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Multiracials' Affective, Behavioral and Identity-Specific Responses to Identity Denial

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Multiracials' Affective, Behavioral and Identity-Specific
Responses to Identity Denial

A dissertation submitted partial satisfaction of the
requirements for the degree of
Doctor of Philosophy in Psychological and Brain Sciences

by

Payton Alan Small

Dissertation Committee:

Professor Brenda Major, Chair

Professor Nancy Collins

Professor Shelly Gable

Professor Kyle Ratner

June 2022

The dissertation of Payton A. Small is approved.

Nancy Collins

Shelly Gable

Kyle Ratner

Brenda Major, Committee Chair

June 2022

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I would like to express my deepest gratitude to the many people who have offered their love, guidance and support throughout my graduate school career. First, I would like to thank my advisor, Dr. Brenda Major. I've never met anybody who is so genuinely in love with their profession, and I can only hope that when I'm at the end of my career I'm still as passionate about my work as you are. Thank you for taking a chance on somebody with no experience in social psychology to be your final graduate student. It has been (and will continue to be) an honor to work alongside you. I would also like to thank my dissertation committee members: Drs. Nancy Collins, Shelly Gable and Kyle Ratner. Your input during the early stages of my dissertation, especially as I pivoted my research to an online format due to the pandemic was instrumental in the success of this project. I am excited to use your feedback and suggestions to continue this line of work. This research would not have been conducted if it wasn't for my friend Analia Albuja. You likely don't remember this, but in one of our first conversations I laid out concerns I had about doing research on Multiracial folks. I had internalized beliefs that doing research on a group I was part of was too subjective and not rigorous. You assured me that the research was important, it was necessary and that if anything I was exactly the right person to be doing this research *because* of my perspective. Thank you for helping me believe in myself and the value of this work and for laying down a beautiful and clear roadmap for how to do this type of research.

The first year of the program was challenging for me as I dealt with the loss of my grandfather and self-doubt about whether I was cut out for a career in academia. Luckily, I had two incomparable academic big siblings, Tessa Dover and Jeff Hunger, to steady my ship. I learned so many valuable lessons from both of you and am incredibly fortunate and grateful for your continued mentorship and friendship. Two other people that helped me through my first year were Jocelyn Parong and Peri Gunalp. You were my go-to people when I needed to destress or get out of my own head. When I think back on my most fond early memories in graduate school, a majority of them include both of you.

When doubts about my own abilities as a researcher were at their peak, channeling my energy into mentoring others was my outlet. Thank you, Lauren Ortosky, for sharing my passion in mentorship and helping to create a lasting legacy in the Access Grads mentorship program. Our early one-on-one conversations as well as our collaboration with Vanessa Woods to get the program off the ground were some of my most meaningful memories as a graduate student. To the nearly 50 students who trusted me to be their mentor, thank you from the bottom of my heart for fueling my passion. A special shoutout to CJ Concepcion, Zoey Eddy, Aryana Kamelian, and Yubo Zhou. You were the cohort of students that truly made me fall in love with mentorship. I know that I would not be where I am today nor where I will be in the future without each and every one of you. This project could not have been completed without the support of my amazing team of undergraduate research assistants: Milan French, Kassandra Gomez, Nathalie Paesler, Emily Park, Carlos Sosa Colindres, Kristen Venegas, and Qi Zhang. The role that your flexibility and professionalism played in helping me bring this project to life is immeasurable.

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energy and ability to light up a room the second you step into it. Having somebody like you by my side *loudly and unabashedly* cheering me on during this entire journey has been so special. I love our friendship and being your other half of the paradox pair of docs. Sierra, my academic little sister! We always joke about how we're the same person, but if I'm being honest, I wish I could be more like you. Thank you for always having my back, being there for me when I needed to vent and making my last few years of graduate school so wonderful. I only wish you got here sooner. Suyi, your steadfastness in fighting for what's right and never backing down from a challenge is legendary. I am constantly inspired by you and have found myself thinking many times over the years: "Suyi is such a badass". Lastly, Ava, I didn't think that in my final year of graduate school I'd make any new friends. I planned to just put my head down, finish my dissertation and be on my way. I'm so glad that instead I met you and gained another friend for life. Thank you all for taking care of me, supporting me and helping me grow.

I would like to thank my family for their love and encouragement over the years; I would not be who I am without you all. Deciding to stay close to home for graduate school was one of the best decisions I ever made. Being able to visit for a quick weekend trip or an extended stay during school breaks sustained me when the going got tough. You allowed me to rest and just be your son when my other responsibilities felt too heavy. You've made it so clear to me for my entire life how proud of me you are and that is the best feeling in the world. Dad, your love for education found its way to me and guided my teaching philosophy. Mom, your perseverance is a trait that I relied on often when obstacles seemed insurmountable. Trevor, your philosophical approach to just about everything broadened and deepened my own philosophy about conducting research. Thank you to my stepmother Lyndee and stepfather Jeff for supporting my brother and I and taking care of our parents.

Lastly, I would like to thank my wife and best friend Kathleen for your love, support and patience during these past 5+ years. There are not enough words in existence to express how much you mean to me. Your support of my dreams and this long and winding path has meant everything to me. Your impact on my development as a scholar activist can be seen everywhere. All at once, you keep me grounded but focused on the bigger picture; up to date on social issues but also remind me to take the historical context into account. I love that you challenge me (and the field of psychology in general) to think more critically about the implications of our research. You make me a better researcher and more importantly a better person. We've seen each other at our most tired and burnt out but have also achieved so much together. I cannot wait for our next adventure.

I conclude my time at UC Santa Barbara with a degree and a couple new professional titles, but what I'll cherish most is the community of lifelong friends and colleagues I have made along the way. From protests for a living wage to fights for equality to intramural championship teams and pint nights, I have made my mark during my time here and a mark has been made on me.

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ACADEMIC POSITIONS

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EDUCATION

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Advisor: Dr. Brenda Major, Ph.D.
Dissertation: Multiracials' experiences with and responses to identity denial

June 2014 **B.A.** Intensive Psychology with Minor in Literature
Graduated *Cum Laude* with departmental *Honors*
University of California, Santa Cruz, Psychology
Advisors: Professors Benjamin Storm & Campbell Leaper

HONORS AND AWARDS

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2022 Honorarium for Visiting Future Faculty Program *University at Buffalo*
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2021 Graduate Division MSI Summer Grant *UCSB* (\$7,000)
2021 CARES Act Grant for Higher Education Allocated to Access Grads
Mentorship Program (\$50,000)
2021 Graduate Division Dissertation Fellowship *UCSB* (\$8,000)
2021 Doctoral Student Travel Grant, *UCSB* (\$400)
2021 Self and Identity Preconference Poster Award Winner, *SPSP* (\$1,000)
2020 Summer Teaching Institute for Associates Certificate, *UCSB*
2020 Excellence in Teaching Award – Honorable Mention, *UCSB*
2020 Diversity Fund Graduate Travel Award, *SPSP*
2019 Summer Institute for Social and Personality Psychology Attendant, *SPSP*
2018 Fiona and Michael Goodchild Graduate Mentoring Award, *UCSB* (\$1,000)
2018 Methods U Graduate Student Scholarship, *UCSB*
2011-2014 Dean's List (9 terms), *UCSC*
2014 Outstanding Scholar Award, *UCSC*
2014 Outstanding Researcher Award, *UCSC*

PUBLICATIONS

1. **Small, P. A.**, & Major, B. (2019) Crossing the racial line: The fluidity vs. fixedness of racial identity. *Self and Identity*, 1-26.
<https://doi.org/10.1080/15298868.2019.1662839>
2. Gordon, A. M., Prather, A. A., Dover, T., Espino-Pérez, K, **Small, P.**, & Major, B. (2020). Anticipated and experienced ethnic/racial discrimination and sleep: A longitudinal study. *Personality and Social Psychology Bulletin*.
<https://doi.org/10.1177/0146167220928859>
3. Kaiser, C., Dover, T.L., **Small, P.A.**, Xia, G., Brady, L., & Major, B. (2021) Diversity initiatives and white Americans' perceptions of racial victimhood. *Personality and Social Psychology Bulletin*.
<https://doi.org/10.1177/01461672211030391>
4. Harris, P., Gordon, A. M., Dover, T., **Small, P.A.**, Collins, N., & Major, B. (2021) Sleep, Emotions, and Threats to Belonging: A Daily Experience Study. *Affective Science*. <https://doi.org/10.1007/s42761-021-00088-0>
5. Feasel, S., Dover, T.L., **Small, P.A.**, & Major, B. (2022) Effects of discrimination vs. self-blame attributions on health: A longitudinal study. *Stigma and Health*. In press

SUBMITTED MANUSCRIPTS

1. Feasel, S., Dover, T.L., **Small, P.A.**, & Major, B. Status-based Identity Uncertainty. *Personality and Social Psychology Bulletin*. Under review

MANUSCRIPTS IN PREPARATION

2. Hachem, Z., Dover, T.L., **Small, P.A.**, & Major, B. (in prep). A longitudinal examination of the effect of discrimination on ethnic identification among Latin-origin college students.
3. Eddy, Z., **Small, P.A.**, Padilla-Garcia, D., & Major, B. (in prep). The Impact of Genetic Information on the Racial Categorization of Mismatched Claimed
4. **Small, P.A.**, Major, B., & Kaiser, C. (in prep). Making Diversity Work for Everybody? The Double-Edged Sword of All-Inclusive Diversity.

CONFERENCE PRESENTATIONS

*Denotes undergraduate co-author

Small, P. A. (2022, June). *Multiracials' Experiences With and Responses to Identity Denial*. Poster accepted at 2022 Society for the Psychological Study of Social Issues conference in San Juan, PR.

*Eddy, Z., **Small, P. A.**, & Major, B. (2022, February). *Exploring the Role of Minority Spaces on Buffering the Distress of Identity Invalidation Among Multiracial Students*. Poster presented at the Society for Personality and Social Psychology annual convention in San Francisco, CA.

Small, P. A. (2022, February). *Multiracials' Experiences With and Responses to Identity*

- Denial*. Talk presented in the “Identity Under Threat: Flexibility and Resilience in Response to Exclusion” symposium held at the Society for Personality and Social Psychology annual convention in San Francisco, CA.
- Small, P. A.**, Dover, T., Feasel, S., Salem, R., Major, B. (2021, February). *Discrimination and Health: A Longitudinal Examination of the Moderating Role of Ethnic Identity*. Poster presented at the Society for Personality and Social Psychology annual convention [online].
- *Zhou, Y., **Small, P. A.**, Major, B. (2021, February). *Ingroup but Not in My Group: The Effects of Ingroup Rejection on Asian Americans' Cultural Identification*. Poster presented at the Society for Personality and Social Psychology annual convention [online].
- Small, P. A.**, Major, B., Kaiser, C. (2020, July). *Making Diversity Work for Everybody? An Investigation of Inclusion-based Approaches*. Symposia presentation at International Conference on Intergroup Competition. **[Canceled due to COVID-19]. Bali, Indonesia.
- Kaiser, C., Major, B., Dover, T., **Small, P.** (2020, June). *The Ironic Consequences of Diversity Initiatives on Organizational Justice*. Symposia presentation at General Meeting of the European Association of Social Psychology. **[Canceled due to COVID-19] Krakow, Poland.
- *Eddy, Z., **Small, P. A.**, Padilla-Garcia, D., & Major, B. (2020, February). *The Impact of Genetic Testing on the Racial Categorization of Mismatched Claimed Identities*. Poster presented at the Society for Personality and Social Psychology annual convention in New Orleans, LA.
- Gordon, A., Prather, A., Dover, T., Espino-Perez., **Small, P.A.**, & Major, B. (2020, February). *Anticipated and Experienced Ethnic Discrimination and Sleep: A Longitudinal Study*. Poster presented at the Society for Personality and Social Psychology annual convention in New Orleans, LA.
- Small, P.A** (2019, June). *Diversity as a Zero-sum Game That Whites Perceive Themselves as Losing*. Poster presented at the Weary Symposium on Diversity and Social Identity at Ohio State University, OH.
- *Rosenthal, B., **Small, P. A.**, Major, B. (2019, May). *Status-Based Identity Mediation of Health Outcomes*. Poster presented at the UCLA Psychology Undergraduate Research Conference in Los Angeles, CA.
- *Kamelian, A., **Small, P. A.**, Major, B. (2019, May). *The Illusion of Meritocracy: Developing Diversity Initiatives for both Minorities and Non-Minorities*. Poster presented at the UCLA Psychology Undergraduate Research Conference in Los Angeles, CA
- Small, P.A** (2019, February). *Who Benefits From Diversity? Re-examining the All-inclusive Multiculturalism Approach*. Poster presented at the Society for Personality and Social Psychology annual convention in Portland, OR.
- Small, P.A** (2018, May). *Making Diversity Work for Everybody? An Investigation of Inclusion-based Approaches*. Poster presented at the Association for Psychological Science annual convention in San Francisco, CA.
- Small, P.A.**, & Major, B. (2018, March). *Claiming Racial Identity: Who Can Pass And Who Can't?* Poster presented at the Society for Personality and Social Psychology annual convention in Atlanta, GA.

