ethnicity among Asian American students because it did not prime participants to specifically think about their race and/or ethnicity, nor being Asian American. These social identities were weighted the same as other identities such as gender, social class, sexual orientation, ability, and faith identity. Therefore students were free to select whatever social identities they felt were important or salient to their sense of identity. Further details about the current study's methods are discussed below.

Sample

The data for this study included the Asian American student sample ($n=52$) within a larger study ($n=101$) on college student identity and cognitive development. Participants were recruited via email and flyers from student organizations and cultural centers across two campuses to participate in a study about “Student Perspectives on College Lives.” Race and ethnicity were not made to be a specific focus of the study, decreasing the potential recruitment bias related to the current study’s focus on race and ethnicity. The study recruited undergraduate students from two large, public, research universities, one in the U.S. Southwest (Southwest University; SWU), and the other on the West Coast (West Coast University; WCU). Although both institutions are of similar size, the diversity profiles of the institutions vary. SWU, located within a suburban area, has a student population that is predominately white (64.3%), followed by Latina/o (16.9%), pan-Asian (5.2%), black (3.1%) and Native American (1.4%) students. On the other hand, WCU, located in a major metropolitan area, has a student body where no racial group accounts for more than 50% of the population. The largest racial group is the pan-Asian group at 38.2%, followed by white (33.9%), Latina/o (14.9%), black (3.5%), and Native American (<1%) students. Unfortunately, the institutions do not provide data on ethnic subgroups in their public demographic profiles. Additionally, part of the diversity profile includes the fact that SWU has a professionally staffed cultural resource center for Asian Pacific Islander American students. WCU does not have any cultural resource centers (no multicultural or group-specific centers). Both campuses have both pan-Asian and ethnic specific student organizations.

All of the 52 participants self-identified as Asian American (or an Asian ethnic subgroup) on a demographic form that included an open-ended question asking them “how do you racially identify?” Twelve additional participants from the larger study identified as multiracial Asian American (e.g., Asian and white) and were considered for inclusion. However, I restricted the

sample to limit the scope of the current study. An emerging body of literature suggests that multiracially-identifying students have unique sets of identity development processes and experiences with racial group boundaries (e.g., Guillermo-Wann & Johnston, 2012; Johnston & Nadal, 2010; Renn, 2004a) that would add a layer of analysis beyond the scope of the current study. Of the 52 Asian American-identifying participants in the current study, 57.7% were women and 42.3% were men (none identified with an “other” gender option).

In terms of ethnic group representation in the sample (obtained from the demographic form or interview), Filipina/o students were the most represented (16), followed by Vietnamese (11), Chinese (8), multiethnic Asian (5), Korean (4), South Asian (4), and other Asian (4). The South Asian category included students who identified as either Indian (2), Nepali, or Pakistani. The “other Asian” category included students who were the sole participants to identify as Indonesian, Taiwanese, or Thai, as well as one student who solely claimed being “Asian” (i.e., wrote “Asian” in the demographic form and only talked about being “Asian” in the interview). The majority of participants were 2nd generation Asian American (34), followed by 1.5 generation (8), 1st generation (7), and 3rd generation (3). Across the two institutions, 14 (26.9%) were from WCU and 38 (73.1%) were from SWU. A wide variety of majors were represented among the sample, including students in science, technology, engineering, or math (STEM) majors (22), social sciences (15), pre-health professions (7), business (4), undecided (2), and the fine arts (1). In terms of class years, the majority of participants were sophomores (37), followed by first-years (6), juniors (6), and seniors (3). Cited participants (in order of appearance) are included in Table 9, along with their ethnicity, immigrant generation (e.g., 2nd generation meant both parents were born outside of the U.S.), institution, year, and major.

Table 9: Study 3 Cited Participants with Background Information

Pseudonym	Ethnicity	Immigrant Generation	Institution	Year	Major
Karl	Filipino	2 nd	SWU	First Year	Physiology
Lex	Chinese/Filipino	3 rd	SWU	Sophomore	Physiology
Emmy	Filipina	2 nd	SWU	Junior	Human Development
Victoria	Indian	1.5	WCU	Sophomore	Anthropology
Michael	Filipino	2 nd	SWU	Sophomore	Engineering
Cathy	Indonesian	1 st	SWU	Sophomore	Biology
Allen	Filipino	2 nd	SWU	Sophomore	Psychology
Joe	Vietnamese/Chinese	2 nd	SWU	Sophomore	Nutrition Sciences
Sean	Pakistani	2 nd	SWU	Sophomore	International Studies
Tory	Nepali	1 st	SWU	Sophomore	Psychology
Kassie	Filipina	2 nd	SWU	Sophomore	Pre-Nursing
Daniel	Korean	1.5	SWU	Sophomore	Public Administration
Jake	Filipino	2 nd	SWU	First Year	Pre-Pharmacy
Karinya	Taiwanese	2 nd	WCU	Senior	Economics
Kati	Indian	1.5	SWU	Sophomore	Neurosciences

Data Collection

Exploratory qualitative interviews with participants used a new protocol that helps to elicit students' thinking about their identity and cognitive development – The Modeling Assessment Protocol (MAP; Pizzolato et al., 2010). Interviews averaged between 45-60 minutes in length, with the bulk of the MAP interview consisting of asking students to create a model of their own identity and development during college. Students were given and asked to sort through multiple terms representing social identities (e.g., race, ethnicity, gender, social class), relationships (e.g., family, friends), or other contexts and influences (e.g., social norms, stereotypes). Appendix B outlines each of the items included in the MAP protocol. Following student construction of their models, researchers asked the participants to explain their models through a semi-structured interview. Researchers probed for how students made meaning of each term (e.g., “You included race here, but what does that mean to you?”) and why certain terms did not enter their models (e.g., “There are a bunch of terms you didn’t use including ethnicity. Can you tell me more about why?”). This line of questioning allowed for an emergent approach to collecting students’ understanding of race and ethnicity in line with grounded theory

(Strauss & Corbin, 1994). Of interest for this study was whether and why race and ethnicity entered students' models, and how students made sense of either the presence or absence of these constructs in their models. All participants received a \$10 gift card as incentive for participation.

Data Analysis

All interviews were transcribed verbatim. Multiple reads of the transcripts allowed me to familiarize myself with the interviews and begin developing a potential coding scheme. First, I reviewed each transcript for whether race, ethnicity, or culture (if used to represent some form of ethnic identity) was used by students in their models. Transcripts were coded for (a) whether race and/or ethnicity were included in the models; and (b) whether these terms were distinguished and how. An *a priori* coding scheme was developed from the literature reviewed, with specific attention to the theoretical explanations of adherence to stereotypes, negative and positive distinctions between race and ethnicity, and inter- and intra-group dynamics (e.g., national origin identity neglect, ethnocentric realization). These initial codes were then updated using constant comparative analysis with new theoretical findings that emerged from the interviews. The qualitative coding software, HyperRESEARCH 3.0.2, was used to manage all data analysis.

In order to improve trustworthiness in my analyses, I employed several strategies consistent with assessing the "goodness" of qualitative research (Arminio & Hultgren, 2002; S. R. Jones et al., 2006). First, I consulted with two colleagues for peer debriefing, one with expertise in qualitative methods and the other with expertise in the area of Asian American psychology, regarding my coding and analyses. In several instances, these colleagues pushed me toward new interpretations of the data through memoing and debriefing. Second, several of the participants asked to remain informed about the study, and I selected three participants (representing a range of identities/experiences) for member-checking of the aggregate findings.

After sharing preliminary aggregate findings with the participants, none felt strongly enough that the findings needed to be changed to fit their own experiences and understandings of the research questions, offering another level of confidence that my interpretations were trustworthy. One participant did want to know more about patterns between the different universities, which I updated accordingly. Third, adherence to my epistemological and methodological assumptions, along with grounding the study in the extant literature, provided another source of goodness for this qualitative study.

Part of that adherence includes being transparent about the research process and my own positionality. For instance, because data were collected through face-to-face interviews, it seems important to acknowledge how interviewers' own identities may have impacted data collection, as all interviews were conducted by myself or another member of a racially and ethnically diverse research team. Six researchers participated in data collection. In terms of identities participants could see, the interview team included two Asian American females, two White females, and two mixed-race (Filipino and white; Mexican and white) males. Although the six interviewers had regional accents that represented their geographical upbringings, these accents were all American regional (Inland North, California English, and Philadelphia and Delaware Valley), and all interviewers spoke English fluently and as a primary language. Given that race was not primed to be a focus of the study (since it was given the same weight as the other identity dimensions), I did not feel it was necessary to track or analyze any cross-racial pairings between interviewers and interviewees for this study.

My own positionality as a multiracial Filipino American male, who can identify key college experiences that influenced the development of my own racial (multiracial) and ethnic (Filipino American) identities, likely colored my analysis of the data (and potentially why the sample is overrepresented by Filipina/o American students). Growing up in the Midwestern U.S., and having lived in the East Coast, Southwest, and West Coast, I also recognize the

importance of regional and demographic contexts in my own experiences as an Asian American. Identifying these experiences helped me to try to bracket these assumptions during data analysis, which was also helped by my use of peer debriefing and extensive memoing, so that the findings could be more grounded in students' lived experiences.

Findings

This study aimed to investigate the dynamic roles that race and ethnicity played in Asian American students' understanding of their multidimensional identities. Findings are presented in terms of these constructs' perceived utility to Asian American students (evidenced by whether they used them in their constructed models of identity) and why they were utilized in different ways, including the influences of different contexts on participants' identity-based claims and the multidimensional nature of participants' identities as Asian Americans.

Race and Ethnicity are Useful Constructs

Of the 52 participants in this study, 39 (75%) included one or both of the terms "race" and "ethnicity" in their models of identity and development during college, suggesting these constructs were useful for students' understandings of their identity and development during college. Most often these terms related to individual characteristics that participants deemed important for explaining who they are and how they know. For instance, although many participants connected these terms to notions of family (e.g., heritage, customs, etc.) and friends (e.g., learning about themselves through peers), these constructs were still individually claimed within their larger models. Of these 39 participants, 24 included both of the terms in their models, while 11 included only ethnicity and four included only race. With these raw numbers, it would seem that ethnicity offered somewhat greater utility for these students' identity claims since it was used more often than race.

However, these numbers representing the inclusion of race and/or ethnicity do not tell the whole story of their utility, since participants differentially distinguished (or not) between the

two terms. Of the 24 participants who included both race and ethnicity in their models, half distinguished between the terms and the other half felt they were similar or synonymous. When viewed as the same, participants generally clumped together the terms to indicate a similar piece of one's self-identity, as evidenced in Karl's discussion of race and ethnicity:

I feel like they have some... they are cohesive in many aspects and they do have their, you know, difference as well... ethnicity is like really who you are and it's like, I don't know it's— I really just saw this one when I did this and so like I can't really distinguish them but then I don't know, I just really thought it's one so I kind of put it together like that.

For Karl and other participants who felt these terms represented similar constructs, there was not much description given to whether they were distinct and so they tended to be grouped together in their models to represent a similar aspect of one's identity. However, the lack of distinction between the terms may represent a lack of complexity in thinking about how these constructs may play varied roles in students' development and answers to the question of "Who am I?"

A small number of participants (3) viewed the terms as synonymous yet they only included one term in their models (2 ethnicity, 1 race). For these participants, when they used one term, they generally found it redundant to include the other. For instance, when asked why race did not enter his model, Lex, who used ethnicity (and other terms of interest), stated, "I don't know why I didn't put race but I feel like I had enough [with] nationality and ethnicity... to not put race on." Similarly, Emmy could distinguish between her race (Asian American) and ethnicity (Filipino) but ultimately did not include race in her model because,

To me, like race and ethnicity kind of fall in the same category just because like you define Asians as I don't know... Whenever you like fill out forms... Sometimes I don't know what to put when it asks for race and then it doesn't ask for ethnicity. So it's like I don't know if I should put Asian American or if I need to like put Filipino... [they are] the same, sort of. So that's why I didn't put race on there.

For these participants and others who saw the terms as synonymous, it seemed redundant to have to put multiple terms that, for them, represented similar, if not the same, concepts.

Therefore, race and ethnicity were generally useful in their labeling of similar parts of their identity, yet, viewing the constructs as synonymous could also be due to these participants not having more complex understandings of either term outside of just being labels.

For the 12 participants who differentiated between race and ethnicity and still used both in their models, race and ethnicity each seemed to uniquely contribute to their sense of answering the “Who am I?” question of identity. Across these participants, patterns emerged where race was viewed as something negative, externally applied, or a broad label, while ethnicity was more likely conceptualized as something positive, claimed, or specific. For instance, Victoria discussed wanting to move past race because of the negative connotations attached to the term.

I think that in college, I haven't really needed to focus on my race as much. But I feel like it still defines who you are. ...I want to believe that eventually everyone can look past race, and everyone can just consider each other as humans, and nothing more. Like I don't think that labels should be put on people at all... I just really am so against it. But for some reason, we as people want to categorize people. I don't know why, but it, I feel like it's an innate quality in us, like “Oh, so you're this.”

Here, Victoria describes a tension between defining and labeling, where she can see that race still defines who one is, but mostly in terms of categorization or labeling. In viewing race as mostly a label, Victoria felt race was something everyone should eventually look past. In her example of people saying: “Oh, so you're this” it seems to be in response to other people's questions of “What are you?” rather than “Who are you?” Furthermore, when asked how ethnicity was different, Victoria offered this example:

Race, I mean again, it's a social construct. It's something that was made up... I feel like if anything, again it should be more of like, “oh, you're from this” or “you're this ethnicity.” See ethnicity and race are two very different things. Ethnicity. I can say that I'm Indian. And okay, “I'm Indian.” That's true. But to say, oh I'm Indian, “so you must be premed” or “you must be doing this” is race. That's where it goes into that.

For Victoria, ethnicity was clearly different from race, and it was more closely related to answering the question of “where are you from?” and it could turn into race when negative stereotypes were attached to her claims about being a certain ethnicity; in this case, being

Indian and stereotypes as being premed. Utility of the terms then seemed to depend on which question is being asked of participants as they encounter different contexts.

Contexts Influence Utilization of Race and Ethnicity in Identity Claims

As the MMDI framework suggested, contexts emerged as important influences in how participants differentially claimed race and ethnicity in their sense of identity. Three specific types of contextual influences were most prominent among participants, including their navigation of stereotypes associated with their identities and how others recognized (or did not recognize) them as particular identities, as well how differences in the demographic profiles of participants' contexts influenced their identity-based claims.