INVITED TALKS

Oklahoma State University	2022
University at Buffalo	2022
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New York University	2019

TEACHING EXPERIENCE

Instructor of Record

- Social Psychology, UC Santa Barbara 2019, 2020, 2021

Lead Teaching Assistant

- Cognitive Psychology, UC Santa Barbara 2021
- Intergroup Relations, UC Santa Barbara 2019, 2020
- Social Psychology, UC Santa Barbara 2018, 2019, 2021
- Introduction to Psychology, UC Santa Barbara 2016, 2017
- Introduction to Psychology, UC Santa Cruz 2014

Lead Laboratory Instructor

- Research Methods, UC Santa Barbara 2021
 - Advanced Research Methods, UC Santa Barbara 2018, 2020
 - Statistical Methods, UC Santa Barbara 2017, 2018, 2019
-

MENTORSHIP EXPERIENCE

Society for Personality and Social Psychology Peer Mentor:

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Ilana Brody (UCLA)

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Nathalie Paesler, B.S. in Psychological and Brain Sciences, UCSB (co-advised)

Honors Thesis: *Bicultural Individuals Perceptions of Frame-Switching*

Zoey Eddy, B.S. in Psychological & Brain Sciences, UCSB

Honors Thesis: *The Effect of Ethnically-Based Clubs on the Well-Being of Multiracial Individuals*

Jennifer Lê, B.S. in Psychological & Brain Sciences, UCSB

Honors Thesis: *The Moderating Effect of Race Rejection Sensitivity on the Discrimination-Health Link*

Aryana Kamelian, B.S. in Psychological & Brain Sciences, UCSB

Honors Thesis: *American Dream: How Meritocracy Undermines Equality for Public Schools in America*

Yubo Zhou, B.S. in Psychological & Brain Sciences, UCSB

Honors Thesis: *Ingroup but Not in My Group: The Effects of Ingroup Rejection on Asian Americans' Cultural Identification*

Byron Rosenthal, B.S. in Psychological & Brain Sciences, UCSB

Honors Thesis: *The Effects of Status-based Uncertainty on Health Outcomes Among Latinx College Students*

UCSB Undergraduate Research and Creative Activities Grant Mentor

2020-2021	Zoey Eddy (\$750 research funding) Jennifer Lê (\$750 research funding) Jiayi Ye (\$750 research funding)
2019-2020	Zoey Eddy (\$750 research funding and <i>SPSP Undergraduate Diversity Travel Award Winner</i>) Aryana Kamelian (\$750 research funding) Yubo Zhou (\$750 research funding)
2018-2019	CJ Concepcion (\$750 research funding) Byron Rosenthal (\$750 research funding) Yubo Zhou (\$750 research funding)
2017-2018	CJ Concepcion (\$750 research funding)
2016-2017	Jasmin Naumburg (\$750 research funding)

REVIEWING EXPERIENCE

2021	<i>Race and Social Problems</i>
2020	<i>Cultural Diversity and Ethnic Minority Psychology</i>
2018	<i>Personality and Social Psychology Bulletin</i>

PROFESSIONAL ACTIVITIES & SERVICE

2022	Led mentoring workshop on fixed vs growth mindsets for UCSB FUERTE
2020	SPSP Peer Advisor
2020-2021	Graduate Student Representative on <i>Diversity, Equity and Inclusion Committee</i>
2017	Invited Graduate Student Panelist: What to Think About When Planning for Graduate School, <i>Psi Chi Speaker Series</i> . University of California, Santa Barbara.
2017-2022	Co-founder of <u>Access Grads Mentorship Program</u> at UC Santa Barbara. Recent funding from the CARES Act provides \$200 funding for each of our 80 mentees with money for applications to graduate school and GRE waivers.
2017-2022	Teaching Assistant Advisory Panelist/Mentor (TAAP)
2016-2019	Graduate Student Advisor for the Society of Undergraduate Psychologists (SUP) at UC Santa Barbara

PROFESSIONAL MEMBERSHIPS

- ❖ *Society for the Psychological Study of Social Issues (SPSSI)*
- ❖ *Society of Personality and Social Psychology (SPSP)*
- ❖ *American Psychological Association (APA), Division 08*
- ❖ *Association for Psychological Science (APS)*
- ❖ *Western Psychological Association (WPA)*
- ❖ *National Honor Society (NHS)*

ABSTRACT

Multiracials' Affective, Behavioral and Identity-Specific Responses to Identity Denial

By

Payton Alan Small

Multiracial people commonly experience racial identity denial, in which their racial identity is questioned, invalidated and/or rejected by others. The current studies examined majority-minority Multiracials' forecasted and actual experiences with identity denial, specifically investigating whether the race of the identity denied (racial minority vs. White) and race of the identity denial perpetrator (racial minority vs. White) differentially impacted the experience of and responses to identity denial. In Study 1, an online sample of 247 majority-minority Multiracial participants (i.e., individuals with White ancestry and racial minority ancestry) imagined having either their racial minority or White identity denied by either a monoracial White or matched monoracial racial minority perpetrator. Participants who imagined having their racial minority (vs. White) identity denied forecasted stronger internal negative affect (such as shame and sadness), external negative affect (such as anger and irritation) and likelihood of identity assertion, irrespective of race of denial perpetrator. Participants also forecasted stronger external negative affective responses when they imagined the denial perpetrator was White (vs. racial minority). Using an experimental design in which 85 Multiracial participants experienced actual instances of identity denial, Study 2 similarly found that participants whose racial minority identity was denied reported

stronger internal negative affect, irrespective of the race of the denial perpetrator. However, the effects of the race of the denied identity on external negative affect and likelihood of identity assertion differed as a function of the race of the denial perpetrator. When a White perpetrator denied their racial minority identity, participants reported greater external negative affect and were more likely to assert their identity than when their racial minority identity was denied by a racial minority perpetrator. Additionally, Study 2 examined three identity-specific responses – flexible self-presentation, self-perception and self-identification – to experiencing identity denial. Findings indicate that majority-minority Multiracials whose racial minority identity is denied by a White perpetrator perceive their own racial identity, present their racial identity to others and shift their racial self-identification in alignment with their racially minoritized identity. In contrast, Multiracials whose racial minority identity is denied by a racial minority perpetrator perceive their own racial identity, present their racial identity to others and shift their racial self-identification in alignment with their White identity. Surprisingly, these patterns of results are not moderated by initial levels of racial identification or feelings of autonomy in navigating between racial identities. The findings imply that the specific components of an identity denial experience (race of denied identity and race of denial perpetrator) are important for predicting how Multiracials will respond to said experiences. Furthermore, responses to identity denial are more multifaceted and identity-specific than previously demonstrated, including shifts in racial identification, flexible self-presentation and fluid self-perception.

Multiracials' Affective, Behavioral and Identity-Specific Responses to Identity Denial

Multiracial individuals (i.e., people who have biological parents from more than one racial background) are the fastest growing youth demographic in the United States (Bonam & Shih, 2009; Pew Research Center, 2015). Despite not being officially recognized and counted as a distinct racial group until the 2000 U.S. Census, the most recent Census data reported that Multiracial¹ Americans make up over 10% of the population (Jones et al., 2021) and are projected to account for approximately 21% of the U.S. population by the year 2050 (Smith & Edmonston, 1997; U.S. Census, 2012). In the same 20+ year time frame since the U.S. government began allowing individuals to choose more than one racial identity, there has been a boom in research on Multiracials. A keyword search of the term 'Multiracial' in the scholarly database PsycINFO found that approximately 90% of the articles containing this keyword were published after the year 2000. Research exploring stereotypes about Multiracials (Shih et al., 2007; Skinner et al., 2020), racial categorization of Multiracials (Ho et al., 2011; Levy et al., 2022; Rodeheffer et al., 2012) and the social and psychological implications of having multiple racial identities (Rockquemore, 1998; Shih & Sanchez, 2005) has provided initial steps toward a more nuanced understanding of the experiences of Multiracial individuals.

Multiracial individuals contradict traditionally binary conceptions of race in their ability to “switch” between multiple racial identities depending on the social context (Funderburg, 1994; Renn, 2004; Rockquemore & Brunnsma, 2007). Widely held beliefs that

¹ In 2020, the *APA Publication Manual* recommended that “If people belong to multiple racial or ethnic groups, the names of the specific groups are capitalized, but the terms ‘multiracial’, ‘biracial’ ... are lowercase”. I disagree with this recommendation as it runs contrary to their earlier recommendation that “Racial and ethnic groups are designated by proper nouns and are capitalized” (APA, 2010, p. 75). Because Multiracial is a racial group, I will capitalize it throughout this dissertation in recognition of the legitimacy of this racial group.

race is a biological construct generate norms of monoracial identification that directly undermine Multiracial people's simultaneous membership in multiple racial groups (Ho et al., 2015; Sanchez et al., 2014; Williams & Eberhardt, 2008). Conflict between monoracial categorization norms and the multiplicity of Multiracials' racial identities can result in a mismatch between how Multiracial individuals self-identify and how others perceive and/or categorize them. This racial incongruence has been associated with a host of downstream psychological consequences including experiencing psychological conflict and feelings of exclusion (Binning et al., 2009; Cheng & Lee, 2009; Nakashima, 1992; Sanchez et al., 2009; Shih & Sanchez, 2005; Shih & Sanchez, 2009).

Most pertinent to the current research is the experience of *identity denial* – broadly defined as instances in which an individual is explicitly rejected as a member of an important ingroup (Albuja et al., 2019; Cheryan & Monin, 2005; Townsend et al., 2009) and/or “placed into a racial category that does not align with the racial category with which they personally identify” (Franco et al., 2016, p. 96). Multiracial individuals frequently experience various forms of identity denial, with prior work estimating that 87% to 93% of Multiracial participants experience challenges to or questioning of their racial identity (Townsend et al., 2009; Tran et al., 2016). Experiencing identity denial has been linked to a range of negative psychological outcomes including decreases in self-esteem, resentment towards the perpetrator of the denial, and higher self-reported stress (Rockquemore, 2002; Stepanikova, 2010; Townsend et al., 2009). Experiencing identity denial is so common that it is often cited as a critical aspect of the identity development process among Multiracials (Rockquemore & Brunnsma, 2002). The most widely accepted model of Multiracial identity development – the multidimensional model of racial identity – specifies that individuals who hold multiple

racial identities and identify as Multiracial, can either have these identity claims explicitly validated or left unvalidated (Rockquemore & Brunnsma, 2004). Identity validation is a process “whereby a particular racial identity is considered legitimate and accepted by others or deemed illegitimate and ignored” (Rockquemore & Brunnsma, 2004, p. 86). The model proposes that “unvalidated” Multiracial identities are associated with poorer psychological health (Brunnsma & Rockquemore, 2001, Harris & Sim, 2002). Relatedly, research on Multiracials identity development differentiates between an “internal” (i.e., how a Multiracial individuals conceptualizes their racial identity) and “ascribed” (i.e., how perceivers racially categorize a Multiracial individuals racial identity) Multiracial identity (Edwards, 2008; Rockquemore et al., 2009). Prior work has found that Multiracial individuals may experience disparate psychological outcomes depending on the degree to which their Multiracial identity is validated or not (Coleman & Carter, 2007, Lou et al., 2011).

In the most comprehensive experimental demonstration of the effects of identity denial to date, Albuja and colleagues (2019) induced identity denial experiences by interrupting a study to inform Asian-White Biracials that they could not participate in the study because they were not White. They measured self-reported stress, and positive and negative affect before and after the denial experience. Compared to a control condition in which participants were denied a racial identity to which they had no claim (African American), Asian-White Biracial participants whose White identity was denied reported higher levels of stress and were more likely to verbally assert their denied identity. A qualitative study by the same research team found that Multiracial participants who reported experiencing challenges to their White identities felt reduced identity autonomy and perceived their identities as less compatible, which was ultimately associated with higher

reported depressive symptoms and a reduced sense of social belonging (Albuja et al., 2019). Taken together, these findings elucidate the negative psychological outcomes associated with identity denial for Multiracial individuals. Yet, to this point, little research has explored other ways that Multiracial individuals might respond to experiencing identity denial nor the factors that influence the experience of and responses to identity denial. These gaps in the literature imply that the relatively scant knowledge we do have about identity denial – one of the most common and unique experiences faced by Multiracial folks – is limited in nature. To address these limitations, my dissertation will investigate two primary factors of the identity denial experience among majority-minority Multiracials: the race of the denied identity (racial minority vs White) and the racial identity of the person doing the denying (racial minority vs White). Additionally, the strength of identification with the denied identity is tested as a moderator of responses to experiencing identity denial.

Fitting a Multiracial Peg Into a Monoracial Hole

Previous research demonstrates meaningful and consistent differences between Multiracial and monoracial populations in how they are racially categorized, how they conceptualize race in childhood and adulthood, how their racial identity is perceived and monitored by others, how they behave in interracial interactions and how they respond to stereotype threat (Binning et al., 2009; Chiong, 1998; Gaither et al., 2013; Gaither et al., 2015; Hitlin et al., 2006; Ho et al., 2011; Morrison, 1995; Shih & Sanchez, 2005). Such findings signify that racial identity development processes among monoracial populations – and thus theories related to racial identity and identification – may not always apply to the experiences of Multiracial populations. In its most fundamental form, the multidimensional model of racial identity (MMRI) recognizes that Multiracial individuals conceptualize their

racial identity in a variety of ways (Rockquemore, 1999). The most common of which are a *protean identity* (switching back and forth between monoracial identities), a *singular identity* (choosing a monoracial identity) or an *exclusively Multiracial “border” identity* which represents a blending of multiple identities (Anzaldúa 1987; Brown 1990; Herring 1995; Poston 1990; Rockquemore & Brunsma, 2002; Root 1990; Stephan, 1992). Another pillar of the MMRI is the understanding that people with mixed racial backgrounds may shift their racial identities over time, based on the context and that racial identification may not follow a linear course of development (Rockquemore, 1999; Rockquemore & Laszloffy, 2003). Numerous studies have provided longitudinal evidence that Multiracial individuals’ racial identification choices are mutable (Harris & Sim, 2002; Hitlin et al., 2006). For example, Doyle and Kao (2007) found that a majority of Multiracial individuals in their sample (59%) changed their self-reported racial identification across two separate time points. Surveyors of the most recent Census data point to this flexibility in racial self-identification (in addition to a host of other explanations) as an important factor in the dramatic growth in the Multiracial population from the 2010 to the 2020 census (U.S. Census, 2020). Broadly, the monoracial paradigm of race in the United States maintains that racial categories are mutually exclusive (Harris, 2016) and thus ignores the reality of Multiracial folks. Research on the complex experiences of Multiracial individuals with regards to their racial identities is necessary to challenge dominant and restrictive ideologies of race.

Theorizing Beyond a Singular Identity Framework

People hold a variety of social identities based on group membership, social roles, and affiliations that can become more or less salient over time and across context (i.e., race, gender, age, religion, occupation). While a rich literature on social identities provides

innumerable insights into the dynamics of social categorization and behavior, this theorizing primarily focuses on how monocultural, gender-typical, and monoracial individuals behave in the world and how the world reacts to them and their identities.

Multiracial individuals conceptualize their racial identity differently over time and based on the context. When applying this understanding to well-established social psychological theories regarding racial identity, it is evident that the predictions derived from these theories may not apply to the Multiracial experience. For example, social identity theory posits that an individual's self-concept is defined by their perceived group membership, that individuals desire ingroup enhancement and that social identity is an important source of self-esteem, behavior, sense of belonging, and purpose in the social world (Tajfel & Turner, 1979; Turner & Tajfel, 1986; Correll & Park, 2005). However, because Multiracial individuals do not belong to just one racial ingroup and/or may change which group is considered their ingroup, they are significantly more likely to be denied access to a desired ingroup than monoracials.

Multiracials similarly complicate research on interracial interactions, which typically rely on a binary in-group/out-group distinction. Finally, developmental models of racial identity may also play out differently for Multiracial individuals. For example, Multiracial children worry about racially identifying with only one of their racial groups out of fear of offending one of their parents (Sebring, 1984), which is an identification experience unique to Multiracial youth. These examples represent the tip of the iceberg for how popular (monoracial) models of racial identity may not translate to the experiences of Multiracial individuals. These examples are particularly relevant for predictions related to Multiracials' responses to identity denial because identity denial (at least as manipulated in the current

research) represents a type of interracial interaction, is related to questions surrounding ingroup membership and informs racial identification processes.

Social psychological research has made headway in its examination of the more multifaceted nature of social identities. A proliferation of research on social identity complexity (Roccas & Brewer, 2002) acknowledges that all individuals understand their varying social identities in multi-layered ways and can freely switch between them and that perceivers behave differently toward individuals based on a combination of their social identities (Bodenhausen, 2010; for review, see Ellemers et al., 2002; Kang & Bodenhausen, 2015). Although this shift in focus toward social identity complexity was developed to discuss the intersection between different social identities (i.e., racial identity and gender identity) within an individual, the concepts introduced by this theory can be useful when applied to discuss the intersection between sub-identities within the same social identity category (i.e., racial minority and racial majority identities) within an individual. The model consists of four strategies for managing multiple social identities: (a) “intersection” which is to maintain an ingroup that lies at the intersection of the separate identity groups. For a Multiracial individual this would represent identifying as Multiracial and perceiving other Multiracial people (regardless of their individual sub-racial identities) as ingroup members. The second strategy is (b) “dominance” or identification with a primary social group to which other identities are relegated to a subordinate placement. For Multiracial individual this maps on to the “singular” identity in the MMRI. The third strategy for managing multiple social identities is (c) “compartmentalization” or identifying with a social group depending on the social context. This strategy maps on to the “protean” identity in the MMRI and is informed by the self-categorization model (Turner, et al., 1987; Turner et al., 1994).

Lastly, is the (d) “merger” strategy or simultaneous identification with each social identity group. For a majority-minority Multiracial individual this would be exemplified by identifying with both one’s racial minority and majority identity and perceiving any member of those groups as ingroup members.

Despite progress in research on the complexity of social identities, far less is known about how simultaneously holding multiple sub-identities (i.e., Asian and White) within the same social identity domain (i.e., race) impacts behavior. The limited research that does exist, however, suggests that embodying multiple sub-identities within the same social identity domain represents a distinct experience when compared to holding multiple social identities across different groups. For example, bicultural individuals who identify simultaneously with both their “home” and “host” cultures versus those who have assimilated to just one culture show higher levels of complex thinking and innovation (Simonton, 1988; Tadmor et al., 2012). Bisexual individuals exhibit higher levels of cognitive flexibility compared to gay, lesbian or heterosexual individuals (Konik & Crawford, 2004). Multiracial individuals report weaker endorsement of racial essentialism relative to monoracial individuals (Bonam & Shih, 2009; Shih et al., 2007). Research from early child development finds that Multiracial children are cognizant of their multiple racial identities and that priming their different racial identities differentially influences their behavior and learning preferences relative to monoracial children (Gaither et al., 2014).

Most relevant to the current work, research on *racial identity flexibility* – the ability to switch between multiple racial identities – is qualitative in nature. However, there is empirical evidence that identification among Multiracials may vary when primed to think about a specific identity (Chiao et al., 2006; Gaither et al., 2013) and that Multiracial people

alter their self-perceptions when one of their racial identities is primed (Pauker, et al., 2013). Racial identity flexibility has received very little research attention as a behavioral mechanism for responding to identity denial. More specifically, research on Multiracial individuals has yet to examine how racial identity flexibility influences identity-specific processes such as self-presentation, self-perception and self-identification following instances of identity denial.

Responding to Identity Denial

Categorization Threat and Self-Verification

Self-verification theory provides a valuable theoretical lens to examine the detrimental effects of and potential responses to identity denial by highlighting the importance of alignment between self-perceptions and others' perceptions of the self (Swann, 2011). Individuals possess a general motivation for self-verification, to receive evaluations from others that are consistent with existing views of themselves, even if these evaluations are unfavorable and/or objectively inaccurate (Swann, et al., 1987). Prior work finds that Multiracials are particularly likely to value others' accuracy about their racial identity (Remedios & Chasteen, 2013). This focus on others' accuracy is especially relevant given experiencing identity denial – characterized by discrepancy between Multiracial individual's conceptions of their racial identity and others' perceptions/categorization of them – can undermine attempts at self-verification within the domain of racial identity.

In a foundational study, Female college students – who were labeled as “self-dominants” or “self-submissives” based on responses to a prescreening survey – interacted with a confederate who provided self-discrepant feedback (i.e., that self-dominants were

behaving submissively or that self-submissives were behaving dominantly). When participants were afforded the opportunity to disconfirm the self-discrepant feedback, they made intensive efforts to do so by acting in ways that exemplified their pre-existing self-conceptions (i.e., self-dominants behaved more dominant and self-submissives behaved more submissive). Individuals who were not provided the opportunity to refute the feedback were more likely to alter their self-ratings (i.e., their self-perceptions of dominance/submissiveness) in alignment with the self-discrepant feedback (Swann & Hill, 1982). These findings indicate people respond to self-discrepant feedback by discrediting it and behaviorally verifying their pre-existing self-conceptions as long as they are provided the opportunity to disconfirm the self-discrepant feedback. According to self-verification theory, Multiracial individuals should be motivated to restore coherent self-views following experiencing identity denial and might do so by challenging the denial perpetrator's misperceptions of their racial identity in an attempt to align the perpetrator with their own racial self-conceptions.

Research directly examining responses to experiencing identity denial among Biracial and Bicultural individuals supports self-verification as a common approach. In a study examining Asian Americans responses to denial of their American identity, participants demonstrated “identity assertion”; a process by which an individual proves that they *are* an ingroup member and belong to the group to which they have been denied (Cheryan & Monin, 2005). In this study, Asian American participants responded to experimentally manipulated denial of their American identity by a White person by identifying more strongly with their American identity and displaying more ingroup prototypical behavior and knowledge of cultural information. In a separate study examining majority-minority Multiracials' reactions

to identity denial of their White identity, identity assertion was operationalized as Multiracials' likelihood of stating that they were a member of the racial group to which they had just been denied access (Albuja et al., 2019). They found that about ½ of the participants (54.3%) did assert their denied racial (White) identity, and those who did so subsequently reported greater identity autonomy than participants that did not assert their denied identity. These findings illustrate that part-White Multiracials engage in self-verification following denial experiences by challenging denial perpetrator's misperceptions via asserting their identity.

A related framework for contextualizing the results of the aforementioned studies is categorization threat – the aversive experience of being categorized in ways that are incongruent with expectancies for being categorized (Deaux & Ethier, 1998; Ellemers et al., 2002). The literature on categorization threat suggests that in general, highly committed but marginalized group members tend to resist miscategorizations (for review, see Branscombe et al., 1999) and respond to individual-directed threats by displaying group prototypical behavior and increasing identification with their group. Although Multiracial individuals are typically regarded as marginal members of any monoracial category as evidenced by derogatory terms to describe their racial identity such as “half-breed”, “mestizo”, “mutt” and “mulatto” (Root, 1990), it is possible for Multiracials to be highly committed to a racial group even if they have a marginal status.

An added layer to consider when employing these theories to predict Multiracials' responses to identity denial is that in cases of identity denial, a Multiracial person is not only denied access to part of their racial identity but are simultaneously categorized into a racial group with which they might not fully identify. According to Ellemers and colleagues

(2002), categorization into a group to which one is not committed or weakly identified can result in threats to the individual self. Relative to highly identified group members, when the group is threatened, individuals low in group identification are more likely to distance from the group and protect the personal self. For instance, Barreto and Ellemers (2002) found that participants who were treated as a member of a group that they did not choose for themselves resisted self-categorization in the ascribed group and displayed reduced group loyalty. According to the categorization threat literature, Multiracials who strongly identify with the racial group they are denied access to may respond by strengthening identification with that group. In contrast, Multiracials who do not strongly identify with the racial group they are denied access to may be more likely to distance themselves from that group and/or strengthen identification with their other (non-denied) racial group.

Self-verification and categorization threat literature posit that Multiracials will respond to instances of identity denial by asserting their denied identity, challenging denial perpetrator's racial miscategorizations and identifying more strongly with the denied identity, especially if they strongly identify with the racial group that they are being denied access to. Additionally, they are likely to resist categorization into a group with which they do not identify or identify weakly by deemphasizing the importance of that group.

Reflected Appraisals and Social Tuning

According to Cooley (1902), individual's self-concepts are shaped by their own perceptions of how others view them. The "looking-glass" is a metaphor for the way that the self develops as a reflection of the appraisals of others (Felson, 1981; Mead 1934; Schlenker 1980). People feel that their identity claims require validation by others to give them a sense

of shared social reality (Wicklund & Gollwitzer, 1982) and when identity claims (e.g., “jock”) are challenged, individuals are more likely to alter their self-concepts in attempts to change how they are perceived by others – referred to as internalization (Lemay & Ashmore, 2004). Qualitative analysis of Asian-White Multiracials indicated phenotype, measured by how respondents felt that others perceived their racial appearance, was the strongest predicting factor of racial identification above and beyond cultural exposure to their Asian heritage. Participants who felt that others perceived them as Asian were nearly twice as likely to identify as Asian (than non-Asian) on a binary identification task (Khanna, 2004).