The role of stereotypes. Victoria's example above demonstrates the powerful role stereotypes, which come from contexts, played in students' identity claims. Forty-two (80.8%) of the 52 participants discussed the term "stereotypes" in relation to race and/or ethnicity, or described normative behaviors commonly associated with racial and/or ethnic stereotypes. For instance, Emmy discussed how she "didn't really notice when people would make fun of like Asians and stereotypes" until she came to college and her involvement in Asian American activities helped her realize "that people thought I was always the smartest in class just because I am Asian. Or they always thought that I would be good in math or science." In Emmy's case, she only included ethnicity in her model, and while she felt the constructs of race and ethnicity were similar (and why she did not include race in her model), she could distinguish between her identity as both Filipina and Asian American, with Asian American being related to racial stereotypes she encountered as an Asian American.

Although participants discussed generally becoming more aware of stereotypes during college, 24 participants, like Emmy, specifically discussed these types of stereotypes related to being the so-called "model minority." Among these participants, 12 discussed not fitting the myth, while five seemed to fit it, and seven tried fighting against the stereotypes but ultimately

seemed to fit it. Among those that did not fit the model minority myth, four included only ethnicity in their models, compared to only one participant who only included ethnicity among the other half of participants. Here, ethnicity seemed somewhat more salient for participants who did not fit the model minority myth attached to Asian Americans.

When discussed, stereotypes most often related to race as being Asian American, rather than ethnic-specific stereotypes. This distinction was evidenced in Michael's explanations of the terms that entered his model:

My ethnicity. Being Filipino, and like really proud of it and like, yeah, uh being raised from like the Filipino aspect and everything like that from my parents really motivates me to be in college because like I know, like there's not like a lot of Filipinos and stuff that could like get an education, and especially like those in the Philippines that are like always working hard and like trying to like make it in life, I guess... And then like race, I guess that goes off to like being an Asian American.... yeah, so you know like the typical stereotypes like, you know, being in college. But you know, I look at it as like, Oh, I'm Asian American, I'm proud of it.

In Michael's case, race was about the broader label of Asian American, which was attached to stereotypes, but he recognized he also had agency in combating stereotypes by being proud of who he is, both in terms of both his ethnicity as a Filipino and his race as an Asian American. Overall, stereotypes played a role in how students were answering questions both about who they were but also what it meant to be part of a certain group, when these groups had certain stereotypes attached to them.

The importance of being recognized. Related to stereotypes, contexts also gave participants experiences of being recognized/labeled in particular ways. For participants who did not see themselves as fitting within the prototypical Asian American group (i.e., East Asian Americans), using ethnicity as a more specific descriptor of self-identity seemed to honor national origin identity and was common among participants (15). For instance, Cathy, who often felt isolated as one of the very few Indonesian Americans on her campus, talked about how she appreciated the term ethnicity over race when she stated,

And with race, um... I think that race kind of further divides people...I think ethnicity is just a better term overall, because yeah, I feel like ethnicity can also be more specific, ways in which you can say Indonesian whereas it's like "what ethnicity are you?" "Oh, Indonesian!"

For Cathy and others, ethnicity allowed for their being able to claim and have recognized a national origin identity. Similarly Allen discussed why being recognized as Filipino was so important to him when he stated, "I guess when people see me... they either see me as an Asian, but I want them to see more in depth. I want them to see I'm Filipino, because I'm proud of it, and it just represents who I am." For others, the idea of labels being related to race influenced why they wanted their national original identity recognized. For example, Joe explained how race entered his model, but as something only surface level. He described people just seeing him as Asian, but he also felt that "country of origin is what shapes you more than just saying 'I'm Asian.'" Joe explained his thinking further by stating,

People look at you and they don't think oh Vietnamese or Filipino, or I don't think they do. They just say Asian. So if you look a little bit deeper into that you see something more specific. That's why being Vietnamese or Chinese... influences me more.

Here, Allen and Joe recognize being labeled as "Asian" by others, but were clear that the term did not adequately describe their more in-depth identities.

The importance of being recognized as particular types of people also appeared for a group of participants that described not even being seen as Asian by others. This finding seemed most common among the South Asian participants in the study. For instance, Sean stated,

And my ethnicity is Pakistani and like race and everything. It's like some people they will think whether or not you are White, Black, Asian, and Mexican and then there is not really a Middle East or anything so like falls under Asian so people say "you're not Asian man, why do you hang out with Asians?" Like technically, if you look it on map, it's in Asia, so...

Here, Sean describes how others question his identity claims as an Asian American and his choices to affiliate with other Asians. This type of external questioning relates to Asian American participants having to answer the question of "What group do you belong to?" Tory

echoed Sean's sentiments when she also described people not thinking she was Asian American

Like most people don't even think that I'm Asian American. They are, "Are you Mexican? Are you Indian?" And even though Indian is Asian American, it's like they have this idea of what is Asian American, and I don't look like I'm Asian American – stereotypically anyway. So they are confused by me, and they make assumptions about what I am that are wrong. So I put stereotypes in with nationality and ethnicity, because it's like they are all connected to each other in other peoples' perceptions and how they act toward you. I think I'm Asian American, but I'm also my nationality and ethnicity, and that leads to stereotypes, so I value my ethnicity more.

As described by Tory and other participants, the claims they made about who they were ethnically and racially seemed contingent on how others viewed them. Here, more specificity in relation to national origin identities offered a deeper sense of self even when others saw them differently. Therefore, as participants navigated these types of recognition dilemmas prompted by others' questioning of their identities (e.g., "what are you?"), these participants had to decide both which group they could claim, but also what it meant to be a part of that group (e.g., "Who are we?").

Demographic contexts as influences. Participants also discussed their perception of differences in cultures and regional contexts as playing a role in the claims they were making about their identities. Karl mentions culture this way when he stated,

I used to live in California and like a lot of my friends were all Asians, they were all Filipino, so coming here, it was kind of culture shock but in the same time it helped me realize that I am, I should embrace who I am especially since you know not everyone around me is the same as me.

Here, culture shock was based on his experience of moving to a place with different compositional diversity than where he was from; in college fewer people were like him (Asian or Filipino) than was the case before. Similarly, Tory discussed the role of the changing contexts of college and how being around more Asian American students in college changed her thinking about her own Asian American identity.

Before I came to [college] I just said I was Asian American, and people thought I was Mexican, and I was like, "No." Now that I'm around a lot of Asian American people you

can see the difference between us and so my ethnicity is more important because it's more about who I am.

Here, Tory's experience in college demonstrates the power of college contexts in informing students' racial and ethnicity identities, prompting the importance of looking at differences between the two institutions.

Although the sizes of the sample across the two sites were not even, analysis across the two schools suggests that contextual differences might differentially influence students' understandings and claims about race and ethnicity. One pattern emerged: while 35.7% of the 14 participants from WCU claimed only ethnicity (and not race) in their models, only 15.8% of the 38 participants from SWU did. Moreover, WCU participants were less likely to claim both race and ethnicity in their models than SWU participants. Hence, race seemed somewhat less useful to participants at WCU when compared to those from SWU.

These differences may be due in part to some of the contextual differences between the campuses. Demographically, SWU has a smaller percentage of Asian American students, while at WCU, Asian Americans are the most represented group. At WCU, having a critical mass of Asian American students might make ethnic group differences more salient. On the other hand, the smaller numbers of Asian American students at SWU may have influenced their claiming a pan-Asian racial identity, which may have come from a perceived need for pan-Asian organizing to gain "strength in numbers" (Rhoads et al., 2002). This type of organizing is similar to the pan-Asian political movements affiliated with the 1960s Civil Rights movement. Participants at WCU may not have felt the need for such pan-Asian organizing and thus, ethnic-based identities could become more salient. Furthermore having a cultural resource center dedicated to Asian American students at SWU may have also influenced a sense of shared identity as being Asian American, as many of the SWU participants mentioned the cultural center in their interview when they talked about who they were and what they were involved in.

The Multidimensionality of Race and Ethnicity for Asian Americans

In investigating further why participants utilized race and ethnicity differently to explain their identities, additional findings emerged that suggested that these constructs were not always perceived as two separate identity dimensions, but sometimes as potentially the same dimension (i.e., the lines were blurred) or as insufficient for explaining the multidimensionality of being Asian American. Although participants generally used race and ethnicity in the ways described in preceding examples, there were also those who blurred the lines between these constructs. Outside of the common usage of “ethnicity” to describe national origin identity, some participants actually used the term “race” to describe their ethnicity. For instance, Kassie stated, “Um, race. I’m very proud of who I am. Of being Filipino.” Daniel also used the term “race” to talk about being Korean when stating,

Um, I’m Korean; I know that there is a lot expected from Korean, Korean American students. Um, like you get joked around a lot how they are expected to do more. There is a lot of pride behind the race and culture.

And when asked about his involvement in the Vietnamese student club even though he identified as (and was proud of being) Korean, he responded, “They didn’t have a Korean club. I thought about coming up with one but then I got caught up in school. But it was a way to get involved outside of my own race.” Daniel used race to signify a national origin identity, which was usually reserved for the term ethnicity.

Another example of this perceived blurriness comes from Jake and his explanation of how he developed during college. In his modeling activity, Jake included the terms “nationality” and “culture” but neither race nor ethnicity. He explained his reasoning this way:

I feel like I’ve grown more nationalistic to my Filipino culture just through the Filipino Club here, like before in like high school there wasn’t really that many cultural clubs for Asians because I went to a predominantly white school, so most of my friends were white. I had very few Asian friends, so I couldn’t really share that. And if they were Asian they weren’t Filipino, they are like Chinese, Vietnamese and, so on... I would have to like wait until the weekend to hang out with my other friends who are like Filipino. But now that I’m here I feel like I don’t have to worry about like what they think, like if I use my Filipino accent as a joke, you know, just joking around with my friends, they kind of get

my humor because they know where I'm coming from. And yes, I feel like I've grown that way.

For Jake, nationality was about his national origin identity of being Filipino, which he could distinguish as being different from being Asian. Jake also included "culture" in his model, which he used to describe his learning about other cultures through his involvement in the Asian American cultural center at SWU.

Culture... I have been exposed to more cultures like Vietnamese and like Koreans, Chinese, all those other clubs in [the Cultural Center] which have been like one of the greatest things that I've gained this year. So I've been involved with almost all the clubs here like I have friends in every club pretty much and like I don't have to worry about like you know meeting new people because through all these clubs I met new people... At first when I first came around I was kind of like skeptical because it's like all Asians and I never really hanged out with all Asians and just like college in general like it's kind of like shocking to me, because moving away from family, don't really know anyone, but like maybe two or three people here and I guess that the center, this Cultural Center helped me.

When asked why he did not include race in his model, he stated, "it wasn't a good explanation to define kind of the change I went through or what kind of defines me now." For Jake, he seemed to be developing a greater sense of his ethnic identity (what he described as becoming more "nationalistic") as Filipino, but at the same time seemed to be increasing in his pan-Asian solidarity. In high school he noted having Asian friends who were not Filipino, but now in college, he was involved with those same groups at the same time as the Filipino club.

Although this study was particularly interested in participants' understandings and claims about race and ethnicity, the term culture, as in Jake's example above, was often used alongside or in place of race and ethnicity. For instance, the 13 participants that did not use either or both race and ethnicity in their models, the majority (11) included "culture" and referenced it being about their national origin identities. Adding culture was helpful for some participants to be able to make sense of conflicting messages about who they are and what labels they could claim. One prominent example comes from Karinya, a senior from WCU who discussed how she came to identify herself in terms of culture and race:

Um, so I think most important here is nationality, race, and ethnicity. And I think it's because I'm actually away from my family and I think prior to college and maybe the first and second years of college, if you had asked me what race I identified with, I would've said Taiwanese and half Mexican. And people would be like, "What? You look totally Asian! Blah, blah, blah." So then, I didn't know how to react to that. Just because in my childhood, just to make it a short story, I was brought up with a Mexican family, in a sense... So um, then when I got to college I actually took this women's studies class where we had to write journals. And one of the journals was, "What do you identify with?" So I wrote about my past and why I would say I'm half Taiwanese, half Mexican. And basically my TA wrote, "Come see me." So I went to talk to her and basically the whole meeting was about her telling me, "oh, you can't say you identify as half Mexican because your outward appearance isn't Mexican. So you don't get treated the way a real Mexican would be. Like you don't go under those, you don't experience the kind of oppression that they experience." And after coming out of that session, I was just like, "Whoa, what's going on?" And then I think I talked about this with someone [within Residence Life]. And um, they're just like "Well, she doesn't know what you've experienced so, it's up to you to identify with what you identify." So now if you ask me I would say I identify as Taiwanese American and culturally Mexican.

For Karinya, being able to distinguish between race and culture seemed crucial to her ability to honor her upbringing but also recognize the role that racism plays in claims about racial identity.

Despite some of the distinctions made between race and ethnicity, the term culture also seemed to offer some participants an even more specific or comfortable term in which to claim.

For instance, Kati distinguished between culture and race/ethnicity but only claimed culture:

To me, I did see the other ones... but I kind of thought that culture was the most positive way to represent, I guess a different ethnicity. I would say that if I had to identify I wouldn't say it as my ethnicity, I wouldn't say it as my nationality, I would say it as my culture. Because I feel like people are more receptive when you say it as culture, instead of when you say, I guess ethnicity and things like that. Just because there are political connotations involved with that, I don't know, I just feel like some people... are not as receptive... so I used culture.

In Kati's example and others, culture seemed to be included when participants desired to complicate or provide more dimensions to what might be "useful" or important in their understanding of identity. For participants like Kati, Jake, and Karinya, their identities as Asian Americans were not completely captured with just race and ethnicity, and so other terms, like culture, became important in fully unpacking and capturing their sense of identity.

Discussion

This study explored the ways that the constructs of race and ethnicity were utilized differently by Asian American college students in their understanding of identity. Using a perspective that race and ethnicity are social identity dimensions that could be differentially used in students' constructions of identity, these findings demonstrated that overall these terms tend to be useful for students. In spite of broad claims about being in a so-called "post-racial" era, and claims about Asian Americans being "model minorities" who focus on academics and not racial issues (Chen, 2012), participants in this study still saw race and ethnicity as important terms for describing their own identities. In particular, even though race was often seen as being something externally ascribed (i.e., as a label), negative (e.g., associated with stereotypes), or non-descriptive, Asian American students still tended to see how claiming race could be helpful for explaining their identities and experiences (e.g., as racially minoritized individuals). Although "ethnicity" as something claimed, specific, and prideful seemed to be more useful than the term "race" for these students with respect to frequency of use, it may not necessarily be due to a sense of racial colorblindness (Bonilla-Silva, 2010), as the terms were often blurred, sometimes viewed as synonymous or used interchangeably.

Despite the literature suggesting that race and ethnicity can be successfully distinguished and operationalized in different ways (e.g., Markus, 2008; Moya & Markus, 2010), Asian American college students' utilization of these constructs were varied and messy, and for some, even insufficient for describing their multidimensional Asian American identities. From participants' models, it is apparent that ethnicity, in conjunction with or instead of race, is important to Asian American students' understanding of not only their own identity, but also what identity represents, which may be dependent on contextual influences. Ethnicity as identity offers more specificity, and is tied more closely to their cultural, familial, and/or national origin identity experiences. Whereas race is something more or less ascribed to them as a label.

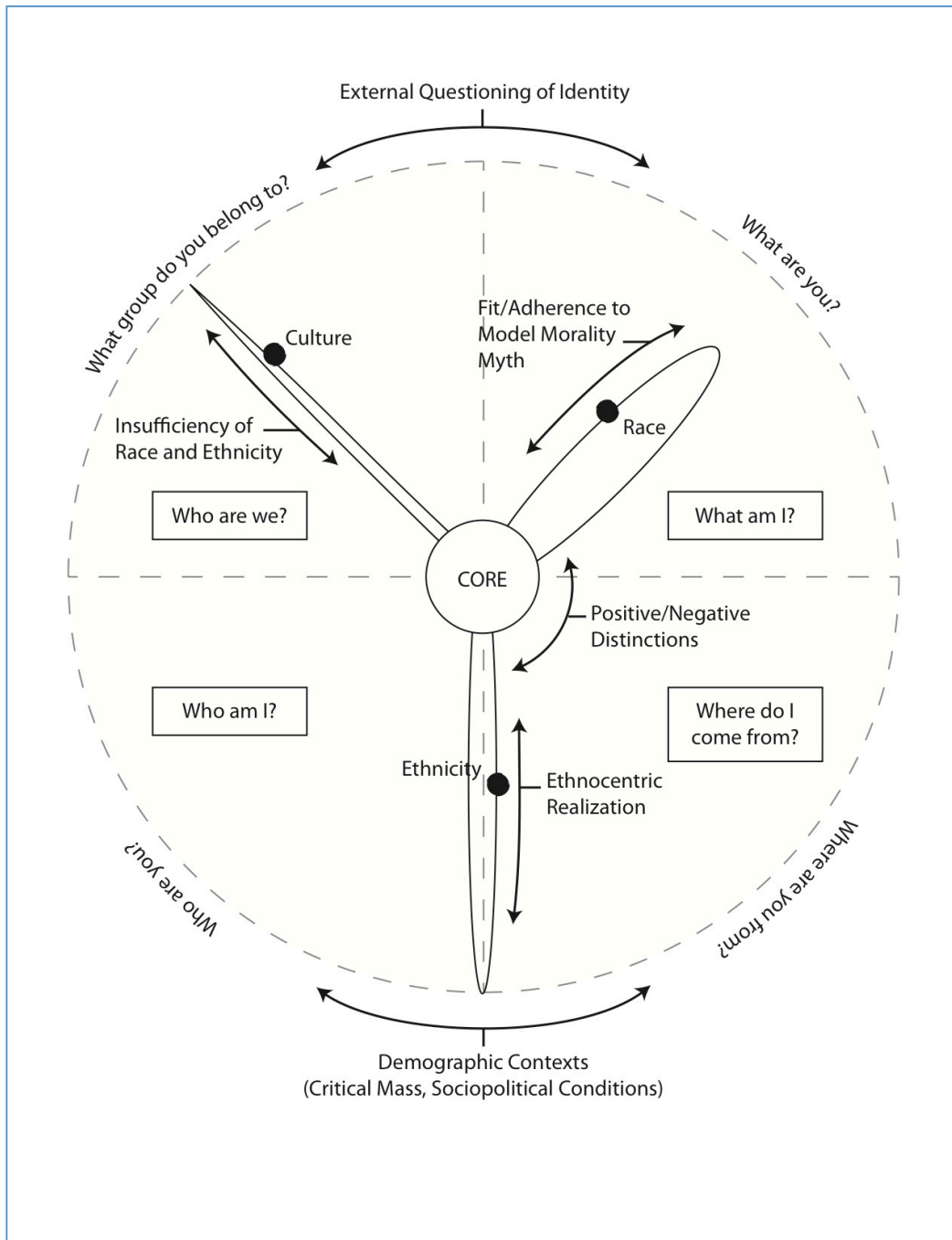
However, students also demonstrated that their identities as Asian Americans may not be completely captured by just race and ethnicity, and thus, other terms (e.g., culture) become important for fully unpacking and capturing the depth and complexity of their Asian American identities. This addition of culture seems to suggest that some students are thinking more complexly about how they are to answer different identity-based questions. This complexity may be in line with where students are in their cognitive development. Greater cognitive complexity might offer students more flexibility in being able to use the constructs of race, ethnicity, and culture in different ways to best represent their multidimensional identities.

With respect to Asian American college student identity then, it seems important to be able to distinguish between the dimensions of race and ethnicity and how these may be similar and or different, how they may intersect or not, and what role contexts plays in how salient each dimension is to students. Building off of the original MMDI model (See Figure 2; Jones & McEwen, 2000), which included race and culture, but did not model ethnicity as a different social identity dimension (although it did not delimit ethnicity from being included), the findings from this study suggest an updated model that better captures not only the identities and experiences of Asian American college students through the inclusion of different dimensions of identity, but also how these dimensions seem to be engaged differently depending on the types of identity-based questions students may be encountering in different contexts.

The Multidimensional Model of Asian American Identity (M^2A^2I ; See Figure 3) adapts aspects of the original MMDI including the sense of a core identity, with social identity dimensions orbiting this core, and contexts being able to exert influence on how close each of the dimensions of identity get to the core (representing importance/salience). However, the M^2A^2I (a) allows for dimensions to actually intersect the core rather than remaining outside of it; (b) posits that orbitals can be different sizes to demonstrate that not all social identities occupy/take up the same amount of cognitive energy for individuals (no matter how salient); (c)

incorporates quadrants to represent different identity-based questions students ask themselves (which are reflected by the types of questions others ask them within various contexts); and (d) adds potential influences for why identities may become more or less salient (i.e., closer to or further from the core).

Figure 3: Multidimensional Model of Asian American Identity (M²A²I)



It may be helpful to think of the M²A²I operating similarly to a clock. The orbitals can be thought of as hands on a clock, held together by the central core. The orbitals can be of different magnitude, similar to the different hands of a clock. The larger hour hand (modeled here as race), the smaller minute hand (ethnicity), and the addition of a second hand (culture) can move about the face of the clock to answer different questions that may emerge throughout different parts of their lives or within new contexts (e.g., beginning college), beginning with “What am I?” types of questions, to “Where do I come from?”, to “Who am I?”, to “Who are we?” One might notice that not all clocks have second hands, and so the addition of this hand is reflective of how some students felt that race and ethnicity were insufficient for their understandings of identity, and so they added culture (or other terms). Representing culture as the second hand also helps to demonstrate how culture may be conceptualized as being more dynamic and fluid (compared to race and ethnicity); the second hand generally moves faster around the clock than the other hands.

The central core operates to hold all the pieces together, yet it is what is behind this core that is especially important. Just as gears behind the clock help it function, students’ cognitive development is represented by the gears (and manipulation of those gears). As students develop increasingly complex understanding of the racial constructs, they also develop the cognitive complexity to be able to move the orbitals in different ways to answer the various identity-based questions. Also, like gears behind the clock, these cognitive processes are largely unseen.

The benefit of operationalizing race and ethnicity (and in some cases, culture) as being separate social identities seems to be that it then would allow for better understanding how and when these identities (and the social systems – racism, ethnocentrism – they are attached to) intersect in the development of Asian American college students. The model allows for the distinction between internal questions students might ask themselves (What am I?; Where am I

from?; Who am I?; Who are we?) and the external contexts that prompt these types of questions. The salience of each question is created by contexts, but different contexts can invoke different constructs to be used to answer such questions. The findings from this study start to get at differentiations in and relationships between questions of “Where am I from?” “Who am I?” and “What am I?” and specifically, how the congruence of answering the first and last questions in the context of entering a new college might impact how the student answers the middle question. Furthermore, the answering of the “Who am I?” question may ultimately be tied to the answering of a question related more closely to groupness – the question of “Who are we?”

Although the participants in this study were not necessarily asking this “Who are we?” question (see limitations below), the findings did speak to potential group dynamics, both intra- and inter-group that may influence the salience of different identities and their relationship to groupness. For Cathy, race seemed to be a point of contention since she felt it further divided people, while ethnicity was something more specific, and allowed her to claim her identity as Indonesian. Not having one’s national origin identity acknowledged seems to relate to why the broader Asian racial category may not have felt so useful for participants, as they wanted their more specific and distinct ethnic group labels to be recognized. In these cases, students’ answers to the question of “Who are we (as Asian Americans)?” may or may not include their own ethnic identities. When this occurs, they may be experiencing national origin identity neglect (Flores & Huo, 2013), which could relate to why their ethnic identities become more important and claimed over a pan-Asian group identity.

Although the notion of ethnocentric realization, where individuals move from a pan-Asian identity to an ethnocentric one, was not necessarily found among participants, there were differences among participants in the level of ethnic pride they had. Jake’s example above provides a particularly compelling example of a student increasing in ethnic identity pride as well

as pan-Asian solidarity. For Jake, his orbits of race and ethnicity may be more closely aligned. This example does not seem to support the idea of Nadal's (2004) model of Filipina/o American identity development and the claim that ethnocentric realization leads Filipina/o Americans to leave a pan-Asian American identity and solely claim a Filipina/o American one. For Jake, it seemed like he could have both. Jake does not reject an Asian identity (although does reject the term "race") because he's actually seeing and experiencing other Asian cultures, and this seems very rewarding to him.

Limitations and Areas for Future Research

There are several limitations to note with this study. Although the study's goal was to better understand Asian American students' identity-based claims (as a racially minoritized group), the MAP interview protocol's prompting of the individual's sense of identity and development during college did not allow much room for participants to conceptualize these constructs outside of individual experiences or labels. This individualization could explain why there seemed to be less attention paid to a sense of group-ness and that the construct of race may actually help students better acknowledge the potential common group experience of experiencing racism. Focusing on the role of race in terms of power seems important for understanding individual experiences and the influence of stereotypes on individual claims about identity; yet future research should focus on power inequities across groups, rather than just individuals.

This study also did not include any measures of racial and/or ethnic identity. The proxy for identity salience was whether the terms race and ethnicity were claimed and how participants discussed the roles race and ethnicity played in their understandings of identity. Future research could also compare the open-ended responses and models students created with measures for multidimensional aspects of racial (e.g., Rowley et al., 1998) and/or ethnic identity (e.g., Phinney & Alipuria, 1990).

The unequal sample sizes across the two institutions as well as a lack of diversity of the sample (e.g., overrepresentation of Filipinas/os and 2nd generation Asian Americans, lack of non-Vietnamese Southeast Asian students) limited the potential for important cross-case analyses. For instance, having more comparable samples from the two institutions would allow for better investigating how contextual influences may have operated differently at the institutions, which had very different demographic profiles and regional settings. The lack of diversity among immigration generations also limited the potential analyses, since recent research suggests that for more recent immigrants, the broad racial and ethnic categories may be less important politically and psychologically than their national origin identities (Flores & Huo, 2013; Schildkraut, 2011). Furthermore, the case for the South Asian American participants seemed to suggest a very different experience from other participants since they had to contend with questions from others about whether or not they could even claim being Asian. Future research should explore this phenomenon in more depth. Lastly, dropping multiracial Asian Americans from this study's sample presents another limitation for better understanding the ways in which the increasing presence of multiracial Asian Americans may be changing the nature of race and ethnicity for Asian Americans as a group.

Implications & Conclusion

This study offers multiple implications for practice. First, given that the construct of race and being labeled as "Asian" seemed less useful for some Asian American students, student affairs and counseling center practitioners that aim to outreach to Asian American students may need to devise ways to target and outreach to specific subgroups. This type of specific outreach seems especially needed for groups that may not see themselves as part of the Asian American umbrella term. For instance, the South Asian students in this study struggled with claiming an Asian American identity because other people did not see them as Asian. Some movement within the field is attempting to be more inclusive to this population, for instance, by

expanding Asian American or Asian Pacific Islander to Asian Pacific Islander Desi American (APIDA; Accapadi, 2012). However this language may not be effective if it is not also accompanied with education for the broader campus community about who is included within the pan-Asian umbrella. Although students may identify with the APIDA term themselves, they likely may still be encountering the types of questions from their peers that cause them to rethink whether or not they can claim certain identities, and may question whether or not they can seek out specific services if their individual group is not named in the services' outreach efforts.

Second, the findings from this study offer implications for how educators teach college students about the constructs of race and ethnicity, and also in how educators use these constructs in their services/trainings. Victoria was able to repeat that "race is a social construct" which seems to have become a mantra for college students (Johnston, in press). However, how often is ethnicity described as a social construct? It seems important for better understanding the dynamics of race and ethnicity among college students if educators challenge their students to think more deeply about *both* constructs, instead of just regurgitating specific mantras. Additionally, there are "culture centers" or cultural resource centers across campuses nationwide (Patton, 2010), yet these centers are usually related to broad ethnic (e.g., the Puerto Rican/ Latin American Cultural Center at the University of Connecticut) and racial (e.g., the Black Cultural Center at Purdue University) groupings. This practice seems important to interrogate, not with the goal of creating specific centers or programs for every ethnic subgroup, but for better understanding changing demographic contexts as well as how the language of "culture" may mask the ways racial discrimination and stereotypes may be operating in the lives of college students and influencing their identities, outside of just cultural practices.