Related to the concept of reflected appraisals is “affiliative social tuning”. Within the literature on shared reality (Hardin & Conley, 2001; Hardin & Higgins, 1996) the social tuning hypothesis postulates that when people are motivated to affiliate with others, they will adjust or “tune” their social beliefs – including beliefs about the self – toward that person’s apparent beliefs (Sinclair & Huntsinger, 2006). For example, when Black participants were led to believe they would be interacting with a White partner that held stereotype-consistent negative attitudes about African Americans, their academic self-evaluations (i.e., “how important are academics to you?”) were more negative and in alignment with the ostensible partner’s attitudes when affiliative motivation was high but not low. In contrast to self-verification and categorization threat literature, these frameworks highlight an alternative response to instances of identity denial – internalization of self-discrepant feedback. The frameworks of social tuning and reflected appraisals posit that Multiracials will respond to instances of identity denial by aligning their racial self-conceptions with denial perpetrator’s miscategorizations and identify more strongly with the identity to which they are categorized into.

Identity-Specific Responses to Identity Denial

Beyond identity assertion, there has been no research exploring other types of identity-specific responses to experiencing identity denial. Considering that in the previously mentioned study ~50% of Multiracial participants **did not** react to identity denial experiences by asserting their identity, there are certainly other/additional mechanisms employed by Multiracial individuals in these situations. The current research examines three identity-specific responses to identity denial – *flexible racial self-presentation*, *fluid racial self-perception* and *shifting racial identification*. For the purposes of this dissertation, racial self-presentation refers to how Multiracial individuals may alter race-specific representations of the self to appear more or less racially prototypical. For racial self-perception, I examined participant's accuracy for correctly identifying their face amongst a lineup of their faces that had been morphed to appear more prototypically White or more prototypically racially minoritized (Asian or Latinx). Similar to identity assertion, self-presentation and self-perception serve as self-verifying tools that can influence how perceivers see Multiracials as well as how Multiracials perceive themselves. Lastly, racial identification refers to how central Multiracial individuals consider various aspects of their multiple racial identities to the self-concept.

The theories and frameworks discussed in the previous section are useful in understanding why identity denial experiences are psychologically stressful for Multiracials; however, they are not sufficient for informing nuanced predictions regarding different types of responses to identity denial. Namely, these theories do not consider that the individual perpetrating the identity threat can simultaneously be an ingroup and outgroup member. Additionally, these theories do not take into account that individuals can belong to multiple

identities within the same social identity group and thus responses to identity threats may differ from an individual whose sole identity is threatened, thus rendering predictions regarding identity-specific responses to identity denial exploratory.

Components of an Identity Denial Experience

Prior experimental work on identity denial experiences among majority-minority Multiracials has exclusively investigated the consequences of having one's White identity denied by a White person. While it is the case that Multiracials are most likely to be miscategorized as exclusively racial minority monoracials (i.e., denied their White identity), evidence from qualitative work suggests that instances of identity denial are most likely to be perpetrated by racial minorities (Franco & Franco, 2016; Franco et al., 2016). To my knowledge, there is no experimental evidence testing the independent or joint impacts of the race of the denial perpetrator and denied identity in identity denial experiences. To fill this gap, the current studies manipulate the race of identity denied (White or racial minority) as well as the race of denial perpetrator (White or racial minority). I examine whether the racial group membership of the perpetrator of identity denial interacts with the racial identity denied impacting Multiracials' affective, behavioral and identity-specific responses to identity denial.

Race of Identity Denied

The most common instantiation of Multiracial identity denial is being miscategorized as monoracial. Although prior work has not specifically investigated whether the monoracial group into which a Multiracial individual has been categorized into (and excluded from) impacts their response to the denial, prior work on categorization of Multiracials may provide

important predictive information. Previous research examining perceptions of Black-White (and Asian-White) Biracials finds that they are more frequently categorized as monoracially Black (and Asian) than as monoracially White (Halberstadt et al., 2011, Ho et al., 2011, Peery and Bodenhausen, 2008). One underlying mechanism explaining this tendency is hypodescent, which holds that minority-White Multiracial targets are racially categorized in alignment with monoracial racial minority categories, and the multiplicity of their racial identities is often not recognized (Harris, 1964; Ho et al., 2011). A separate explanation for this categorization bias is the in-group overexclusion effect (Castano et al., 2002; Leyens & Yzerbyt, 1992). Due to the importance derived from group membership and the motivation to hold one's group in positive regard (Tajfel & Turner, 1986), individuals are especially selective when making judgments about who is categorized as an ingroup member so as to not "contaminate" the ingroup and risk damaging its status (Stelzl et al., 2007).

In terms of self-identification, majority-minority Multiracials are most likely to identify as Multiracial (Lee & Bean, 2004; 2007; Roth, 2005); however, the next most common form of self-identification is in alignment with rules of hypodescent (Waters, 1990). Black-White Multiracial individuals typically identify more strongly with their Black identity relative to their White identity (Khanna & Johnson, 2010), and minority cultural groups are often more likely to provide solidarity and buffers from societal discrimination (Khanna, 2011). Thus, being denied membership in a minority group may have especially negative consequences for Multiracial individuals as it is more likely to represent a central part of their identity (Root, 1992).

Race of Denial Perpetrator

A second factor to consider is the racial identity of the denial perpetrator. No prior research has systematically manipulated the race of the denial perpetrator to examine whether responses to denial differ based on the racial identity of the person doing the denying. The race of the perpetrator may have important implications for how denial experiences are interpreted and internalized (Harris & Khanna, 2010; Miville et al., 2005). All prior experimental work on identity denial has either explicitly (Cheryan & Monin, 2005) or indirectly (Albuja et al., 2019) examined the impact of White denial perpetrators and found that Multiracials respond with negative affect (anger and offense) and are more likely to assert their identity compared to a control (no denial) condition. Qualitative evidence points to positive and negative interactions with members of their racial ingroups as “push” and “pull” factors affecting Multiracials’ choice of racial identity (Miller & Miller 1990; Rockquemore & Brunson, 2002). Depending on the valence of these interactions and the racial identity of the interactant, individuals may feel pulled toward one identity option and/or pushed away from another identity. A study examining Black-White Biracials’ social network composition and identity choices found that individuals who experienced negative interactions with Black individuals in their social network were pushed away from a singular Black identity (towards a Biracial identity) whereas negative interactions with White individuals in their social network resulted in pulls toward a monoracial Black identity (Franco & Franco, 2016). Together, these findings imply that negative experiences – such as identity denial – play a meaningful role in how Multiracials’ racially identify and that identification processes differ as a function of the racial background of the interaction partner (i.e., denial perpetrator). However, to this point, research has yet to examine whether the race

of the denial perpetrator differentially impacts responses to and consequences of identity denial.

Race of Identity Denied × Race of Denial Perpetrator

No experimental research has explored the interactive effects of the two primary components of an identity denial experience: the racial identity denied and race of the denial perpetrator. In an interview-based study investigating racial identity construction, descriptive analyses revealed that Black-White Biracial individuals who had negative identity-specific experiences (i.e., negative treatment because of skin color or physical features) with Black individuals were more likely to deemphasize their Black identity and identify more strongly with their Biracial identity (Rockquemore & Brunisma, 2004). Related work has shown that due to essentialist notions of race enforced by the Black community, Black-White Biracials feel less “authentically Black” and engage in “self-marginalization”; characterized by distancing from their Black identity (Harris & Khanna, 2010).

There are several important differences between this research and the current research. First, these studies examine interactions over the lifespan and the role they play on conceptualizations of one’s racial identification, whereas the current study examines a single instance in which an individual’s racial identity is denied. Second, their samples (like most research on Multiracials) only consisted of Black-White Biracials where distinctions between racial groups are more stark than other Multiracial groups. Third, these studies only explored “Biracial” and “Black” as potential identity choice options. In other words, the researchers did not ask individuals whether negative experiences related to their identity impacted identification with their White identity; they only considered deemphasis of their Black

identity or strengthening of their Biracial identity as outcomes. Lastly, these studies only examined the effects of negative experiences with Black perpetrators on racial identification processes. Nonetheless, the findings from these studies indicate that denial of one's racial minority identity by a minority perpetrator impact the way majority-minority Multiracials conceptualize and shift their racial identity.

Prior research (qualitative and experimental) examining Multiracials identity denial experiences has exclusively focused on cases in which the racial identity denied matches the race of the person perpetrating the denial. Thus, for majority-minority Multiracials we know that denial of one's racial minority identity by a racial minority ingroup member has negative consequences and we know that denial of one's White identity by a White ingroup member also has negative consequences. What is undetermined is whether cross-race identity denial experiences elicit similar responses or represent a different type of identity denial experience. What makes the comparison of cross-race identity denial unique is that when a majority-minority Multiracial individual's racially minoritized (White) identity is denied by a White (racial minority) perpetrator this simultaneously represents a form of categorization threat *and* ingroup inclusion. Because majority-minority Multiracials are more likely to identify with their racially minoritized identity, cross-race identity denial by a White perpetrator (of a racial minority identity) should result in more negative affect and greater likelihood of identity assertion than cross-race identity denial by a racial minority perpetrator (of a White identity).

Exploratory Moderators

Identification with Denied Identity

Individual differences in group identification are an important predictor of cognition, affect, and behavior in intergroup situations (Ellemers et al., 2002; for review, see Smith et al., 2007). Thus, individual differences in group identification may play a role in Multiracials' responses to identity denial. However, because Multiracial individuals may be less likely to establish strong racial identity as a result of experiencing denial from both the majority and minority racial groups (Comas-Diaz, 1996; Gibbs, 1987; Poston, 1990; Root, 1996; Winn & Priest, 1993), it is unclear whether individual's sense of group membership will moderate responses to identity denial. Relatedly, the experience of identity denial may have a profound impact on the individual's sense of group membership in the moment (Fryberg & Townsend, 2008; Hall, 1992; Shih & Sanchez, 2005). The directionality of this relationship will be tested in the current research.

Identity Autonomy

The identity autonomy perspective (IAP; Sanchez et al., 2014) characterizes identity autonomy as the ability to freely choose and express one's identity. While it has been established that Multiracial people may shift their racial identification over time, these identity choices are not always perceived as legitimate. Prior work testing whether identity autonomy mediated the impact of identity denial on psychological health found no evidence it did so (Albuja et al., 2019). The authors suggested that identity autonomy may instead serve as a moderator determining whether people come to identify in ways that challenge societal norms. Multiracial people may have higher or lower feelings of identity autonomy and thus, in the current study, identity autonomy is tested as an individual difference moderator of responses to identity denial.

Present Research

Across two studies, the present research examines Multiracials' forecasted (Study 1) and actual (Study 2) responses to experiencing identity denial and provides a first test of how the race of the denied identity and the race of the denial perpetrator influence these experiences. Additionally, Study 2 investigates how experiencing identity denial impacts various racial identification processes, including how Multiracial individuals perceive their own racial identity, present their racial identities to others, and conceptualize the centrality of their racial identities.

Rejecting someone from a group that is an important part of their identity is akin to denying their fundamental need to belong (Baumeister & Leary, 1995; Eisenberger et al., 2003). Consequently, denying individuals access to an identity that is central to their self-concept could motivate them to maximize positive social identity (Tajfel et al., 1979) by proving that they are part of that group (Branscombe et al., 1999). When utilizing the lens of these well-established social psychological theories to make predictions about Multiracials' responses to identity denial, the picture is not completely clear. For example, if an individual belongs to multiple groups and they are simultaneously rejected from one and categorized into another, how does this impact belongingness to each group? Additionally, how might individuals who can shift between racial identities prove that they belong to a group in order to maximize positive identity? Relatedly, what role does the race of the person perpetrating the rejection play on whether individuals decide to engage in processes to strengthen identification with the group to which they were denied? The current studies seek to address these questions.

Hypotheses

Hypothesis 1. Based on principles of hypodescent (both in terms of categorization of and self-identification among Multiracials) and ingroup overexclusion in the United States (Castano et al., 2002; Ho et al., 2011; Leyens & Yzerbyt, 1992), majority-minority Multiracials are more likely to be categorized into (Halberstadt et al., 2011, Ho et al., 2011, Peery & Bodenhausen, 2008; see Chen & Hamilton, 2012 for contrary evidence) identify with and feel a sense of belonging to their racial minority identity (Davenport, 2018; Khanna & Johnson, 2010). Thus, denial from one's racial minority identity should be especially negative and impactful. I predict a main effect of denied racial identity such that denial of one's racial minority group membership compared to racial majority group membership will result in more negative affect and increased likelihood of identity assertion.