Third, in terms of Asian American college students specifically, there seems to be a need to focus on educating these students about race and racism, and not just leaving “Asian” to be conceptualized as something ethnic or about being something cultural. As found in this study, some of the differences in conceptualizing the constructs may depend on a “critical mass” of Asian American students. Therefore education efforts targeting the identity development of Asian American students will need to take into account the unique demographic contexts of the institution and region, especially in terms of ethnic subgroup representation.

Lastly, it seems important that educators contemplate if and how we should be best distinguishing these constructs. This study suggests that students seem to have some flexibility with their use of the constructs, so it might be important to also embrace some of this ambiguity. For instance, Karinya’s example about her TA telling her she could not identify a certain way, even though she felt she was culturally Mexican, provides an interesting example of how the M²A²I may be useful for educators. Instead of telling students how to identify (especially given the potential of being in positions of power, as Karinya’s TA likely had influence on grades), educators can help students understand the differences between constructs, and how these constructs can be useful for answering different types of identity-based questions. With the help of educators in residential life who allowed her to process the situation, Karinya was ultimately able to distinguish between the constructs of race (Asian) in answer to “What am I?,” ethnicity (Taiwanese) in answer to “Where am I from?,” and culture (Mexican upbringing) in answer to “Who am I?.” However, further support could help Karinya think more deeply about what it means to be a part of a certain group. So although she feels she shares a similar cultural upbringing to Mexicans, this likely would not be her same answer if she were asking herself the group-identity question related to “Who are we?” Educators can help students contemplate these complexities and continue to push students forward in understanding identity not just as individuals, but as members of social groups who potentially experience racism in different ways.

In conclusion, this study adds to the scant literature on Asian American college students. The diversity of Asian American students continues to present complexities for research and practice targeting this group and ways to include subgroups that may feel marginalized and only identify with their ethnicity/national origin group. The Multidimensional Model of Asian American Identity provides a conceptual framework for both working with Asian American students as well as future research that better captures some of the complexities of their identities. In particular, helping students to better understand the dynamic ways race and ethnicity (and often culture) can be used to answer different identity-based questions may serve as an important tool for educators to help students make sense of their identities within various contexts, which can be helpful for identity development, and also dismantling static and essentialist notions of race at the foundation of racial stereotypes. Furthermore, this study also offers some new ways of modeling the constructs of race, ethnicity, and culture in the multidimensional identities of college students overall, which could be investigated in future research on other college student populations.

CHAPTER 5: CONCLUSION

Introduction

It seems as though any social scientific study on race must begin with a disclaimer (whether explicit or implicit) that “race is a social construct[ion].” However necessary and helpful this phrasing may have been in the past to move scientific inquiry away from its eugenic and scientifically racist past, the teaching of race as being socially constructed may now be ubiquitous. Scholars and students alike are taught this, and are able to repeat it succinctly, but in reality, race is much more complex than the few words of being “just a social construct” tends to allow. As evidenced throughout this dissertation, the memorizing of “race is a social construct” may actually obscure broader understanding of what race is, if/when/how race matters, how racial thinking is developed, and how race should best be used (if at all) in research. It is to this apparent lack of complexity in thinking about race that this dissertation aimed to better understand, starting with the broad question, “What’s the use of race?” Throughout the three studies, the term “use” signals how race gets used (e.g., applied, operationalized, interpreted, claimed) in different ways by postsecondary scholars and students. The term also relates to how useful race may be for college students and their sense of identity as well as their understandings of science and racialized experiences. As the findings suggest, race offers some utility for research as well as for identity claims and reasoning through persistent racial issues on college campuses.

Although race continues to be a contested topic within higher education, the three studies in this dissertation offer some insights into the complexity of race and its dynamic nature. The changing nature of race is partially related to the discourse around President Obama’s election in 2008 and re-election in 2012, and claims about race no longer mattering for determining life chances (apparently since the U.S. has a black-identified president). This idea

of whether or not race matters also continues to re-appear in anti-affirmative action lawsuits including the *Fisher v. University of Texas at Austin* case currently being heard by the U.S. Supreme court. Therefore, these ideas about race mattering relate to a second overarching question that this dissertation helps to answer: “Does race [still] matter?”

The joint findings from this dissertation demonstrate that yes, race still matters. However, just as the “race is a social construct” phrasing cannot stand alone, asserting that race matters must not end there. While previous scholarship has answered this question about whether or not race matters (e.g., West, 1993), this dissertation goes deeper by answering the question of *how* race matters. Study 1 shows that how higher education scholars apply race in their research matters, since scholars’ decisions about race can influence not only the outcomes of their study (based on methods chosen) but also their interpretations, whether explicit or implicit. The messages sent by the research can also become important for how others make sense of race. For instance, Study 2 demonstrated the power of scientific authority in students’ reasoning through whether and how race matters. As students made meaning of race in different ways, the power of scientific authority could influence students’ own experiences and expertise with race and racism. Study 3 attempted to answer the question of *when* does race matter for a sample of Asian American college students, with a focus on identity. Race seemed to matter to students in some cases, but often, ethnicity was claimed as more important than race.

These examples are just a few of relationships between the three studies of this dissertation. In this concluding chapter, I provide some further examples of how the three studies connect in answering both questions regarding what the utility of race is and how race matters. I then provide some shared implications for research and practice, and end with several directions for future research on the concept of race in higher education.

Connecting the Three Studies

Biological Race Thinking Persists

Despite the mantra that “race is a social construct” that students were able to repeat and scholars likely ascribed to, the three studies demonstrated that the biological concept of race continues to persist. In Study 1, scholars’ lack of explicit interpretations of why race mattered in their studies, left the potential for implicit interpretations that there is something inherently or innately (i.e., biologically) different between racial groups, which is what could be attributed to the cause of significant racial differences found in their studies. Even when race was not significant, the inclusion of race as a variable without rationale (e.g., not in literature reviewed, not in conceptual framework), creates a sense that race is an essential characteristic of college students, rooted in their genetic/biological makeup, that must be controlled for in analyses.

As scholars applied race in this way in their research on college students, the findings from Study 2 and Study 3 demonstrate that students themselves still adhere to, or struggle with, the biological concept of race. Participants in Study 2 tended not to be able to deny the role of biology in their reasoning through race. Contemplating race as embodiment and as ancestry tended to hinge on biological aspects, for instance, genes contributing to skin color and skin color being about race, as was the case with Bob’s uneasiness around responding to the biological race statement. Furthermore, the ways DNA tests could be used to determine one’s race (as in the case of Dracula’s friend) seems to contradict the social construction of race. The influx and authority of DNA tests in a post-genomic era may indeed be re-inscribing race as something written in our genes. Here, it seems teaching verbatim that “race is a social construct” is not doing the work educators hope it would do, as the slippery slope of biological/genetic race thinking may again resurface in a post-genomic era where (genetic) race becomes useful for gaining access to perceived resources. Therefore, teaching students that

race is “just” a social construct, as Christy repeated in Study 2, is likely not as useful as educators hope it to be.

Similarly, for participants in Study 3, claiming race to be more about ancestry and labels related to encountering “what are you?” types of questions, which often elicited biological answers and rationales; that race was about *what* you are, not necessarily *who* you are. Indeed, these rationales were often in contrast to “ethnicity” being more useful for these participants as something cultural, claimed, and/or more specific. Yet, leaving race to be something less useful limits the potential for Asian American students to understand the ways race matters for political reasons, such as creating a critical mass of a shared group identity, or for better understanding racism. Group identity and spaces (often a result of collective action) can be helpful for Asian American students, especially in regions like the U.S. Southwest where their numbers may not offer the same type of critical mass often apparent on either of the coasts. Furthermore, if Asian American students do not understand race and racism, they may be more likely to perpetuate themselves as fitting the model minority myth, which can have detrimental impact on their own mental health, as well as prevent services being provided and tailored to Asian American subgroups who may truly benefit from them. It should be made clear to Asian American students that even though race is not something biological, it is still useful to understand how race matters to them as a racialized group in the U.S.

The Influence and Importance of Scholarly Authority

As outlined by Study 1 and students’ deference to scholarly authority in Study 2, the methodological decisions and interpretations of scholars matter because they may influence shared understandings of race. One particular finding from Study 1 was the lack of research specifically on Native American college students and the ways they often get excluded from analyses. The lack of research on this group presents a potential void not only for scholars’ and practitioners’ understandings of the unique needs and experiences of Native American students,

but can also influence how college students themselves understand Native American students. For instance, the findings in Study 2 demonstrate the potential misconceptions students have about Native American rights and retributions and claims about who counts as a Native American. Dracula's beliefs that her friend should take a DNA test to prove she is Native American and gain financial resources is just one example of how the lack of research on Native Americans prevents awareness of what it means to be Native American.

This lack of understanding may be due to the low numbers of Native American students at these particular campuses, but may also reflect a lack of inclusion of Native American issues and perspectives into the curriculum or other programming led by student affairs educators. If these educators do not have knowledge about Native American students (given their absence in much of the core higher education journals), then they likely do not have the know how to incorporate Native American perspectives into their work with college students. Without this education, the misperceptions of Native Americans, that are deeply ingrained in people's unconscious minds (Fryberg et al., 2008) will continue to be perpetuated and will be even more difficult to break. It seems imperative, now more than ever, that smaller populations like Native Americans do not get overlooked in higher education research and practice. A recent edited volume by Shotton et al. (2013) is helping to fill this gap, but further research in peer-reviewed journals is still needed.

Another one of these smaller populations is multiracial students. The finding from Study 1 that mixed race students were also rarely specifically focused on in studies and were often excluded in operationalizing of race as a variable, presents another need for better understanding this increasingly present population and how these findings can contribute to the field's broader understandings of the utility of race. Indeed, I am guilty of excluding mixed race students in Study 3 as well. As I reflect back on my own decision making process, I invoked both my personal experiences as a mixed race Asian American college student, as well as the

literature on multiraciality, to make the claim that trying to include their unique identities would make the study unwieldy. This type of rationale is very different from Lundberg's (2007) claim about excluding students who selected more than Native American on their demographic forms in order to study only Native American students. The implicit message from Lundberg seems to be that students who are mixed Native American are not truly Native American. I do not deny that multiracial Asian American students are a part of Asian American college student populations. Unfortunately, I too found myself in a predicament on whether and how best to include multiracial students in my study. I doubt I am the only researcher struggling with these types of dilemmas.

Additionally, the authority scholars have in the decisions made regarding race in Study 1, transcend to the same types of scholarly authority that may have played a role in how students in Study 3 came to develop their sense of identity. For instance, Karinya's example of how her TA told her she could not identify as "half Mexican" influenced how she changed the ways she identified her self in terms of race and culture. For Karinya, her TA was in an authority role, and likely had a strong influence on delineating the types of identities she could claim. Similarly, for participants in Study 2, scholarly authority played a role in how they made meaning of race, especially when they did not have the experiences with race to validate their own personal level of racial expertise. Overall, scholarly authority can influence whether and how race matters, both in terms of racial findings in research, and how students make meaning of race. Therefore, scholars need to be extra attentive to how they use race in different ways and how their choices can impact whether or not race matters.

Contexts Count

Across the three studies, context emerged as a common component of the findings. In Study 1, the demographic context of studies was not always included. Despite the majority of the studies (77.0%) enumerating samples by race, the racial demographics of the program,

institution, state, region, or nation seem equally important to include. However, fewer studies included demographic contexts along with the enumeration. It seems as though part of the rationale for enumerating by race is to be able to compare (e.g., assess representativeness of sample) the racial composition of the sample to the racial composition of the population as a form of context. However being explicit about the role of context is imperative for combating essentialist notions that students of different races are innately different and therefore need to be counted (outside of context). Including an understanding of the demographic contexts in which a study takes place seems especially important for considering how race might matter differently in each particular context, adding to the potential for disrupting essentialist and static notions of race.

The need for including context in scholarship is also informed by the findings from Study 2 and Study 3, which demonstrate that contexts count for how students understand race and racially identify. In Study 2, the high representation of Asian American students in the sample was a function of the demographic context of the two institutions, where Asian Americans are the largest racial groups in the undergraduate populations. Moreover, these campuses often get claimed to be “diverse” by the administration since no racial group constitutes a numerical majority; yet, students like Coffey continue to experience racial microaggressions related to being the “only one” in different spaces on campus, making race continue to matter for her and other underrepresented students on campus. The various contexts in which students were involved also seemed important for their experiencing and learning about race, but in different ways. In study 2, students could clearly pinpoint where and how they learned about race, for instance, in particular classes or in equity-based trainings as student leaders. These contexts are important to identify since educators are largely responsible for creating these types of contexts that will provide students with the space to reflect on race and the tools to deconstruct race in different ways, including language to name complex constructs. For instance, Ian’s

ability to name race and racism operating at different levels was likely partially because of being an ethnic studies major and the language he gained to be able to use in different ways to express exactly how he saw race mattering.

In Study 3, both contextual differences between SWU and WCU related to differences in how students were claiming race and ethnicity as being important to their identities. With WCU's larger Asian American population on campus, the subpopulations could more clearly be claimed, and these were claimed as ethnicities, and therefore, likely part of the reason why ethnicity seemed more useful (on average) to students at WCU than at SWU. Furthermore, the contexts students found themselves in within either institution (e.g., the Asian American cultural resource center at SWU), seemed to influence how they made sense of the terms race and ethnicity and why either (or none) were more important to their claims about their identity. Despite race mattering less to these particularly students' claims about identity, these findings could look very different in different contexts. For instance, if racial groups have smaller numbers of similar-race peers at a particular campus, they likely will bridge diverse ethnic backgrounds to band together as a racial group, potentially to escape the ways race matters as a function of power (i.e., they will likely claim race since they may feel the effects of racism in that given context).

The Power of Language

Findings from the three studies demonstrated the power of language for using race and how race matters. Most prominent were the ways the language of race and ethnicity was used inconsistently. Study 1 demonstrated inconsistency in scholars' use of terms, both across the studies and even within particular articles. For instance, some scholars used the conflated "race/ethnicity" term while others consistently used "ethnicity" but included racialized terms (e.g., Asian, White). Students in Study 2 often contemplated the distinctions between the terms race and ethnicity when reasoning through the realities of race, while the terms were also sometimes

viewed as synonymous for some students in Study 3. The findings suggest that the usefulness of the term *race*, may be connected to the usefulness of the term *ethnicity*; or that the terms do not matter as much for how individuals are actually experiencing these constructs in their lives. This potential lack of clarity begs a question: Is there a need for a shared definition for race and ethnicity if agreement can be reached that we are generally speaking about the same things?

Although this study did not seek to answer that particular question, it is apparent that the power of language does not end with the terms race and ethnicity themselves. In Study 1, the scholars' choices of language can change their interpretations. For instance, when dummy coding race as a variable in regression analyses, a group needs to be left out against which to test hypotheses. Study 1's findings demonstrated that white students were always this referent group, as stated in the Mayhew and Engberg (2010) exemplar for being transparent about race. However, the language choice could very well say whites where the "omitted" group, rather than the referent group. Although it is the exact same technique, the meanings seem to shift. "Referent" signals the status quo dominant group, while "omitted" may send a different message more in line with what the actual statistical analysis entails (S. Dynarski, Personal Communication, February 1, 2013). Yet, the fact remains that in either case, the group that hypotheses are being tested against (the comparative group) are white students, continuing to perpetuate them as the norm in which other racial groups should be compared.

Students were also very keen on trying to distinguish between different language to use when referring to groups often racialized. In Study 2, several students who were science majors and also believed in the validity of the DNA tests felt that race was not the appropriate term to use when reporting out scientific results. For instance, Fred stated that the groups that scientists describe when reporting out DNA test results should not be referred to as "races" but as geographic populations. This type of distinction also related to why some students felt that they might agree with the biologically distinct race statement if it did not say "races" (Johnston,

in press). Here, the inconsistencies in how the language of race gets used can impact whether or not and how students believe race matters.

Joint Implications

The three studies of this dissertation mutually inform implications for both research and practice. There are several implications for graduate preparation programs. Since many of the scholars writing the articles examined in Study 1 were likely trained in Higher Education and Student Affairs preparation programs (although some may have degrees from disciplines outside of higher education), there may be inconsistencies in how graduate students are socialized and trained to account for race in their research. This socialization not only occurs through direct teaching of methods, but also in the development of research ideas or lenses to be critical of race-based findings. This socialization can even influence whether or not scholars think race matters and should be incorporated into research.

The teaching of methods in graduate programs is a specific area informed by this dissertation. In terms of quantitative methods, group comparisons form the foundation for some of the more advanced statistics, and so binary group comparisons are usually the first step for teaching students quantitative methods in higher education research (S. Dynarski, personal communication, February 1, 2013). In terms of race, this binary may equate to black and white (e.g., the black and white gap in college GPA), or white vs. minority/students of color. These methods can and should become more complex since race cannot be appropriately captured in binary ways. However, scholars may never think twice about their methods or interpretations they may have learned in graduate school if they are never challenged to do so.

This challenge may be left up to editors and review boards for journals through the peer-review process. Hence, implications for review board orientation and training include key aspects of how journals (even if not focused on race or other aspects of diversity), should include a layer of review for determining the appropriateness of the authors' applications and

interpretations of race. Furthermore, journal editors should pay attention to the language of race and/or ethnicity and the inconsistencies apparent within articles. Asking scholars to define the terms they use and how they collect and operationalize race in their studies may help limit these inconsistencies and also provide an opportunity to limit the essentialization of racial categories used in their studies. For instance, my findings from Study 1 reminded me that I should be more transparent about how I collected the racial demographic data of the next two studies. Journal editors should expect this type of transparency among all studies that use race or speak to whether or not race matters.

Graduate preparation programs also socialize students into becoming educators who may or may not be able to teach about race or incorporate race into their practice. The teaching of race seemed to be a critical aspect of how students in Study 2 learned about race, and could influence the types of identities students in Study 3 felt they could claim. It seems imperative given the popular discourse claiming that race no longer matters that more attention should be paid to teaching about the complexities of race. Students should not just repeat that “race is a social construct” but should actually understand and be able to articulate that race is much more complex than “just” being socially constructed. New pedagogical techniques for teaching about the social construction of race should more clearly bring in the multiple meanings of race, and in particular, race as power. Although some students may see ethnicity as a term of choice for their own identities, there is still usefulness in teaching about race specifically in order to contemplate the ways that racism influences students’ identities and outcomes in higher education and larger society. However, the joint findings demonstrate that contextual differences may play a role in how educators teach about race and racism. Validating all students’ experiences with race seems important for engaging individuals in learning about racial realities; yet, it is unclear what this process might look like when almost everyone in the classroom more or less has similar experiences with race, except for maybe one or two

students of color. Educators should be mindful about the dynamics of racial authority in the minds of students and not let the learning (of the majority) be dependent on the perceived experiential authorities on race (i.e., minoritized students who experience racism).

This dissertation also offers implications for how educators conceptualize race. Although often thought of specifically as a form of identity, race may be much more than just a dimension of identity for students. In terms of research then, it seems important to not operationalize racial identity by the demographic category students select from the options provided. In other research (e.g., Johnston et al., 2009), my colleagues and I have argued the need to ask additional types of questions to collect more intentional racial data that relates to the purpose of the research. However, real estate on surveys is often limited and thus, demographic questions may need to be as concise as possible. This dissertation demonstrates the need to at least collect racial and ethnic data as separate questions, given the ways students in Study 3 distinguished between these terms.

These distinctions seem very different than the way the U.S. Census categorizes ethnicity (i.e., Hispanic or not) and race. The 2010 Census race question suggests that Asian subpopulations, such as Japanese, Korean, Filipino, are their own racial groups. Having at least two questions related to race and ethnicity may be helpful for several reasons. First, asking specifically about race may be helpful for contemplating the broad racial categories students claim. Moreover, Renn (2004a) suggested the importance of collecting both ancestry and identity demographic data from college students. Similarly, this dissertation suggests that students may think of race as ancestry (what am I?) and ethnicity as a more specific indicator of identity (who am I?). Second, by disentangling race from ethnicity, students may become more understanding of these differences and the different ways both of these constructs may inform their identities and experiences. However, race cannot just be an operationalization of ancestry if students are to be aware of the ways racism may inform their experiences. Discrimination

based on race may be due in part to ancestry, but may be more directly informed by race as embodiment, or what one looks like; yet, students may not see this discrimination occurring if they do not make meaning of race as a function of power.

In terms of how educators conceptualize race and ethnicity, this dissertation also suggests implications for the work of student affairs educators doing race-based practice. This type of practice includes educators in the functional area of multicultural affairs and those that advise racial, ethnic, or cultural student organizations. What does it mean for “cultural” resource centers to be based on racial categories, such as “Asian American”? How does the practice of these types of cultural programs reinforce notions that race is solely about culture? This dissertation suggests that educators in these areas should more centrally incorporate race and racism into their work so that students themselves can better understand how complex race is in terms of their experiences and identities.

Areas for Future Research

Together these studies inform multiple areas for future research, especially considering the importance of context. Studies 2 and 3 are contextually bound to the regions in which the institutions are located and comparing racial identities and racial meanings across different regions of the U.S. would serve for interesting follow-up studies. For instance, how does the history of slavery and racial segregation in the U.S. South inform students’ meanings of race that may look different from those on the West Coast? And in particular, how do Asian American students in the South come to understand their own racial identities, especially given the ways race historically has been seen through a black and white dichotomy? For these studies and Study 1, an international and comparative approach to the research would also be an interesting and compelling area for future research. How might the core journals of higher education in the U.S. compare to international journals in the ways race gets applied? How do the terms race and ethnicity get claimed differently in other national contexts? More

comparative research will not only help to answer these questions on a global scale, but may also inform future research that might still be bounded by U.S. borders.

One of the ways the three studies informed each other in terms of future research deals with the potential relationship between scholars' applications of race and the meanings students make of race. Although these studies did not explicitly look at this potential relationship (i.e., the participants in Study 2 were not reading the articles in Study 1), the joint findings lay the foundation for future studies that more closely investigate the ways student affairs educators learn (or do not learn) about race from what is published in the journals analyzed in Study 1. In turn, future studies could look at how college students themselves learn (or do not learn) about race from the contexts that these educators create. One particular study could examine syllabi of graduate preparation programs in student affairs to investigate the extent to which race is integrated, and in particular, whether or not Native American perspectives are included within various curricula.

Moreover, these studies seem to be just breaking the surface of the field of higher education's shared knowledge on the utility and meanings of race, and the need for more research that specifically examines the complexities of race for different constituents and across multiple functions. For instance, future research could investigate which disciplinary perspectives or canons of race scholars' incorporate into their research on race, or could more explicitly investigate the connections between how scholars and research tend to manufacture race through statistical categories (Zuberi, 2001) with understandings of race being manufactured by politics/power a particular sociohistorical moment (Omi & Winant, 1994).

Conclusion: Race is Complex

The overall conclusion of the three studies in this dissertation is that race is complex. Race is more complex than many research methods and techniques allow us to capture. Race is also more complex than just trying to get rid of it, for instance, by replacing the term *race* with

the term *ethnicity*. Students seem to be able to distinguish between these two terms and can find value in race, especially when wanting to better understand the ways racism may affect educational contexts and experiences.

Race continues to matter both for research, in terms of students' identities, and in their meaning making. Higher education must continue to keep race as a central focus of research and practice so that someday, the persistent problems of racial inequities may be overcome. Considering race as fluid and dynamic seems to be an initial starting point for de-essentializing race as something innate and biological. Here, complexity seems to be the antithesis to essentialism, and thus, more research that captures and practice that incorporates this complexity will be important as the field moves forward with understanding the roles of race and racism in college students' identities and experiences.

Furthermore, the move within the field of higher education toward intersectional approaches to research is important. However, this move must be accompanied with complex understandings of race itself. Too often rationale for intersectionality implies that studying race alone is not complex and compelling in its own right. This type of rationalizing reinforces the idea that race is something static and essentialized. Therefore, this dissertation continues to push the boundaries of racialized research toward capturing the complexities of race that can inform future research and practice that incorporates such complexity in more purposeful ways.

Appendices

Appendix A: Study 2 Interview Protocol

(Adapted from Morning, 2009)

A. INTRODUCTION & RAPPORT BUILDING

1. Tell me a little bit about yourself and how you came to be student here?
 - a. Probe for: Class standing, major, college choice
2. How has your experience here been so far?
 - a. Probe for:
 - i. General attitudes regarding campus life and academics
 - ii. Specific organizations involved in

B. BACKGROUND & EDUCATION

3. A lot of the questions I'll ask you today will have to do with how race might come up on campus. But before we get to that, I'm curious to know a little about the racial makeup of the community where you grew up—how would you characterize it?
 - a. Probe for:
 - i. Importance of ethnic or racial identities to people in home community
 - ii. Racial and ethnic makeup of elementary and secondary schools attended
4. How do you usually describe yourself in terms of race?
 - b. Probe for: Whether fluid or fixed, preferences for racial vs. ethnic language
5. As I mentioned, I'm interested in exploring the ways in which the topic of race may come up in campus settings. Would you say that the topic of race has come up much here?
 - a. Probe for: Where, when, how, and any specific examples

D. UNDERSTANDINGS OF THE CONCEPT OF RACE

So far I've asked you several questions related to race and how people talk about it, but I haven't asked you how you define the meaning of the word "race." This might seem like a strange question, since race is such an everyday idea in the United States that we generally don't think very often about how it is defined. But research has shown that different people have different ideas about things like what determines a person's race, or which groups should be considered races.

6. First of all, if you had to give a definition of the word "race," or explain what it was, what would you say?
7. What kind of information or facts would you use to support that definition?
8. What are the main kinds of differences that exist between racial groups; that is, what kinds of things make racial groups different from each other?
9. Do you think there are biological or genetic differences between different races? Why or why not?
10. How would you say racial differences come about—what causes them?
 - a. Probe for: Where they got these ideas from and any specific examples

At this point, I'd like to ask you how you think some other groups of people would define the concept of race. I'll do this by showing you a printed statement, and then asking you first for your opinion about it, and then I'll ask you how you think some other people would react to it.

11. First I'm going to give you a card with a short statement printed on it; this sentence is taken from a survey that was conducted in the 1980s. After you've read the statement, I'd like to

know whether you agree or disagree with it. (Hand over card, which reads: “There are genetically distinct races within the species *Homo sapiens*.”) Now, how would you describe your reaction to this statement: do you agree or disagree? Why?

b. Probe for:

- i. Content knowledge about genetics/biological sciences
- ii. Contingent (dis)agreement if words are changed (e.g., “ethnicity” or “geographic populations” for “race”)

12. Let’s stick with this statement for a minute. How do you think that most of your peers—other students here—would react to it? In general, do you think other students would agree or disagree? Why?

c. Probe for: similarities or differences based on majors

13. What about administrators or faculty? Do you think they would agree/disagree? Why?

Now I’m going to describe to you two scenarios—taken from real life—where racial groups differ in terms of some outcome or phenomenon. In each case, I’ll describe the facts of the situation to you, and then ask you to give me a couple of possible explanations for the differences in the experiences of different racial groups. That is, I’d like you to give a couple of plausible reasons that might explain the situations I’ll describe to you.

SCENARIO A: The first scenario I’ll describe refers to a biomedical outcome, namely, the weight of babies at birth. Researchers have discovered that at birth, babies of different racial groups tend to have different weights. For example, white babies have among the highest median weight, black babies among the lowest, and Asian babies’ weights tend to be in the middle.

14. In your opinion, what are some possible explanations for this finding?

15. Which do you think is the most likely explanation? Why?

SCENARIO B: The second scenario I’ll describe has to do with education, and the disproportional rates at which certain racial groups obtain a higher education. According to the US Census Bureau, 53 percent of Asians 25 and older have a bachelor’s degree or more, compared to 33% for Whites, 19% for Blacks and 13% for Hispanics.

16. In your opinion, what could be some plausible explanations for these differences?

17. Which explanation do you think is the most likely one? Why?

E. CLOSING

18. Those are all the questions I have for you. Is there anything else that you’d like to add—maybe a comment on a related topic I didn’t think to ask you about?

19. And are there any questions that you’d like to ask me?

Appendix B: MAP Interview Protocol
(from Pizzolato, Johnston, Olson, & Nguyen, 2010)

Modeling Assessment Procedure

I'm going to give you a pile of index cards. Each one has one thing written on the front. Some of the cards represent identities you might hold. Other cards have environments you might spend time in. And other cards have people and places that might be important to you. There are also a number of blank cards. You can write things on these blank cards that you think are missing from the other cards.