Hypothesis 2. Prior work has not fully examined the interactive effects of the race of the denied identity and race of denial perpetrator on responses to identity denial. Instead, it has exclusively focused on denial experiences where the race of the denied identity matches the race of the denial perpetrator. To this point, the literature has established that for majority-minority Multiracials, denial of one's racial minority identity by a racial minority ingroup member has negative consequences and denial of one's White identity by a White ingroup member also has negative consequences. I predict that a cross-race identity denial in which one's racially minoritized identity is denied (e.g., racial minority identity denied by a White perpetrator) will elicit more negative affective responses and increased likelihood of identity assertion than a cross-race identity denial in which one's White identity is denied (e.g., White identity denied by a racial minority perpetrator). Because majority-minority Multiracials are more likely to identify with their racial minority group, when this identity is

denied by an individual that does not belong to that group and thus is an illegitimate gatekeeper of group membership, affective responses will be the most negative and identity assertion will be most likely under these circumstances. In contrast, having one's White identity denied by a racial minority perpetrator implies a form of inclusion by a legitimate gatekeeper of the more preferred group and thus likelihood of identity assertion and negative affect should be reduced.

Exploratory Hypotheses

Prior research has not examined identity-specific responses to identity denial that involve how individuals conceptualize, perceive and/or present their racial identities. The literature on categorization threat hypothesizes that highly committed members tend to respond to identity threats by increasing identification with their group and displaying group prototypical behavior. Additionally, self-verification theory proposes that in response to instances of identity denial, Multiracials should assert their denied identity. Alternatively, social tuning hypothesis proposes that Multiracials may respond to identity denial by altering self-perceptions to align with the perpetrator who miscategorized their racial identity. The current study tests these competing hypotheses by exploring measures of self-perception, self-presentation and racial self-identification following experiences of identity denial.

Study 1

Study 1 investigated Multiracial individual's forecasted affective and behavioral responses to experiencing identity denial. Multiracial participants were asked to imagine having one of their racial identities denied (either majority race or minority race) by either a racially matched monoracial minority perpetrator or a monoracial White perpetrator. They

were then asked to predict how this experience would make them feel and how likely they would be to assert their denied identity. Open-ended responses were also analyzed and coded to gather descriptive information on the percentage of participants who had experienced identity denial during their lifetime and in what context these denial experiences were most likely to occur.

Method

Participants and Procedure

Two hundred eighty Multiracial participants were recruited using CloudResearch (N = 155) and Prolific (N = 125) online platform participant pools. Thirty-three participants were removed for not identifying as part-White Multiracial and/or not completing all key measures resulting in a final sample of N = 247 [CloudResearch n = 137, ProlificCo n = 110]. A post-hoc sensitivity analysis using G*Power (Faul et al., 2009) suggests that this sample provided 90% power to detect a minimum effect size of $\eta_p^2 = .025$ for 2×2 ANOVAs. All participants were compensated \$1 for their participation. The breakdown of racial demographics for the study were as follows: 35.6% Latinx-White, 25.1% Asian-White, 19.8% Black-White, 4% Native American-White, 0.4% Native Hawaiian or Pacific Islander-White and 15.1% of participants that identified with a combination of White and 2 or more racial minority identities [Native American, Native Hawaiian or Pacific Islander, Black, Asian and/or Latinx].

Participants were told they were completing a survey examining the experiences of Multiracial individuals and how various experiences impact their understanding of their racial identity. After filling out their racial identity, participants were instructed to engage in

an “imagining exercise”. Depending on the conditions to which they were randomly assigned, participants were asked to “imagine a scenario in which a _____ person told you that you weren’t *really* _____ because of your mixed-race heritage”. If participants were in the *White Denial Perpetrator* condition ($n = 127$), the first fill-in-the-blank was populated with “White”. If participants were in the *Racial Minority Denial Perpetrator* condition ($n = 120$), the first fill-in-the-blank was populated with the participant’s matched racial minority identity. If participants were in the *White Identity Denied* condition ($n = 123$), the second fill-in-the-blank was populated with “White”. If participants were in the *Racial Minority Identity Denied* condition ($n = 124$), the second fill-in-the-blank was populated with the participant’s racial minority identity. If the participant had multiple racial minority identities ($n = 38$), only one was assigned at random for each of the fill-in-the-blanks. There were 62 participants in the White denial perpetrator/Racial minority identity denied condition, 65 participants in the White denial perpetrator/White identity denied condition, 62 participants in the Racial minority denial perpetrator/Racial minority identity denied condition, and 58 participants in the Racial minority denial perpetrator/White identity denied condition.

After the imagining exercise, participants forecasted their affective responses to the identity denial scenario. Next, participants completed a measure concerning their likelihood of identity assertion following the imagined identity denial. Participants then answered questions related to racial identity autonomy and identification as Multiracial – both measures have been used in prior work on identity denial (Albuja et al., 2019). Lastly, participants were shown an open-ended section where they were invited to describe personal experiences of identity denial.

Measures

Affect

Affect was measured using a modified version of Positive and Negative Affect Schedule (PANAS; Watson et al., 1988). The original PANAS includes 10 items that measure positive affect (e.g., excited and proud) and 10 items that measure negative affect (e.g., upset and distressed). For this study, some items that were deemed irrelevant and/or unrelated were removed (e.g., active, strong and alert) and other items that have been shown to be relevant to instances of identity denial and the Multiracial experience of navigating multiple identities (e.g., offended and angry) were included (Albuja et al., 2019; Bowles, 1993; Cheryan & Monin, 2005). Using a scale of 1 (*very slightly or not at all*) to 5 (*extremely*), participants indicated “To what extent would you feel _____ as a result of the scenario you imagined previously” for each of the affect items. See Appendix A for full scale.

For the measure of affect, I was primarily interested in negative affective responses to imagining identity denial experiences and thus analyses will focus only on those items. More specifically, I was interested in whether experiencing identity denial would result in different patterns in approach-oriented negative affective responses (i.e., anger) compared to avoidance-oriented negative affective responses (i.e., shame). I separated the negative affect items into two separate clusters: *External Negative Affect* (Angry, Irritated, Offended and Annoyed; $\alpha = .92$) and *Internal Negative Affect* (Sad and Ashamed; $\alpha = .76$). These two clusters are statistically highly correlated $r(244) = .74, p < .001$, but they are conceptually distinct and prior work has distinguished between inhibitory and agitative negative affect

(Davitz, 1969) as well as active and internal negative affect (Brand & Leckie, 1988).

Additionally, and most relevant to the current study, a surplus of evidence finds that certain types of negative affect – such as anger – derives from or is related to approach-oriented motives whereas other types of negative affect such as fear and sadness are associated with avoidance-oriented motives (for review, see Carver & Harmon-Jones, 2009). The use of two separate negative affect clusters allows an examination of whether and in what cases identity denial elicits external and/or internal negative affective responses.

Racial Identity Autonomy

Participants indicated their agreement with the following statements on a 7-point scale from 1 (*strongly disagree*) to 7 (*strongly agree*): “I feel that I can racially identify as I want”; and “I feel that I decide how I want to racially identify.” Past work using this scale has reported Cronbach’s alphas between .82-.89 (Albuja et al., 2019; Albuja et al., 2020; Sanchez, 2010), and in the present sample, $\alpha = .78$. Items within the scale were coded such that higher scores indicate greater identity autonomy.

Multiracial Identification

An adapted version of the Multidimensional Inventory of Black Identity (MIBI; Sellers et al., 1997) measured participants’ Multiracial identification. Seven items ($\alpha = .87$) from the racial centrality subscale were used in the current study to assess the degree to which being Multiracial is central to the participant’s self-concept. A sample item includes “Being Multiracial is an important reflection of who I am”. Responses to each item ranged from 1 (*strongly disagree*) to 7 (*strongly agree*), and items within the scale were coded such that higher scores indicate higher racial centrality. See Appendix B for full scale.

Personal Experiences with Identity Denial

In addition to having participants imagine experiencing identity denial and forecast their responses, we included an open-ended item asking participants to share whether they had experienced identity denial. Participants read the following definition of identity denial: “Situations in which a person tells you that you aren't truly a member of one of your racial groups because of your mixed-race identity” and asked to state whether they had experienced identity denial before and if so, to expand on how these experiences made them feel. A simple coding scheme was developed to reflect whether participants had or had not reported experiencing identity denial as well as who the perpetrator of the denial experience was. The following seven categories emerged for the latter coding scheme: (a) general – did not specify; (b) family or romantic partners; (c) racial ingroup members; (d) strangers; (e) friends/peers; (f) professional settings such as the workplace, military or healthcare settings; (g) have not experienced identity denial

Three research assistants, who were unaware of the hypotheses being tested, coded the open-ended responses for the presence (“1”) or absence (“0”) of a personally experienced identity denial. If a response was coded as a 1, the assistants then coded the same response for the second set of codes: the source of the identity denial. Some responses were irrelevant and were thus not coded at all. Some responses were coded into multiple categories. Interrater reliability was high, with 90.7% agreement between the coders. Disagreements were resolved by discussion between me and a separate research assistant who had not coded the open-ended responses. Table 1 presents the percentage of participants that reported or did not report experiencing identity denial as well as the perpetrator of these experiences.

Table 1*Examples and Frequency of Responses in Each Identity Denial Coding Category*

Coding Category	Example	Percent of Sample Reported Type of Denial Experience
Did not specify – general experiences of identity denial	I have experienced this type of racism my whole life. I was not Black enough, or I talk White or act like a White girl. These incidences have stuck with me and have affected my life greatly	38.8%
Family or romantic partners	I have had my own White family members tell me that I am not really Black because I have been raised by a White family. This has made me extremely upset and angry because at the end of the day, my skin is still black.	11.5%
Other members from racial group	I have been invalidated many times over my Latina identity because I am not fluent in Spanish. When around full Latinas/os, I can feel they are treating me differently than each other. This made me feel sad and like I am a phony for claiming my Latina background when I'm not 100% fluent in Spanish.	35.5%
Strangers	I am mixed Black and White but I look more White. Usually when I tell people that I am part Black they just say wow...would never have guessed that. It makes me so sad.	4.4%
Friends/Peers	When I was growing up during middle school I was often teased for looking a little different than my other Hispanic classmates. Upon finding out that I had native American blood a couple of these kids from school would tease me and say that "I wasn't really Mexican" and would call me a Mutt. At the time it made me feel insecure but over time I grew to accept and embrace my racial identities.	16.9%
Professional settings: school, workplace, medical, military	One person at my job didn't acknowledge me as partially European/White because my physical features mostly resemble Latino features. I tried to explain to her but she thought I was just lying. It made me feel irritated, annoyed and frustrated. After I while I left because I was starting to lose my patience	9.8%
Have not experienced identity denial	I haven't experienced identity denial before, I feel comfortable with who I am and do not feel conflicted about my racial identities. It feels, to me, that the way I was raised was with both identities as a mix and never placing one as a core part of myself.	20.1%

Note: Some participants provided multiple personal examples of identity denial that fall into different categories, thus percentages sum to over 100.

Results

Descriptive statistics and zero-order correlations between variables of interest are presented in Table 2. To test hypotheses related to the independent and joint impact of different components of the identity denial experience on forecasted affective responses and likelihood of identity assertion, I conducted a series of 2 (Racial Identity Denied: White vs. racial minority) \times 2 (Race of Denial Perpetrator: White vs racial minority) between-subjects ANOVAs.

Table 2

Correlations among Study 1 variables

	M (SD)	1.	2.	3.	4.	5.
1. Negative affect – external	2.96 (1.17)	--				
2. Negative affect – internal	2.12 (0.91)	.74***	--			
3. Identity assertion	5.44 (1.80)	.50***	.34***	--		
4. Racial identity autonomy	5.09 (1.44)	-.03	-.16*	.05	--	
5. Multiracial identification	4.80 (1.30)	.34***	.34***	.41***	.01	--

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

Negative Affect

External Negative Affect

As hypothesized, there was a significant main effect of racial identity denied, $F(1, 242) = 25.74, p < .001, \eta_p^2 = .10$, with participants forecasting stronger external negative affective responses to denial of a racial minority identity ($M = 3.31, SD = 1.13$) compared to denial of a White identity ($M = 2.60, SD = 1.11$). There was an unpredicted significant main effect of identity denial perpetrator, $F(1, 242) = 6.16, p = .014, \eta_p^2 = .03$, with participants forecasting stronger external negative affective responses to denial by a White perpetrator (M

= 3.12, $SD = 1.18$) compared to denial by a racial minority perpetrator ($M = 2.79$, $SD = 1.14$). Contrary to predictions, the interaction between the two factors was not significant, $F(1, 242) = 1.65$, $p = .201$, $\eta_p^2 = .01$.