I'd like you to sort through the cards and arrange them in a way that you think best depicts your identity and cognitive development during college so far. I've also brought some markers, glue, and paper if you want/need more supplies. If you prefer to talk while you're putting things together please go ahead and do so. If you prefer to finish the task and then talk, that's fine too. Once you're done making your arrangement, I'm going to ask you to describe what your arrangement means. This is not a test of art skill, your arrangement/picture does not need to be beautiful, just descriptive of your development during college so far.

Do you have any questions?

[TIME FOR MODEL CONSTRUCTION – 10-20 minutes]

Alright, now that you're done, can you describe what you think your model means/how your model works?

PROBE FOR:

- What each card means for them - both in terms of content & influence on them &/or on other cards.
- Why & how particular dimensions of identity became salient.
- How "development" is represented.
 - If they would have made a different model last year/earlier on in college? - if so why? if not, why not?
 - If they might make a different model next year? - if so why? if not, why not?

List of terms included on cards:

Academic Discipline	Immigrant Status
Age	Nationality
(Biological) Sex	Peers
Career Path	Race
Culture	Religion
(Dis)Ability	Sexual Orientation
Ethnicity	Social Class
Faith Identity	Social Norms
Family	Sociopolitical Conditions
Friends	Stereotypes
Gender Identity	

References

- Abes, E. S., Jones, S. R., & McEwen, M. K. (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:10.1353/csd.2007.0000
- Accapadi, M. M. (2012). Asian American identity consciousness: A polycultural model. In D. Ching & A. Agbayani (Eds.), *Asian American and Pacific Islanders in higher education: Research and perspectives on identity, leadership, and success*. Washington, DC: NASPA Press.
- Allen, W. R. (2005). A forward glance in a mirror: Diversity challenged. *Educational Researcher, 34*(7), 18–23. doi:10.3102/0013189X034007018
- Allen, W. R., & Chung, A. Y. (2000). "Your blues ain't like my blues": Race, ethnicity, and social inequality in America. *Contemporary Sociology, 29*(6), 796–805.
- Allen, W. R., & Jewell, J. O. (1995). African American education since "An American Dilemma". *Daedalus, 77*–100.
- Allen, W. R., & Jewell, J. O. (2002). A backward glance forward: Past, present and future perspectives on historically black colleges and universities. *The Review of Higher Education, 25*(3), 241–261. doi:10.1353/rhe.2002.0007
- Allen, W. R., Kimura-Walsh, E., & Griffin, K. A. (Eds.). (2009). *Towards a brighter tomorrow: The college barriers, hopes and plans of Black, Latino/a and Asian American students in California*. Charlotte, NC: Information Age Publishing.
- Allen, W. R., Suh, S. A., Gonzalez, G., & Yang, J. (2008). Qui bono? Explaining – or defending – winners and losers in the competition for educational achievement. In T. Zuberi & E. Bonilla-Silva (Eds.), *White logic, white methods: Racism and methodology* (pp. 217–237). Lanham, MD: Rowman & Littlefield.
- Allport, G. W. (1969). The historical background of modern social psychology. In G. Lindzey & E. Aronson (Eds.), *The handbook of social psychology* (2nd Ed., Vol. 1.). Reading, MA: Addison-Wesley.
- Alon, S., & Tienda, M. (2007). Diversity, opportunity, and the shifting meritocracy in higher education. *American Sociological Review, 72*(4), 487–511. doi:10.1177/000312240707200401
- Alvarez, A. N. (2002). Racial identity and Asian Americans: Support and challenges. *New Directions for Student Services, 97*, 33–44. doi:10.1002/ss.37
- American Anthropological Association. (1998). Statement on "Race". *American Anthropologist, 100*, 712–713.
- American Psychological Association. (2003). Guidelines on multicultural education, training, research, practice, and organizational change for psychologists. *American Psychologist, 58*(5), 377–402. doi:10.1037/0003-066X.58.5.377
- Anderson, J. D. (2002). Race in American higher education: Historical perspectives on current conditions. In W. A. Smith, P. G. Altbach, & K. Lomotey (Eds.), *The racial crisis in American higher education: Continuing challenges for the twenty-first century* (Revised ed., pp. 3–22). Albany, NY: SUNY Press.
- antonio, a. I., Chang, M. J., Hakuta, K., Kenny, D. A., Levin, S., & Milem, J. F. (2004). Effects of racial diversity on complex thinking in college students. *Psychological Science, 15*(8), 507–510. doi:10.1111/j.0956-7976.2004.00710.x
- Apollon, D. (2011). *Don't call them "Post-Racial": Millennials' attitudes on race, racism, and key systems in our society*. Oakland, CA: Applied Research Center. Retrieved from <http://www.arc.org/content/view/2266/132/>

- Arminio, J. L., & Hultgren, F. H. (2002). Breaking out from the shadow: The question of criteria in qualitative research. *Journal of College Student Development*, 43(4), 446–60.
- Astin, A. W. (1993). *Assessment for excellence: The philosophy and practice of assessment and evaluation in higher education*. Phoenix, AZ: The Oryx Press.
- Baez, B. (2004). The study of diversity: The “knowledge of difference” and the limits of science. *Journal of Higher Education*, 75(3), 285–306. doi:10.1353/jhe.2004.0011
- Bahr, P. R. (2010). Preparing the underprepared: An analysis of racial disparities in postsecondary mathematics remediation. *The Journal of Higher Education*, 81(2), 209–237. doi:10.1353/jhe.0.0086
- Banning, J. H., Ahuna, L. M., & Hughes, B. M. (2000). A study of the NASPA journal (1967-1996): A 30-year reflection of scholarship in student affairs focusing on race and ethnicity. *Journal of Student Affairs Research and Practice*, 38(1), 14–25. doi:10.2202/1949-6605.1121
- Barnes, M. L. (2009). Reflection on a dream world: Race, post-race and the question of making it over. *Berkeley Journal of African American Law and Policy*, 11, 6–18.
- Baxter Magolda, M. B. (2004). Learning partnerships model: A framework for promoting self-authorship. In M. B. Baxter Magolda & P. M. King (Eds.), *Learning partnerships: Theory and models of practice to educate for self-authorship* (pp. 37–61). Sterling, VA: Stylus.
- Bensimon, E. M., & Bishop, R. (2012). Why “critical”? The need for new ways of knowing. *The Review of Higher Education*, 36(1), 1–7. doi:10.1353/rhe.2012.0046
- Betancourt, H., & López, S. R. (1993). The study of culture, ethnicity, and race in American psychology. *American Psychologist*, 48(6), 629–637. doi:10.1037/0003-066X.48.6.629
- Black, E. (2003). *War against the weak: Eugenics and America’s campaign to create a master race*. Four Walls, Eight Windows.
- Bonilla-Silva, E. (2010). *Racism without racists: Color-blind racism and the persistence of racial inequality in the United States* (3rd Ed.). Lanham, MD: Rowman & Littlefield Publishers, Inc.
- Bonilla-Silva, E., & Baiocchi, G. (2001). Anything but racism: How sociologists limit the significance of racism. *Race and Society*, 4(2), 117–131. doi:10.1016/S1090-9524(03)00004-4
- Bowman, N. A. (2010). College diversity experiences and cognitive development: A meta-analysis. *Review of Educational Research*, 80(1), 4–33. doi:10.3102/0034654309352495
- Bowman, N. A. (2011). Promoting participation in a diverse democracy: A meta-analysis of college diversity experiences and civic engagement. *Review of Educational Research*, 81(1), 29–68. doi:10.3102/0034654310383047
- Bray, N. J., & Major, C. H. (2011). Status of journals in the field of higher education. *The Journal of Higher Education*, 82(4), 479–503. doi:10.1353/jhe.2011.0020
- Brayboy, B. M. J. (2005). Transformational resistance and social justice: American Indians in ivy league universities. *Anthropology & Education Quarterly*, 36(3), 193–211. doi:10.1525/aeq.2005.36.3.193
- Cabrera, N. L. (2013). *Is Critical Race Theory actually theory?: A constructive criticism of the Critics*. Unpublished Manuscript.
- Chang, M. J. (1999). Does racial diversity matter?: The educational impact of a racially diverse undergraduate population. *Journal of College Student Development*, 40(4), 377–395.
- Chang, M. J. (2002). The impact of an undergraduate diversity course requirement on students’ racial views and attitudes. *The Journal of General Education*, 51(1), 21–42.

- Chang, M. J. (2011). Asian American and Pacific Islander millennial students at a tipping point. In F. A. Bonner, A. F. Marbley, & M. F. Howard-Hamilton (Eds.), *Diverse Millennial Students in College: Implications for Faculty and Student Affairs* (pp. 55–68). Sterling, VA: Stylus.
- Chang, M. J., Denson, N., Saenz, V., & Misa, K. (2006). The educational benefits of sustaining cross-racial interaction among undergraduates. *The Journal of Higher Education*, 77(3), 430–455. doi:10.1353/jhe.2006.0018
- Chang, M. J., Park, J. J., Lin, M. H., Poon, O. A., & Nakanishi, D. T. (2007). *Beyond myths: The growth and diversity of Asian American college freshmen, 1971-2005*. Higher Education Research Institute, University of California, Los Angeles.
- Chang, M. J., Witt, D., Jones, J., & Hakuta, K. (Eds.). (2003). *Compelling interest: examining the evidence on racial dynamics in colleges and universities*. Stanford, CA: Stanford University Press.
- Chao, M. M., Chen, J., Roisman, G. I., & Hong, Y. (2007). Essentializing race: Implications for bicultural individuals' cognition and physiological reactivity. *Psychological Science*, 18(4), 341–348. doi:10.1111/j.1467-9280.2007.01901.x
- Charmaz, K. (2006). *Constructing grounded theory: A practical guide through qualitative analysis*. Thousand Oaks, CA: Sage Publications.
- Chaudhari, P., & Pizzolato, J. E. (2008). Understanding the epistemology of ethnic identity development in multiethnic college students. *Journal of College Student Development*, 49(5), 443–458. doi:10.1353/csd.0.0028
- Chavous, T. M. (2000). The Relationships among Racial Identity, Perceived Ethnic Fit, and Organizational Involvement for African American Students at a Predominantly White University. *Journal of Black Psychology*, 26(1), 79 –100. doi:10.1177/0095798400026001005
- Chen, C. (2012, December 19). Asians: Too smart for their own good? *The New York Times*. Retrieved from <http://www.nytimes.com/2012/12/20/opinion/asians-too-smart-for-their-own-good.html>
- Ching, D., & Agbayani, A. (Eds.). (2012). *Asian Americans and Pacific Islanders in higher education: Research and perspectives on identity, leadership, and success*. Washington, DC: NASPA Press.
- Chua, A. (2011). *Battle hymn of the tiger mother*. New York: Penguin Books.
- Cobham, B. A., & Parker, T. L. (2007). Resituating race into the movement toward multiculturalism and social justice. *New Directions for Student Services*, 120, 85–93. doi:10.1002/ss.260
- Cokley, K. O. (2005). Racial(ized) identity, ethnic identity, and afrocentric values: Conceptual and methodological challenges in understanding African American identity. *Journal of Counseling Psychology*, 52(4), 517–526. doi:10.1037/0022-0167.52.4.517
- Cokley, K. O. (2007). Critical issues in the measurement of ethnic and racial identity: A referendum on the state of the field. *Journal of Counseling Psychology*, 54(3), 224–234. doi:10.1037/0022-0167.54.3.224
- Corcos, A. F. (1997). *The myth of human races*. East Lansing, MI: Michigan State University Press.
- Cornell, S., & Hartmann, D. (2007). *Ethnicity and race: Making identities in a changing world* (2nd ed.). Thousand Oaks, CA: Pine Forge Press.
- D'souza, D. (1995). *The end of racism: Principles for a multiracial society*. New York: Free Press.
- Daniel, G. R. (2006). *Race and multiraciality in Brazil and the United States: Converging paths?* State College, PA: Penn State University Press.
- Daniel, G. R., & Haddow, G. L. (2010). All mixed up: A new racial commonsense in global perspective. In J. O. Adekunle & H. V. Williams (Eds.), *Color struck: Essays on race and ethnicity in global perspective* (pp. 311–348). Lanham, MD: University Press of America.

- Dar-Nimrod, I., & Heine, S. J. (2011). Genetic essentialism: On the deceptive determinism of DNA. *Psychological Bulletin*, 137(5), 800–818. doi:10.1037/a0021860
- Denson, N. (2009). Do curricular and cocurricular diversity activities influence racial bias? A meta-analysis. *Review of Educational Research*, 79(2), 805–838. doi:10.3102/0034654309331551
- Denson, N., & Chang, M. J. (2009). Racial diversity matters: The impact of diversity-related student engagement and institutional context. *American Educational Research Journal*, 46(2), 322–353. doi:10.3102/0002831208323278
- Diaz, V. M. (2004). “To ‘P’ or not to ‘P’?”: Marking the territory between Pacific Islander and Asian American studies. *Journal of Asian American Studies*, 7(3), 183–208. doi:10.1353/jaas.2005.0019
- Duster, T. (2005). Race and reification in science. *Science*, 307(5712), 1050–1051.
- Espenshade, T. J., & Radford, A. W. (2009). *No longer separate, not yet equal: Race and class in elite college admission and campus life*. Princeton University Press.
- Espiritu, Y. L. (1992). *Asian American panethnicity: Bridging institutions and identities*. Philadelphia, PA: Temple University Press.
- Evans, N. J., Forney, D. S., Guido, F. M., Patton, L. D., & Renn, K. A. (2010). *Student development in college: Theory, research, and practice* (2nd ed.). San Francisco: Jossey Bass.
- Feagin, J. R. (2006). *Systemic racism: A theory of oppression*. New York: Routledge.
- Flores, N. M., & Huo, Y. J. (2013). “We” are not all alike: Consequences of neglecting national origin identities among Asians and Latinos. *Social and Personality Psychology Science*, 4(2), 143–150. doi:10.1177/1948550612449025
- Foeman, A. (2008). *DNA discussion project*. Retrieved from <http://www.dnadiscussionproject.com>
- Fredrickson, G. M. (2002). *Racism: A short history*. Princeton, NJ: Princeton University Press.
- 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
- Fryberg, S. A., Markus, H. R., Oyserman, D., & Stone, J. M. (2008). Of warrior chiefs and Indian princesses: The psychological consequences of American Indian mascots. *Basic and Applied Social Psychology*, 30(3), 208–218. doi:10.1080/01973530802375003
- Garces, L. M. (2012). Racial diversity, legitimacy, and the citizenry: The impact of affirmative action bans on graduate school enrollment. *The Review of Higher Education*, 36(1), 93–132. doi:10.1353/rhe.2012.0050
- Garcia, G. A., Johnston, M. P., Garibay, J. C., Herrera, F. A., & Giraldo, L. G. (2011). When parties become racialized: Deconstructing racially themed parties. *Journal of Student Affairs Research and Practice*, 48(1), 4–20. doi:10.2202/1949-6605.6194
- Garner, S. (2010). *Racisms: An introduction*. Thousand Oaks, CA: Sage Publications.
- Glaser, B. G., & Strauss, A. L. (1967). *The discovery of grounded theory: Strategies for qualitative research*. Chicago: Aldine.
- Glasgow, J. (2008). On the methodology of the race debate: Conceptual analysis and racial discourse. *Philosophy and Phenomenological Research*, 76(2), 333–358. doi:10.1111/j.1933-1592.2007.00135.x
- Glasgow, J. (2009). *A theory of race*. New York: Routledge.
- Goodwin, L. D., & Goodwin, W. L. (1985). Statistical techniques in AERJ articles, 1979–1983: The preparation of graduate students to read the educational research literature. *Educational Researcher*, 14(2), 5–11. doi:10.3102/0013189X014002005