Internal Negative Affect

As predicted, there was a significant main effect of racial identity denied, $F(1, 242) = 15.16$, $p < .001$, $\eta_p^2 = .06$, with participants forecasting stronger internal negative affective responses to denial of a racial minority identity ($M = 2.33$, $SD = 0.94$) compared to denial of a White identity ($M = 1.90$, $SD = 0.83$). Unlike with the measure of external negative affect, the main effect of denial perpetrator was not significant, $F(1, 242) = 0.24$, $p = .627$, $\eta_p^2 = .001$. The interaction between the two factors was not significant, $F(1, 245) = 1.55$, $p = .215$, $\eta_p^2 = .006$.

Identity Assertion

As predicted, there was a significant main effect of racial identity denied, $F(1, 242) = 10.13$, $p = .002$, $\eta_p^2 = .04$, with participants forecasting greater likelihood of identity assertion in response to denial of a racial minority identity ($M = 5.80$, $SD = 1.57$) compared to denial of a White identity ($M = 5.08$, $SD = 1.96$). The main effect of denial perpetrator was not significant, $F(1, 242) = 1.18$, $p = .278$, $\eta_p^2 = .01$. The interaction between the two factors was not significant, $F(1, 242) = 0.31$, $p = .581$, $\eta_p^2 = .001$.

Moderator Analyses

Multiracial identification did not moderate any of the above effects (See Table 3). The measure of identity autonomy was influenced by the manipulation and thus was not

tested as a moderator. All individual difference variables in Study 2 were collected prior to the experimental manipulation in Study 2 to ensure they could be tested as moderators.

Table 3

<i>Moderation Analyses for Multiracial Identification (Study 1)</i>	
Multiracial Identification	
External Negative Affect	F(1, 237), <i>p</i> , η_p^2
Effect of ID Denied.	32.383, <i>p</i> < .001, .120
Effect of ID Perp	9.067, <i>p</i> = .003, .037
Effect of Ind. Diff.	39.352, <i>p</i> < .001, .142
ID Denied x ID Perp	1.606, <i>p</i> = .206, .007
ID Denied x Ind. Diff.	0.227, <i>p</i> = .634, .001
ID Perp x Ind. Diff.	3.250, <i>p</i> = .073, .014
3-way Interaction	0.651, <i>p</i> = .421, .003
Internal Negative Affect	F(1,302), <i>p</i> , η_p^2
Effect of ID Denied	18.794, <i>p</i> < .001, .073
Effect of ID Perp	0.676, <i>p</i> = .412, .003
Effect of Ind. Diff.	34.966, <i>p</i> < .001, .129
ID Denied x ID Perp	1.575, <i>p</i> = .211, .007
ID Denied x Ind. Diff.	0.200, <i>p</i> = .655, .001
ID Perp x Ind. Diff.	1.939, <i>p</i> = .165, .008
3-way Interaction	0.235, <i>p</i> = .629, .001
Identity Assertion	F(1,302), <i>p</i> , η_p^2
Effect of ID Denied.	12.479, <i>p</i> < .001, .050
Effect of ID Perp	2.293, <i>p</i> = .131, .010
Effect of Ind. Diff.	52.080, <i>p</i> < .001, .180
ID Denied x ID Perp	0.309, <i>p</i> = .579, .001
ID Denied x Ind. Diff.	0.124, <i>p</i> = .725, .001
ID Perp x Ind. Diff.	2.892, <i>p</i> = .090, .012
3-way Interaction	0.204, <i>p</i> = .652, .001

Note. Significant effects are bolded.

Discussion

The purpose of Study 1 was to provide a more nuanced examination of Multiracial people's experiences with identity denial than previous research has to this point. Although prior work has demonstrated that identity denial experiences are psychologically distressing, the specific components of these experiences had not yet been explored. The current study

addresses this gap by examining how the racial identity denied and the race of the denial perpetrator impact forecasted responses to instances of identity denial. Majority-minority Multiracial participants who imagined having their racial minority identity denied forecasted stronger negative affective responses and increased likelihood of asserting their identity compared to participants who imagined having their White identity denied. These findings provide supportive evidence that majority-minority Multiracial individuals conceptualize their racially minoritized identity as more central (Khanna & Johnson, 2010; Root, 1992) and extend these findings to a variety of minority-White Multiracials. The race of the denial perpetrator only predicted differences for the measure of external negative affect, with participants forecasting stronger external negative affective responses when imagining their identity was denied by a White perpetrator compared to a racial minority perpetrator. Prior work has highlighted anger and feeling offended as especially pertinent affective responses to identity denial but have not disentangled different types of negative affect to directly test this. The difference in patterns between internal and external negative affect suggest that having one's racial minority identity denied increases both internal (sadness and shame) and external (anger and irritation) affect, but only more approach-oriented negative affect when the denial perpetrator is White

In sum, findings from Study 1 provide initial evidence that the race of the identity denied, and race of denial perpetrator *independently* influence responses to forecasted responses to identity denial. There was no evidence of the predicted interactive effects of these factors. However, imagining identity denial experiences is categorically distinct from actually experiencing identity denial which was manipulated in Study 2.

Study 2

Study 2 had two primary goals. First, it sought to extend findings from Study 1 by manipulating identity denial instead of asking participants to imagine an identity denial experience. In addition to measuring negative affect and likelihood of identity assertion, Study 2 investigated Multiracial individuals' identity-specific responses to experiencing identity denial, including racial self-presentation and racial self-perception. Racial self-presentation was operationalized by comparing racial prototypicality ratings of participant's self-portrait photographs uploaded prior to the identity denial and avatars that they generated after experiencing identity denial. The photographs and avatars were rated by an independent sample for how prototypically Asian or Latinx (based on racial minority status of the participant) they appeared and how prototypically White they appeared. Racial self-perception was operationalized by participant's accuracy in identifying their face among a lineup of their faces that had been morphed to appear more prototypically White or more prototypically racially minoritized (Asian or Latinx based on the racial minority status of the participant). Although no individual differences were found to moderate effects in Study 1, identity autonomy was tested again. In addition to measuring Multiracial identification as in Study 1, identification with each sub-racial identity was measured to test initial racial identification as a moderator of responses to identity denial and also to measure potential changes in racial identification as a function of and response to experiencing identity denial.

Method

Participants

Multiracial (N = 137) undergraduate students were recruited from three separate participant pools. The course credit pool included Psychological and Brain Sciences students participating in research for course credit. The paid subject pool included Psychological and Brain Sciences students who had previously signed up to be contacted for paid studies. The third subject pool was recruited by a university-wide email sent by the Registrar to all UCSB students who indicated they had multiple racial identities. Participants recruited from the paid subject pools were compensated with a \$10 Amazon gift card for their participation in the experiment. All contacted participants were sent an email inquiring about their interest to participate in a study on “mood and avatar use” and provided a link to the prescreening survey. All participants who completed the prescreening survey were entered into a \$20 raffle. Only participants that uploaded a photograph of themselves, completed all the prescreening measures and provided their email address were contacted to schedule a time to participate in the actual experiment. Due to the demographic characteristics of UCSB, only individuals who identified as Latinx/White or Asian/White were recruited to participate. Using the effect sizes found in Study 1 for a significant 2×2 interaction, we sought to recruit 125 participants to achieve 80% power. Participants who did not identify as Multiracial (n = 13), did not report any White ancestry (n = 12) or those who uploaded low-quality self-portrait photographs (n = 11) in the prescreening survey were not invited to participate. Additionally, participants who did not complete all the primary dependent measures (n = 2), were subject to experimenter error (n = 2), did not believe the identity denial manipulation (n = 6) or incorrectly identified the race of the experimenter (n = 6) during the study were removed, leaving a final sample of 85 majority-minority Multiracial participants². Sensitivity

² The present research focuses on majority-minority Multiracials because they represent the largest Multiracial

analyses suggested that this sample provided 80% power to detect a minimum effect size of $\eta_p^2 = .08$. The sample was 53% Asian-White ($n = 45$), 46% Latinx-White ($n = 39$) and 1% Asian-Latinx-White ($n = 1$). The sample was 85% female ($n = 72$).

Independent Raters

A separate sample was recruited to serve as independent raters of the participant-generated avatars as well as the self-portrait photographs submitted by the participants in the prescreening survey. In total, 1,723 participants were recruited from Prolific. 92 participants were removed for incorrectly recalling the racial/ethnic group they were asked to imagine while completing their racial prototypicality ratings, leaving a final sample of 1,631 participants. The demographic breakdown of the sample was as follows: 66.7% White or European American, 10.1% Multiracial, 9.3% Asian or Asian American, 6.4% Latino/a or Latin American, 5.5% Black or African American, 0.4% Native American or Alaska Native, 0.3% Middle Eastern or North African, 0.1% Native Hawaiian or Pacific Islander and 1.1% who did not specify their race. 73.9% of the sample identified as Women, 21% identified as Men, 3.9% identified as non-binary and 1.1% did not specify their gender identity.

Procedure

Prescreening Survey

Participants first completed a prescreening survey. In this survey, participants filled out a demographic form asking for their racial and gender identification in addition to other filler demographic information such as international, first-generation and transfer student

groups in the United States (Brittingham & de la Cruz, 2004). Additionally, Asian-White and Latinx-White participants were not subdivided into separate groups due to sample size limitations.

status. Next, participants completed scales measuring identity autonomy, Multiracial identification and identification with each self-identified racial identity. For example, a participant who self-identified as White and Asian, completed measures related to identification with their White and Asian identities as well as identification as Multiracial. Lastly, participants were instructed to upload a front-facing high-quality photograph of their face in which they had a neutral expression as well as a place of personal importance. Three sample photographs and three pictures of places of personal importance were provided for participants. At the beginning of the prescreening survey, participants were told that the photograph they uploaded along with the place of personal importance would be viewed and rated by participants in a separate study on facial perception and first impressions. Only the photo they uploaded was later rated. After uploading their images, participants were asked to provide their email address so that they could be contacted for part 2 of the study.

Main Experiment

Between 5-14 days after completing the prescreening survey, qualified participants were contacted to schedule a time to participate in the experiment via the video communications platform Zoom. At the time of their scheduled sign-up, participants were sent an email with a Qualtrics link redirecting them to the consent form. In the consent form they were told they would be interacting with an experimenter on Zoom, creating their own avatar and answering some questions about their identity and experiences interacting with others. Participants were also informed that the study session would be recorded via Zoom and viewed by the primary investigator and research assistants at a later date. After signing the consent form, participants were told to follow the link on their screen which would redirect them to the Zoom platform where the experimenter would be waiting to walk them

through the experiment. Seven total experimenters (3 Latino/a, 2 Asian, 2 White) were used for this study and were scheduled based on availability, denial perpetrator condition and racial background of the participant. Because a large majority of participants were Female and 2 of the experimenters were Male, they were not always gender-matched.

Upon entering the Zoom platform, the experimenter initiated the identity denial manipulation. The procedure mirrored previous studies that have manipulated an identity denial experience (Albuja et al., 2019; Cheryan & Monin, 2005). In the *Racial Minority Identity Denied* condition, the experimenter said, “I’m sorry, our study coordinator must’ve made a mistake. You actually have to be ____ (either Latinx American or Asian American based on participants’ racial minority status) for this particular study”. In the *White Identity Denied* condition, the experimenter said, “I’m sorry, our study coordinator must’ve made a mistake. You actually have to be White for this particular study”. If after approximately 5 seconds the participant did not respond or if the participant responded but did not assert their identity, the experimenter said, “Well, because you have already shown up for the study, I think it’s okay if you continue, but I will make a note in my records that you’re not actually _____.” and filled in the blank with whichever identity they had initially denied. If the participant responded by asserting their identity, the experimenter said, “Well, because you have already shown up for the study, I think it’s okay if you continue but I will make a note in my records that you’re not fully _____.” and fill in the blank with whichever identity they had initially denied (Albuja et al., 2019). See Appendix C for link to clip demonstrating the identity denial manipulation. The second factor manipulated involved the race of the experimenter (the denial perpetrator). In the *Racial Minority Denial Perpetrator* condition, the experimenter was either Asian American (for Asian-White participants) or Latinx

American (for Latinx-White participants). In the *White Denial Perpetrator* condition, the experimenter was White³. There were 20 participants in the White denial perpetrator/Racial minority identity denied condition, 21 participants in the White denial perpetrator/White identity denied condition, 22 participants in the Racial minority denial perpetrator/Racial minority identity denied condition, and 22 participants in the Racial minority denial perpetrator/White identity denied condition.