- Gould, S. J. (1996). *The mismeasure of man* (Revised Ed.). New York: W.W. Norton & Company.
- Guillermo-Wann, C., & Johnston, M. P. (2012). Rethinking research on multiracial college students: Toward an integrative model of multiraciality for campus climate. Presented at the Critical Mixed Race Studies Conference, Chicago, IL.
- Guillory, R. M., & Wolverton, M. (2008). It's about family: Native American student persistence in higher education. *The Journal of Higher Education*, 79(1), 58–87. doi:10.1353/jhe.2008.0001
- Gurin, P., Dey, E. L., Hurtado, S., & Gurin, G. (2002). Diversity and higher education: Theory and impact on educational outcomes. *Harvard Educational Review*, 72(3), 330–367.
- Harmon, A. (2007). In DNA era, new worries about prejudice. *New York Times*. Retrieved from <http://www.nytimes.com/2007/11/11/us/11dna.html?ref=dnaage>
- Harper, S. R. (2012). Race without racism: How higher education researchers minimize racist institutional norms. *The Review of Higher Education*, 36(1), 9–29. doi:10.1353/rhe.2012.0047
- 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(4), 389–414. doi:10.1353/jhe.0.0052
- Haslam, N., Bastian, B., Bain, P., & Kashima, Y. (2006). Psychological essentialism, implicit theories, and intergroup relations. *Group Processes & Intergroup Relations*, 9(1), 63–76. doi:10.1177/1368430206059861
- Hebbar, R. (2010). Genetic testing on students: Going too far or a necessary learning experience? *Health Law Perspectives*. Retrieved from http://law.uh.edu/healthlaw/perspectives/2010/hebbar_genetic.pdf
- Helms, J. E., Jernigan, M., & Mascher, J. (2005). The meaning of race in psychology and how to change it: A methodological perspective. *American Psychologist*, 60(1), 27–36. doi:10.1037/0003-066X.60.1.27
- Herrnstein, R. J., & Murray, C. A. (1994). *The bell curve: Intelligence and class structure in American life*. Boston: Free Press.
- Hollinger, D. A. (1995). *Postethnic America: Beyond multiculturalism*. New York: Basic Books.
- Hong, Y., Chao, M. M., & No, S. (2009). Dynamic interracial/intercultural processes: the role of lay theories of race. *Journal of Personality*, 77(5), 1283–1310. doi:10.1111/j.1467-6494.2009.00582.x
- Hong, Y., Coleman, J., Chan, G., Wong, R. Y. M., Chiu, C., Hansen, I. G., ... Fu, H.-Y. (2004). Predicting intergroup bias: The interactive effects of implicit theory and social identity. *Personality and Social Psychology Bulletin*, 30(8), 1035–1047. doi:10.1177/0146167204264791
- Humes, K. R., Jones, N. A., & Ramirez, R. R. (2011). *Overview of Race and Hispanic Origin: 2010*. Retrieved from <http://www.census.gov/prod/cen2010/briefs/c2010br-02.pdf>
- Huo, Y. J., & Molina, L. E. (2006). Is pluralism a viable model of diversity? The benefits and limits of subgroup respect. *Group Processes & Intergroup Relations*, 9(3), 359–376. doi:10.1177/1368430206064639
- Huo, Y. J., Molina, L. E., Binning, K. R., & Funge, S. P. (2010). Subgroup respect, social engagement, and well-being: A field study of an ethnically diverse high school. *Cultural Diversity and Ethnic Minority Psychology*, 16(3), 427–436. doi:10.1037/a0019886
- Hurtado, S. (2007). Linking diversity with the educational and civic missions of higher education. *The Review of Higher Education*, 30(2), 185–196. doi:10.1353/rhe.2006.0070
- Hurtado, S., Alvarez, C. L., Guillermo-Wann, C., Cuellar, M., & Arellano, L. (2012). A model for diverse learning environments: The scholarship on creating and assessing conditions for student success. In *Higher education: Handbook of theory and research* (Vol. 27).

- Hurtado, S., Dey, E. L., Gurin, P. Y., & Gurin, G. (2003). College environments, diversity, and student learning. In J. C. Smart (Ed.), *Higher Education: Handbook of Theory and Research* (pp. 145–189). United Kingdom: Kluwer Academic Publishers.
- Hurtado, S., Milem, J. F., Clayton-Pedersen, A. R., & Allen, W. R. (1998). Enhancing campus climates for racial/ethnic diversity: Educational policy and practice. *The Review of Higher Education*, 21(3), 279–302.
- Hutchinson, S. R., & Lovell, C. D. (2004). A review of methodological characteristics of research published in key journals in higher education: Implications for graduate research training. *Research in Higher Education*, 45(4), 383–403. doi:10.1023/B:RIHE.0000027392.94172.d2
- Institute for Scientific Information (ISI). (2010). *2010 Journal Citation Reports Social Sciences Edition*. Retrieved from www.webofknowledge.com
- Jayarathne, T. E., Ybarra, O., Sheldon, J. P., Brown, T. N., Feldbaum, M., Pfeffer, C. A., & Petty, E. M. (2006). White Americans' genetic lay theories of race differences and sexual orientation: Their relationship with prejudice toward blacks, and gay men and lesbians. *Group Processes & Intergroup Relations*, 9(1), 77–94. doi:10.1177/1368430206059863
- Jensen, A. R. (1969). How much can we boost IQ and scholastic achievement. *Harvard Educational Review*, 39(1), 1–123.
- Johnston, M. P. (in press). The concept of race on campus: Exploring the nature of college students' racial conceptions. *Journal of College Student Development*.
- Johnston, M. P., & Nadal, K. L. (2010). Multiracial microaggressions: Exposing monoracism in everyday life and clinical practice. In D. W. Sue (Ed.), *Microaggressions and Marginality: Manifestation, Dynamics and Impact* (pp. 123–144). New York: Wiley & Sons.
- Johnston, M. P., Ozaki, C. C., Pizzolato, J. E., & Chaudhari, P. (2009). Which box do I check and when? Exploring students' rationales behind racial identification. Presented at the Association for the Study of Higher Education Annual Conference, Vancouver, BC.
- Jones, J. M. (1997). *Prejudice and racism* (2nd Ed.). New York: McGraw-Hill.
- Jones, S. R., & McEwen, M. K. (2000). A conceptual model of multiple dimensions of identity. *Journal of College Student Development*, 41(4), 405–414.
- Jones, S. R., Torres, V., & Arminio, J. L. (2006). *Negotiating the complexities of qualitative research in higher education: Fundamental elements and issues*. New York: Routledge.
- Kahn, J. (2007). Race in a bottle. *Scientific American*, 297(2), 40–45. doi:10.1038/scientificamerican0807-40
- Kasinitz, P., Battle, J., & Miyares, I. (2001). Fade to Black?: The children of West Indian immigrants in southern Florida. In R. G. Rumbaut & A. Portes (Eds.), *Ethnicities: Children of immigrants in America* (pp. 267–300). Berkeley & Los Angeles: University of California Press.
- Keller, J. (2005). In Genes we trust: The biological component of psychological essentialism and its relationship to mechanisms of motivated social cognition. *Journal of Personality and Social Psychology*, 88(4), 686–702. doi:10.1037/0022-3514.88.4.686
- Kim, J. (1981). *Processes of Asian American identity development: A study of Japanese American women's perceptions of their struggle to achieve positive identities as Americans of Asian ancestry*. University of Massachusetts, Amherst. Retrieved from <http://scholarworks.umass.edu/dissertations/AAI8118010/>
- Kitano, H. H. (1982). Mental health in the Japanese American community. In S. H. Korchin (Ed.), *Minority mental health* (pp. 149–164). New York: Praeger.
- Koenig, B. A., Lee, S. S., & Richardson, S. S. (2008). *Revisiting race in a genomic age*. New Brunswick, NJ: Rutgers University Press.

- Krippendorff, K. (2012). *Content analysis: An introduction to its methodology* (3rd ed.). Thousand Oaks, CA: Sage Publications.
- Kuh, G. D., Cruce, T. M., Shoup, R., Kinzie, J., & Gonyea, R. M. (2008). Unmasking the effects of student engagement on first-year college grades and persistence. *Journal of Higher Education, 79*(5), 540–563. doi:10.1353/jhe.0.0019
- Lau, A. S., Jernewall, N. M., Zane, N., & Myers, H. F. (2002). Correlates of suicidal behaviors among Asian American outpatient youths. *Cultural Diversity and Ethnic Minority Psychology, 8*(3), 199–213. doi:10.1037/1099-9809.8.3.199
- Lee, C. D. (2003). Why we need to re-think race and ethnicity in educational research. *Educational Researcher, 32*(5), 3–5. doi:10.3102/0013189X032005003
- Lee, J., & Bean, F. D. (2010). *The diversity paradox: Immigration and the color line in twenty-first century America*. New York: Russell Sage Foundation.
- Leonardo, Z. (2005). Through the multicultural glass: Althusser, ideology and race relations in post-civil rights America. *Policy Futures in Education, 3*(4), 400–412.
- Li, G., & Wang, L. (2008). *Model minority myth revisited: An interdisciplinary approach to demystifying Asian American educational experiences*. Charlotte, NC: Information Age Publishing.
- Lindgren, H. C. (1978). Trends in social psychology research in education. In D. Bar-Tal & L. Saxe (Eds.), *Social psychology of education: Theory and research*. Washington, DC: Hemisphere.
- Literte, P. E. (2010). Revising race: How biracial students are changing and challenging student services. *Journal of College Student Development, 51*(2), 115–134. doi:10.1353/csd.0.0122
- Lombardo, P. A. (2008). *Three generations, no imbeciles: Eugenics, the Supreme Court, and Buck v. Bell*. Baltimore, MD: Johns Hopkins University Press.
- Lundberg, C. A. (2007). Student involvement and institutional commitment to diversity as predictors of Native American student learning. *Journal of College Student Development, 48*(4), 405–416. doi:10.1353/csd.2007.0039
- Markus, H. R. (2008). Pride, prejudice, and ambivalence: Toward a unified theory of race and ethnicity. *American Psychologist, 63*(8), 651–670. doi:10.1037/0003-066X.63.8.651
- Markus, H. R. (2010). Who am I? Race, ethnicity and identity. In H. R. Markus & P. M. L. Moya (Eds.), *Doing race: 21 essays for the 21st century* (pp. 359–389). New York: W. W. Norton & Company, Inc.
- Massey, D. S. (2006). Social background and academic performance differentials: White and minority students at selective colleges. *American Law and Economics Review, 8*(2), 390–409. doi:10.1093/aler/ahl005
- Mayhew, M. J., & Engberg, M. E. (2010). Diversity and moral reasoning: How negative diverse peer interactions affect the development of moral reasoning in undergraduate students. *The Journal of Higher Education, 81*(4), 459–488. doi:10.1353/jhe.0.0104
- McCabe, L. L., & McCabe, E. R. B. (2008). *DNA: Promise and peril*. Berkeley & Los Angeles: University of California Press.
- McCabe, L. L., & McCabe, E. R. B. (2010). Are we entering a “perfect storm” for a resurgence of eugenics? Science, medicine, and their social context. In P. A. Lombardo (Ed.), *A century of eugenics in america: From the indiana experiment to the human genome era* (pp. 193–218). Bloomington, IN: University of Indiana Press.
- McEwen, M. K. (2003). New perspectives on identity development. In S. R. Komives, D. B. Woodard, Jr., & Associates (Eds.), *Student services: A handbook for the profession* (4th ed., pp. 203–233). San Francisco: Jossey Bass.

- Milem, J. F. (2003). The educational benefits of diversity: Evidence from multiple sectors. In M. J. Chang, D. Witt, & K. Hakuta (Eds.), *Compelling interest: Examining the evidence on racial dynamics in colleges and universities* (pp. 126–169). Palo Alto, CA: Stanford University Press.
- Milem, J. F., Chang, M. J., & Antonio, A. I. (2005). Making diversity work on campus: A research-based perspective. *Washington, DC: Association of American Colleges and Universities*.
- Montagu, A. (1964). *Man's most dangerous myth: The fallacy of race* (4th ed.). Cleveland, OH: World Publishing Co.
- Morning, A. J. (2009). Toward a sociology of racial conceptualization for the 21st century. *Social Forces*, 87(3), 1167–1192. doi:10.1353/sof.0.0169
- Morning, A. J. (2011). *The nature of race: How scientists think and teach about human difference*. Berkeley, CA: University of California Press.
- Moya, P. M. L., & Markus, H. R. (2010). Doing race: An introduction. In H. R. Markus & P. M. L. Moya (Eds.), *Doing race: 21 essays for the 21st century* (pp. 1–101). New York: W. W. Norton & Company, Inc.
- Museum, S. D., & Kiang, P. N. (2009). Deconstructing the model minority myth and how it contributes to the invisible minority reality in higher education research. *New Directions for Institutional Research*, 2009(142), 5–15. doi:10.1002/ir.292
- Nadal, K. L. (2004). Filipino American identity development model. *Journal of Multicultural Counseling and Development*, 32(1), 45–62. doi:10.1002/j.2161-1912.2004.tb00360.x
- National Commission on Asian American and Pacific Islander Research in Education. (2008). *Facts, not fiction: Setting the record straight*. Retrieved from <http://www.nyu.edu/projects/care/rp.html>
- National Commission on Asian American and Pacific Islander Research in Education. (2010). *The relevance of Asian Americans and Pacific Islanders in the college completion agenda*. Retrieved from <http://www.nyu.edu/projects/care/rp.html>
- Nelkin, D., & Lindee, M. S. (2004). *The DNA mystique: The gene as a cultural icon*. Ann Arbor, MI: University of Michigan Press.
- Nelson, A. (2008). Bio science genetic genealogy testing and the pursuit of African ancestry. *Social Studies of Science*, 38(5), 759–783. doi:10.1177/0306312708091929
- Omi, M. (2010). “Slippin’ into darkness”: The (re)biologization of race. *Journal of Asian American Studies*, 13(3), 343–358. doi:10.1353/jaas.2010.0001
- Omi, M., & Winant, H. A. (1994). *Racial formation in the United States: From the 1960s to the 1990s* (2nd ed.). New York: Routledge.
- Orfield, G., Marin, P., Flores, S. M., & Garcés, L. M. (Eds.). (2007). *Charting the future of college affirmative action: Legal victories, continuing attacks, and new research*. Los Angeles: Civil Rights Project / Proyecto Derechos Civiles of UCLA.
- Ortiz, A. M., & Santos, S. J. (2009). *Ethnicity in college: Advancing theory and improving diversity practices on campus*. Sterling, VA: Stylus Publishing.
- Osei-Kofi, N. (2012). Identity, fluidity, and groupism: The construction of multiraciality in education discourse. *Review of Education, Pedagogy, and Cultural Studies*, 34(5), 245–257. doi:10.1080/10714413.2012.732782
- Padgett, T. (2010, March 29). Still Black or White: Why the Census misreads Hispanics. *Time Magazine*. Retrieved from <http://www.time.com/time/nation/article/0,8599,1975883,00.html>
- Palmer, R. T., Davis, R. J., & Maramba, D. C. (2011). The impact of family support for African American males at an historically Black University: Affirming the revision of Tinto's theory. *Journal of College Student Development*, 52(5), 577–597. doi:10.1353/csd.2011.0066

- Patton, L. D. (Ed.). (2010). *Culture centers in higher education: Perspectives on identity, theory, and practice*. Sterling, VA: Stylus Publishing, LLC.
- Perna, L. W., Rowan-Kenyon, H., Bell, A., Thomas, S. L., & Li, C. (2008). A typology of federal and state programs designed to promote college enrollment. *The Journal of Higher Education, 79*(3), 243–267. doi:10.1353/jhe.0.0002
- Pew Research Center. (2012). *The rise of Asian Americans*. Washington, DC. Retrieved from <http://www.pewsocialtrends.org/2012/06/19/the-rise-of-asian-americans/>
- Phinney, J. S. (1990). Ethnic identity in adolescents and adults: Review of research. *Psychological Bulletin, 108*(3), 499–514. doi:10.1037/0033-2909.108.3.499
- Phinney, J. S., & Alipuria, L. L. (1990). Ethnic identity in college students from four ethnic groups. *Journal of Adolescence, 13*(2), 171–183.
- Pizzolato, J. E., Johnston, M. P., Olson, A. B., & Nguyen, T.-L. K. (2010). Re-modeling student development. Presented at the Association for the Study of Higher Education annual conference, Indianapolis, IN.
- Pizzolato, J. E., Nguyen, T.-L. K., Johnston, M. P., & Wang, S. (2012). Understanding context: Cultural, relational, & psychological interactions in self-authorship development. *Journal of College Student Development, 53*(5), 656–679. doi:10.1353/csd.2012.0061
- Pope, R. L. (2000). The relationship between psychosocial development and racial identity of college students of color. *Journal of College Student Development, 41*(3), 302–312.
- Prentice, D. A., & Miller, D. T. (2007). Psychological essentialism of human categories. *Current Directions in Psychological Science, 16*(4), 202–206. doi:10.1111/j.1467-8721.2007.00504.x
- Ramanujan, K. (2011, February 2). 200 students offer cheek samples for Cornell's genetic ancestry project. *Cornell Chronicle Online*. Retrieved from <http://www.news.cornell.edu/stories/Feb11/GeneticHistory.html>
- Reardon, J. (2005). *Race to the finish: Identity and governance in an age of genomics*. Princeton, NJ: Princeton University Press.
- Renn, K. A. (2000). Patterns of situational identity among biracial and multiracial college students. *The Review of Higher Education, 23*(4), 399–420. doi:10.1353/rhe.2000.0019
- Renn, K. A. (2004a). *Mixed race students in college: The ecology of race, identity, and community on campus*. Albany, NY: SUNY Press.
- Renn, K. A. (2004b). Tilting at windmills: The paradox and promise of researching mixed race, with strategies for scholars. In K. R. Wallace (Ed.), *Working with multiracial students: Critical perspectives on research and practice* (pp. 3–24). Westport, CT: Greenwood.
- Renn, K. A. (2008). Research on biracial and multiracial identity development: Overview and synthesis. *New Directions for Student Services, 123*, 13–21. doi:10.1002/ss.282
- Renn, K. A. (2009). Educational policy, politics, and mixed heritage students in the united states. *Journal of Social Issues, 65*(1), 165–183. doi:10.1111/j.1540-4560.2008.01593.x
- Rhoads, R. A., Lee, J. J., & Yamada, M. (2002). Panethnicity and collective action among Asian American students: A qualitative case study. *Journal of College Student Development, 43*(6), 876–891.
- Risch, N., Burchard, E., Ziv, E., & Tang, H. (2002). Categorization of humans in biomedical research: genes, race and disease. *Genome Biology, 3*(7), 1–12.
- Roberts, D. (2011). *Fatal invention: How science, politics, and big business re-create race in the twenty-first century*. New York: The New Press.

- Roediger, D. R. (2008). *How race survived US history: From settlement and slavery to the Obama phenomenon*. New York: Verso Books.
- 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(3), 715–724. doi:10.1037/0022-3514.74.3.715
- Royal, C. D., Novembre, J., Fullerton, S. M., Goldstein, D. B., Long, J. C., Bamshad, M. J., & Clark, A. G. (2010). Inferring genetic ancestry: Opportunities, challenges, and implications. *American Journal of Human Genetics*, 86(5), 661–673. doi:10.1016/j.ajhg.2010.03.011
- Santos, J. L., Cabrera, N. L., & Fosnacht, K. J. (2010). Is “race-neutral” really race-neutral?: Disparate impact towards underrepresented minorities in post-209 UC system admissions. *The Journal of Higher Education*, 81(6), 675–701. doi:10.1353/jhe.2010.0009
- Schildkraut, D. J. (2011). *Americanism in the twenty-first century: Public opinion in the age of immigration*. New York: Cambridge University Press.
- Scott, D. M. (1997). *Contempt and pity: Experts, social policy, and the Black psyche*. Chapel Hill, NC: University of North Carolina Press.
- Seidman, I. (2006). *Interviewing as qualitative research: A guide for researchers in education and the social sciences* (3rd Ed.). New York: Teachers College Press.
- Selden, S. (1999). *Inheriting shame: The story of eugenics and racism in America*. New York: Teachers College Press.
- Shek, Y. L., & McEwen, M. K. (2012). The relationships of racial identity and gender role conflict to self-esteem of Asian American undergraduate men. *Journal of College Student Development*, 53(5), 703–718. doi:10.1353/csd.2012.0065
- Shotton, H., Lowe, S. C., & Waterman, S. J. (Eds.). (2013). *Beyond the asterisk: Understanding Native students in higher education*. Herndon, VA: Stylus.
- Shulman, J. L., & Glasgow, J. (2010). Is race-thinking biological or social, and does it matter for racism? An exploratory study. *Journal of Social Philosophy*, 41(3), 244–259. doi:10.1111/j.1467-9833.2010.01497.x
- Silverman, R. J. (1987). How we know what we know: A study of higher education journal articles. *Review of Higher Education*, 11(1), 39–59.
- Smedley, A. (2007). *Race in north america: Origin and evolution of a worldview* (3rd ed.). Boulder, CO: Westview Press.
- Smedley, A., & Smedley, B. D. (2005). Race as biology is fiction, racism as a social problem is real: Anthropological and historical perspectives on the social construction of race. *American Psychologist*, 60(1), 16–26. doi:10.1037/0003-066X.60.1.16
- Solórzano, D. G., Allen, W. R., & Carroll, G. (2002). Keeping race in place: Racial microaggressions and campus racial climate at the University of California, Berkeley. *Chicano-Latino Law Review*, 23, 15–112.
- Solórzano, D. G., Ceja, M., & Yosso, T. J. (2000). Critical race theory, racial microaggressions, and campus racial climate: The experiences of African American college students. *The Journal of Negro Education*, 69(1/2), 60–73. doi:10.2307/2696265
- Solórzano, D. G., Villalpando, O., & Oseguera, L. (2005). Educational inequities and Latina/o undergraduate students in the United States: A critical race analysis of their educational progress. *Journal of Hispanic Higher Education*, 4(3), 272–294. doi:10.1177/1538192705276550
- Steele, C. M. (2010). *Whistling Vivaldi: How stereotypes affect us and what we can do*. New York: W.W. Norton & Company.

- Stewart, D. L. (2009). Perceptions of multiple identities among Black college students. *Journal of College Student Development, 50*(3), 253–270. doi:10.1353/csd.0.0075
- Strauss, A., & Corbin, J. (1994). Grounded theory methodology. In N. K. Denzin & Y. S. Lincoln (Eds.), *Handbook of qualitative research* (pp. 273–285). Thousand Oaks, CA: Sage Publications.
- Strauss, A., & Corbin, J. (2008). *Basics of qualitative research: Techniques and procedures for developing grounded theory* (2nd Ed.). Thousand Oaks, CA: Sage Publications.
- Strom, T. Q., Lee, D. J., Trahan, E., Kaufman, A., & Pritchett, T. (2009). The use of race-related variables in counseling research. *Measurement and Evaluation in Counseling and Development, 42*(2), 121–133. doi:10.1177/0748175609336864
- Sue, D. W., Capodilupo, C. M., Nadal, K. L., & Torino, G. C. (2008). Racial microaggressions and the power to define reality. *American Psychologist, 63*(4), 277–279. doi:10.1037/0003-066X.63.4.277
- Sue, D. W., Capodilupo, C. M., Torino, G. C., Bucceri, J. M., Holder, A. M. B., Nadal, K. L., & Esquilin, M. (2007). Racial microaggressions in everyday life: Implications for clinical practice. *American Psychologist, 62*(4), 271–286. doi:10.1037/0003-066X.62.4.271
- Sue, D. W., & Sue, D. (2008). *Counseling the culturally diverse: Theory and practice* (5th Ed.). New York: Wiley & Sons.
- Sue, S., & Sue, D. W. (1971). Chinese-American personality and mental health. *Amerasia Journal, 1*(2), 36–49.
- Sundar Rajan, K. (2011). Two tales of genomics: Capital, epistemology, and global constitutions of the biomedical subject. In S. Jasanoff (Ed.), *Reframing Rights: Bioconstitutionalism in the Genetic Age* (pp. 193–216). Cambridge, MA: MIT Press.
- Suzuki, B. H. (2002). Revisiting the model minority stereotype: Implications for student affairs practice and higher education. *New Directions for Student Services, 97*, 21–32. doi:10.1002/ss.36
- Tajfel, H. (1981). *Human groups and social categories*. Cambridge, UK: Cambridge University Press.
- Teranishi, R. T. (2010). *Asians in the ivory tower: Dilemmas of racial inequality in American higher education*. New York: Teachers College Press.
- Terenzini, P. T., Cabrera, A. F., Colbeck, C. L., Bjorklund, S. A., & Parente, J. M. (2001). Racial and ethnic diversity in the classroom: Does it promote student learning? *The Journal of Higher Education, 72*(5), 509–531. doi:10.2307/2672879
- Tesler, M., & Sears, D. O. (2010). *Obama's race: The 2008 election and the dream of a post-racial America*. Chicago: University of Chicago Press.
- Torres, V., Jones, S. R., & Renn, K. A. (2009). Identity development theories in student affairs: Origins, current status, and new approaches. *Journal of College Student Development, 50*(6), 577–596. doi:10.1353/csd.0.0102
- Warmington, P. (2009). Taking race out of scare quotes: Race conscious social analysis in an ostensibly post-racial world. *Race Ethnicity and Education, 12*(3), 281–296. doi:10.1080/13613320903178253
- Waters, M. C. (1999). *Black identities: West Indian immigrant dreams and American realities*. Cambridge, MA: Harvard University Press.
- Weber, R. P. (1990). *Basic content analysis*. Beverly Hills, CA: Sage Publications.
- West, C. (1993). *Race matters*. Boston: Beacon Press.
- Williams, D. A., Berger, J. B., & McClendon, S. A. (2005). *Toward a model of inclusive excellence and change in postsecondary institutions*. Washington, DC: Association of American Colleges and Universities.

- Williams, M. J., & Eberhardt, J. L. (2008). Biological conceptions of race and the motivation to cross racial boundaries. *Journal of Personality and Social Psychology*, 94(6), 1033–1047. doi:10.1037/0022-3514.94.6.1033
- Wilson, W. J. (1980). *The declining significance of race: Blacks and changing American institutions* (2nd Ed.). Chicago: University of Chicago Press.
- Winant, H. A. (2000). Race and race theory. *Annual Review of Sociology*, 26, 169–185. doi:10.2307/223441
- Winfield, A. G. (2007). *Eugenics and education in America: Institutionalized racism and the implications of history, ideology, and memory* (Vol. 18). New York: Peter Lang.
- Yip, T., & Fuligni, A. J. (2002). Daily variation in ethnic identity, ethnic behaviors, and psychological well-being among American adolescents of Chinese descent. *Child Development*, 73(5), 1557–1572. doi:10.1111/1467-8624.00490
- Zack, N. (2002). *Philosophy of science and race*. New York: Routledge.
- Zuberi, T. (2001). *Thicker than blood: How racial statistics lie*. Minneapolis, MN: University of Minnesota Press.
- Zuberi, T., & Bonilla-Silva, E. (Eds.). (2008). *White logic, white methods: Racism and methodology*. Lanham, MD: Rowman & Littlefield.