Immediately following the identity denial manipulation, participants were sent a link to a Qualtrics survey via the chat function in Zoom. Upon opening the survey link, participants reported affect using the same scale from Study 1 before moving to the next portion of the study. Next, participants completed the self-perception task which required choosing one face out of a randomized lineup of 9 faces that the participant believed was the photograph they had uploaded in the prescreening survey (See Measures section below for full description of the task). Next, the experimenter walked participants through the avatar creation task. Participants were instructed to create an avatar that represented them. For this exercise, they had full control over the various characteristics of their avatar including facial features, hairstyle, skin tone and clothing accessories (See Appendix D for example avatar).

After creating their avatar, participants completed items measuring identity autonomy. Next, participants completed the same racial identification measures as they did in the prescreening survey. Lastly, participants completed three manipulation checks. Participants were fully debriefed and provided the opportunity to schedule a meeting to further discuss the experiment with the primary investigator.

³ There were no experimenter effects, meaning none of the significant effects described in the results section were impacted by who the experimenter was.

Independent Raters

The online sample of independent raters was recruited to view the participant's self-portrait photographs and avatars (i.e., participant-generated face stimuli) and rate them on racial prototypicality. Independent raters were shown 10 self-portrait photographs and 10 avatars and asked to rate how racially prototypical they appeared. Raters were randomly assigned into 1 of 3 surveys. The surveys differed only with regards to the racial group that raters were told to bring to mind when making their prototypicality ratings. To maintain consistency across racial prototypicality ratings, the independent raters were only responsible for rating participant-generated face stimuli with one racial group in mind. For example, raters assigned to the "White prototypicality ratings" survey were told to bring to mind what the "average member of the racial/ethnic group White looks like" before viewing and rating 10 avatars and 10 self-portrait photographs for racial prototypicality. See Appendix E for full instructions.

Dependent Measures

Self-reported Affect

As in Study 1, affect was measured using a modified version of Positive and Negative Affect Schedule (PANAS; Watson et al., 1988). Using a scale of 1 (*very slightly or not at all*) to 5 (*extremely*), participants indicated "The extent to which you are currently feeling _____" for each of the affect items. Affect was measured immediately following the identity denial experience.

To maintain consistency with Study 1, the negative affect items were split into the same two clusters: *External Negative Affect* (Angry, Irritated, Offended and Annoyed; $\alpha =$

.90) and *Internal Negative Affect* (Unhappy, Sad, and Ashamed; $\alpha = .82$) with the additional item of “Unhappy” included in the internal negative affect cluster.

Self-perception

The self-portrait photograph uploaded by participants in the prescreening survey was used as the “seed” for the self-perception measure. The seed images were cropped and edited in a way to create consistency across images and prepared for the morphing procedure (See Appendix F for sample self-portrait photograph and accompanying morphs). The seed facial image was morphed through the Morpheus Photo Morpher, Version 3.17 (Morpheus Software, Inc.) with 2 faces. One of the faces was a same-gender monoracial White individual (White morph). And, based on the participants’ racial background (Asian-White or Latinx-White), the other face was a same-gender monoracial Asian or Latino/a individual (Racial minority morph). The monoracial faces used for the morphing process were extracted from the Chicago Face Database (CFD; Ma et al., 2015; www.chicagofaces.org). The CFD is a free database of high-resolution, standardized digital photographs of individuals with neutral emotion expression from various racial/ethnic groups. Faces from the CFD have been normed and rated on a host of characteristics, including racial prototypicality. The monoracial faces used for the morphing procedure were chosen based on these racial prototypicality ratings. Prior work finds that a significant proportion of the variability in ratings of racial prototypicality among Asian, Black, Latino, and White faces is explained by differences in physical measurements of the face and hair (Ma et al., 2018; Zhuang et al., 2010) and thus Asian, Latino/a and White faces that had been previously rated as extremely racially prototypical were chosen for the morphing procedure. A total of 8 monoracial faces (4 White, 2 Asian and 2 Latino/a) from the CFD were used for the morphing procedure. Each

participant's uploaded photograph was randomly assigned to be morphed with one White face and one racial minority face.

The morphing procedure was adapted from previous research (Epley & Whitchurch, 2008); participants' facial image was morphed in 10% increments (up to 40%) with a monoracial White face and a monoracial racial minority face. Four of the faces were morphed to appear progressively more prototypically White (10% overlap, 20% overlap, 30% overlap, 40% overlap with the White morph) and – depending on the participant's racial background – four of the faces were morphed to appear progressively more prototypically Hispanic or Asian (10% overlap, 20% overlap, 30% overlap, 40% overlap with the racial minority morph). For the self-perception task, participants were asked to “Choose the photograph you think is the original photograph. In other words, pick the photograph that you think is actually you” and were shown the nine faces (eight morphs + the seed photograph).

For this measure, a score of 0 indicated participants correctly identified the seed photograph as their face. Scores above 0 indicated participants incorrectly identified a White morphed face as their face whereas scores below 0 indicated participants incorrectly identified a racial minority morphed face as their face. The larger the absolute value of the score on the self-perception measure, the greater overlap with a morph chosen by the participant. For example, a score of -2 indicates a participant incorrectly chose a face with 20% overlap with the racial minority morph, whereas a score of +3 indicates a participant incorrectly chose a face with 30% overlap with the White morph. 43.5% of participants chose a face that had been morphed with a racial minority monoracial face, 24.7% chose a face that had been morphed with a White monoracial face and 31.8% correctly chose the seed photograph.

Self-presentation

The measure of self-presentation was comprised of a difference score comparing the average racial prototypicality rating of the photograph uploaded by the participant and racial prototypicality rating of the avatar generated by the participant. Each participant's photograph and avatar were rated by approximately 200 independent raters. Each participant had their photograph rated for how prototypically White it appeared by approximately 100 independent raters and how prototypically Asian or Latinx (based on their racial minority background) it appeared by a different set of approximately 100 independent raters. Additionally, each participant had the avatar they generated rated for how prototypically White it appeared by approximately 100 independent raters and how prototypically Asian or Latinx it appeared by a different set of approximately 100 independent raters. Avatars and photographs were randomly assigned to independent raters based on the race of the racial prototypicality ratings. So, a participant whose face and avatar were rated for White prototypicality by one set of independent raters would not also have their face and avatar rated for Asian/Latinx racial prototypicality. However, participants might have their face and avatar rated for White prototypicality by the same raters. Each participant ended up with four racial prototypicality ratings: White prototypicality for the avatar ($M = 4.22$, $SD = 1.24$), White prototypicality for the photograph ($M = 4.44$, $SD = 1.16$), racial minority prototypicality for the avatar ($M = 3.35$, $SD = 1.10$), and racial minority prototypicality for the photograph ($M = 3.09$, $SD = 1.12$). The scale used for racial prototypicality ratings ranged from 1 (*Extremely non-prototypical*) to 7 (*Extremely prototypical*).

To calculate the self-presentation measure, I first calculated the baseline prototypicality score for each type of stimulus (i.e., avatar and photograph). To do this, I

created a difference score by subtracting each participant's average racial minority prototypicality rating from their White prototypicality ratings (e.g., White prototypicality rating for avatar – Racial minority prototypicality rating for avatar = baseline prototypicality rating for avatar). Positive values indicate the baseline prototypicality ratings for a given stimuli were rated as more prototypically White and negative values indicate that the baseline prototypicality ratings for a given stimuli were rated as more prototypically racial minority. Then, I created a difference score by taking the baseline racial prototypicality rating of the photograph and subtracting it from the baseline racial prototypicality rating of the avatar (i.e., Baseline prototypicality rating for avatar – Baseline prototypicality rating for photograph). Positive values indicate participants generated an avatar that was rated as more prototypically White than the photograph; in other words, they self-presented as Whiter than their actual photograph. Negative values indicate participant generated an avatar that was rated as more prototypically racial minority than the photograph; in other words, they self-presented as more racially minoritized than their actual photograph.

White Identification

The same items used to measure Multiracial identification in Study 1 were adapted to measure participants' identification with their White identity (See Appendix B). Participants completed the same scale in the prescreening survey ($\alpha = .72$) and the main study ($\alpha = .72$) to measure changes in White racial identification following experiencing identity denial.

Racial Minority Identification

The same items used to measure Multiracial and White racial identification were adapted to measure participants' identification with their racial minority (either Asian or

Latinx) identity. Participants completed the same scale in the prescreening survey ($\alpha = .79$) and again in the main study ($\alpha = .82$) to measure changes in racial minority identification following experiencing identity denial.

Identity Assertion

Using the video and audio recordings from the experiment, two research assistants coded whether participants asserted their identity following the denial experience. If the participant stated that they were a member of the racial group to which they had been denied, they were coded as engaging in identity assertion. If the participant did not respond at all following the identity denial or responded in a way that did not assert their identity, they were coded as not engaging in identity assertion. There was 100% agreement between coders on behavioral identity assertion.

Moderators

Multiracial Identification

As in Study 1, an adapted version of the Multidimensional Inventory of Black Identity (MIBI; Sellers et al., 1997) measured participants' Multiracial identification. Seven items from the racial centrality subscale were used in the prescreening survey ($\alpha = .83$) to assess the degree to which being Multiracial is central to the participant's self-concept.

Racial Identity Autonomy

Participants indicated their agreement with the following statements on a 7-point scale from 1 (*strongly disagree*) to 7 (*strongly agree*): “I feel free to racially identify however I want”; “How I racially identify is my own choice.”; “The way that I racially

identify is completely up to me.”; and “I feel pressured to racially identify in a certain way” (Albuja et al., 2020). This scale was completed in the prescreening survey ($\alpha = .80$).

Manipulation Checks

At the conclusion of the experiment, participants completed three manipulation checks. The first asked participants about the plausibility of the identity denial. Participants were asked: “How believable was it when the experimenter told you that you were not able to participate in the study?” and were provided with a 1 (*not at all believable*) to 5 (*very believable*) scale ($M = 4.36$, $SD = 0.97$), with 93.4% of participants scoring 3 or above. The six participants that reported a score of 1 or 2 on this scale were removed from analyses⁴. The second manipulation check asked participants to recall which of their racial identities were denied. All participants correctly answered this question. The final manipulation check asked: “What do you think the racial/ethnic background of your experimenter was?” with a list of options. Six participants incorrectly identified the racial identity of their experimenter and were removed from analyses⁵. The 12 participants that failed these manipulation checks were evenly distributed across condition ($n = 4$ White identity denied/Racial minority perpetrator; $n = 2$ Racial minority identity denied/Racial minority perpetrator; $n = 2$ White identity denied/Racial minority perpetrator; $n = 4$ Racial minority identity denied/White denial perpetrator).

Results

⁴ Four of the six participants who failed this manipulation check were in the White identity denied/Racial minority perpetrator condition.

⁵ Four of the six participants who failed this manipulation check were in the Racial minority denied/White denial perpetrator condition

Descriptive statistics and zero-order correlations between variables of interest are presented in Table 4.

Table 4

Correlations among Study 2 variables.

	M (SD)	1	2	3	4	5	6	7	8	9	10
1. Negative affect – external	1.73 (0.86)	--									
2. Negative affect – internal	1.60 (0.77)	.63	--								
3. Self-perception	-0.40 (1.35)	-.03	.30	--							
4. Self-presentation	-0.47 (2.13)	-.05	-.04	.14	--						
5. Racial identity autonomy	4.10 (1.50)	-.24	-.16	-.02	.01	--					
6. Multiracial identification	4.55 (1.25)	.14	.06	-.30	-.05	.16	--				
7. White identification - prescreening	3.65 (1.22)	-.00	.20	.04	-.12	.07	.42	--			
8. White identification - experiment	3.82 (0.99)	-.08	.07	.29	-.01	-.04	.02	.51	--		
9. Racial minority identification - prescreening	4.45 (1.13)	.13	.13	-.33	-.01	.02	.77	.58	.05	--	
10. Racial minority identification - experiment	5.14 (1.05)	.29	.08	-.47	-.08	-.03	.60	.31	-.20	.69	--

Note: Significant correlations are bolded

To test the main hypotheses, a series of 2 (Racial Identity Denied: White vs. racial minority) \times 2 (Race of Denial Perpetrator: White vs racial minority) between-subjects ANOVAs were conducted on each dependent measure: negative affect (external and internal), self-perception and self-presentation.

Negative Affect

External Negative Affect

As predicted, and in replication of Study 1, there was a significant main effect of racial identity denied, $F(1, 81) = 5.11, p = .026, \eta_p^2 = .06$. Participants whose racial minority identity was denied reported stronger external negative affect ($M = 1.91, SD = 0.93$) compared to participants whose White identity was denied ($M = 1.55, SD = 0.74$).

Replicating Study 1, there was also a significant main effect of identity denial perpetrator, $F(1, 81) = 7.91, p = .006, \eta_p^2 = .09$. Participants whose identity was denied by a White perpetrator reported stronger external negative affective responses ($M = 1.97, SD = 0.95$) compared to participants whose identity was denied by a racial minority perpetrator ($M = 1.50, SD = 0.69$). The interaction between the two factors was also significant, $F(1, 81) = 6.39, p = .013, \eta_p^2 = .07$. Simple effects revealed that participants whose racial minority identity was denied by a White perpetrator reported stronger external negative affect than those whose racial minority identity was denied by a racial minority perpetrator, M difference = 0.91, $SE = .243, 95\% \text{ CI } [0.43, 1.39]; F(1, 81) = 14.08, p < .001, \eta_p^2 = .15$. In contrast, participants whose White identity was denied reported no difference in external negative affect as a function of the race of the denial perpetrator, M difference = 0.05, $SE = .240, 95\% \text{ CI } [-0.43, 0.53]; F(1, 81) = 0.41, p = .839, \eta_p^2 = .001$ (See Figure 1).

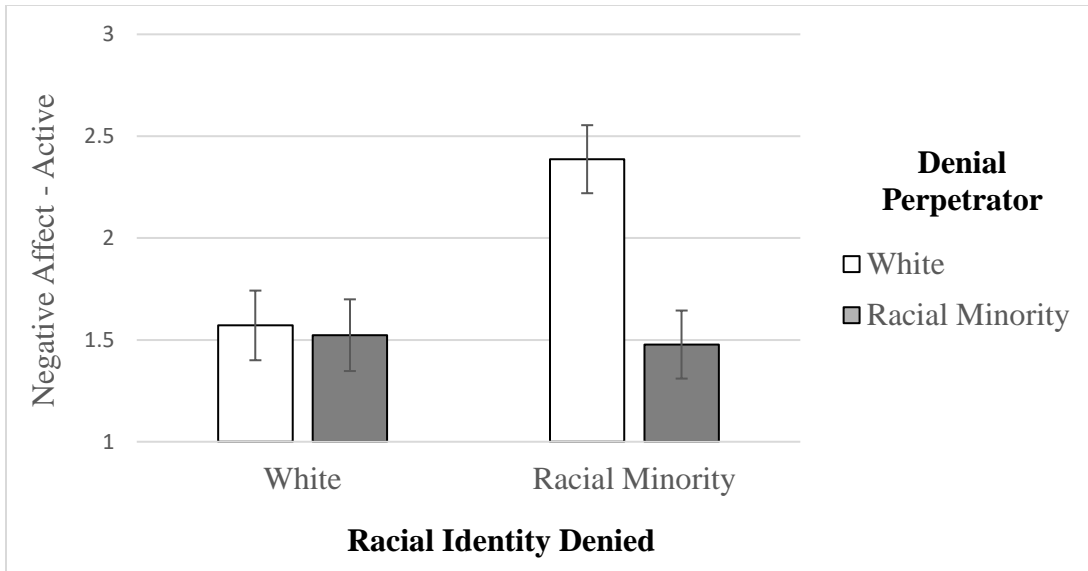


Figure 1. Effects of race of denial perpetrator and racial identity denied on external negative affect in Study 2. Error bars indicate standard error of the mean for each column.

Internal Negative Affect

As predicted, and in replication of Study 1, there was a significant main effect of racial identity denied, $F(1, 81) = 5.19, p = .025, \eta_p^2 = .06$. Participants whose racial minority identity was denied reported stronger internal negative affect ($M = 1.79, SD = 0.90$) compared to participants whose White identity was denied ($M = 1.43, SD = 0.57$). In replication of Study 1, the main effect of identity denial perpetrator was not significant, $F(1, 81) = 3.10, p = .082, \eta_p^2 = .04$. The interaction between the two factors was not significant, $F(1, 81) = 0.93, p = .337, \eta_p^2 = .01$.

Self-perception

Next, I examined participants' performance on the self-perception task. Positive values indicate participants chose a White-morphed version of their face and negative values indicate participants chose a racially minoritized-morphed version of their face. Scores closer

to 0 indicate greater accuracy in choosing the actual face uploaded in prescreening. The results revealed a main effect of identity denial perpetrator, $F(1, 81) = 6.52, p = .013, \eta_p^2 = .08$. Participants whose identity was denied by a White perpetrator chose significantly more racially minoritized versions of their face ($M = -0.76, SD = 1.50$) compared to participants whose identity was denied by a racial minority perpetrator ($M = -0.07, SD = 1.11$).

This main effect was qualified by a Racial Identity Denied \times Race of Denial Perpetrator interaction, $F(1, 81) = 8.89, p = .004, \eta_p^2 = .10$. Simple effects revealed that participants whose racial minority identity was denied by a White perpetrator chose more racially minoritized morphed faces than those whose racial minority identity was denied by a racial minority perpetrator, M difference = $-1.51, SE = .388, 95\% \text{ CI } [-2.28, 0.74]; F(1, 81) = 15.13, p < .001, \eta_p^2 = .16$. In contrast, participants whose White identity was denied did not differ in performance on the face recognition task as a function of the race of the denial perpetrator, M difference = $0.12, SE = .383, 95\% \text{ CI } [-0.65, 0.88]; F(1, 81) = 0.09, p = .761, \eta_p^2 = .001$ (See Figure 2).

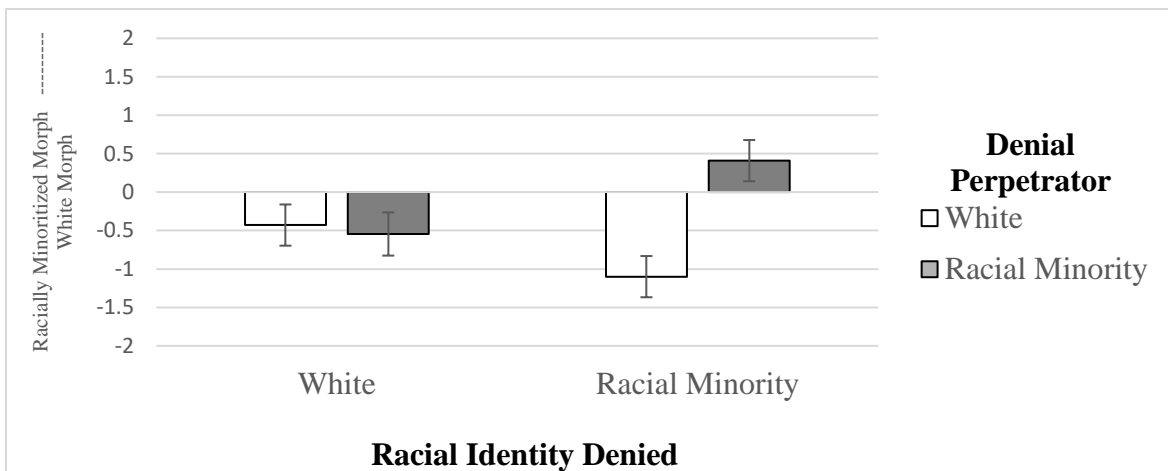


Figure 2. Effects of race of denial perpetrator and racial identity denied on self-perception task in Study 2. Values below 0 indicate participants chose a racially minoritized morphed

version of their face whereas values above 0 indicate participants chose a whiter morphed version of their face. Error bars indicate standard error of the mean for each column.

Self-presentation

Next, I examined the measure of self-presentation – the comparison between racial prototypicality ratings of the participants' actual self-portrait and the avatar they generated after their identity was denied. Positive values indicate participants created an avatar that was rated as more prototypically White in appearance compared to their own self-portrait. Negative values indicate participants created an avatar that was rated as more prototypically racially minoritized in appearance compared to their own self-portrait. The results revealed a main effect of identity denial perpetrator, $F(1, 81) = 7.40, p = .008, \eta_p^2 = .08$. Participants whose identity was denied by a White perpetrator created avatars that were rated as significantly more racially minoritized in appearance ($M = -1.09, SD = 1.87$) compared to participants whose identity was denied by a racial minority perpetrator ($M = 0.11, SD = 2.22$).

The Racial Identity Denied \times Race of Denial Perpetrator interaction was not significant, $F(1, 81) = 3.06, p = .084, \eta_p^2 = .04$. However, simple effects revealed a similar pattern to the measure of self-perception, such that participants whose racial minority identity was denied by a White perpetrator created avatars that were rated as appearing significantly more prototypically racially minoritized than those whose racial minority identity was denied by a racial minority perpetrator, M difference = $-1.98, SE = .630, 95\% \text{ CI } [-3.23, -0.73]; F(1, 81) = 9.87, p = .021, \eta_p^2 = .11$. In contrast, the avatars created by participants whose White identity was denied did not differ in racial prototypicality ratings as a function of the race of

the denial perpetrator, M difference = -0.43, $SE = .622$, 95% CI [-1.67, 0.81]; $F(1, 81) = 0.48$, $p = .492$, $\eta_p^2 = .006$ (See Figure 3).

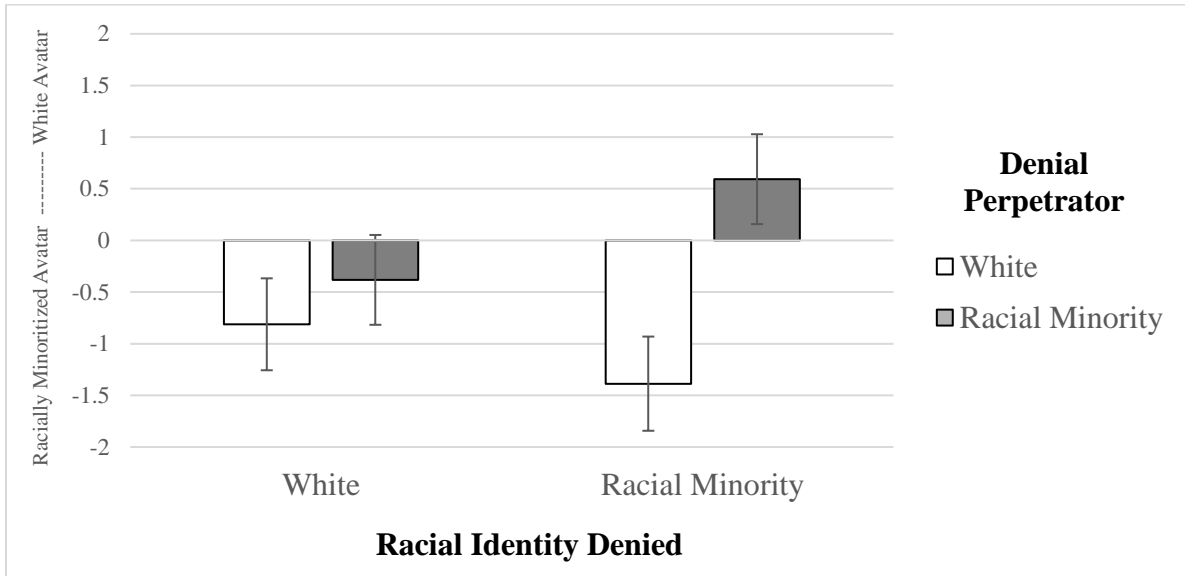


Figure 3. Effects of race of denial perpetrator and racial identity denied on self-presentation in Study 2. Values below 0 indicate participants created an avatar that was rated as appearing more racially minoritized in appearance relative to their actual face. Values above 0 indicate participants created an avatar that was rated as appearing more prototypically White in appearance relative to their actual face. Error bars indicate standard error of the mean for each column.

Identity Assertion

To allow for comparisons across studies, I first conducted a chi-square test of independence to examine the relation between race of identity denied and behavioral identity assertion (asserted or did not assert). The relationship was significant; $\chi^2(1, N = 85) = 4.30$, $p = .036$ such that participants whose racial minority was denied were more likely to assert their identity than those whose White identity was denied. These results map onto findings from Study 1, in which participants who imagined having their racial minority identity denied forecasted higher likelihood of identity assertion than those who imagined their White

identity being denied. A chi square test of independence examining the relation between denial perpetrator and identity assertion was not significant, $X^2 (1, N = 85) = 0.254, p = .654$. Lastly, I conducted a chi-square analysis examining the relation between race of identity denied, race of denial perpetrator and behavioral identity assertion. The relation between race of identity denied and identity assertion was significant when the perpetrator was White, $X^2 (1, N = 41) = 5.63, p = .018$, but the relation between race of identity denied and identity assertion was not significant when the perpetrator was a racial minority, $X^2 (1, N = 44) = 0.42, p = .517$. In other words, the observed number of participants who asserted their identity when their racial minority identity was denied by a White perpetrator exceeded the expected value as indicated by the Chi-square independence test (see Figure 4).

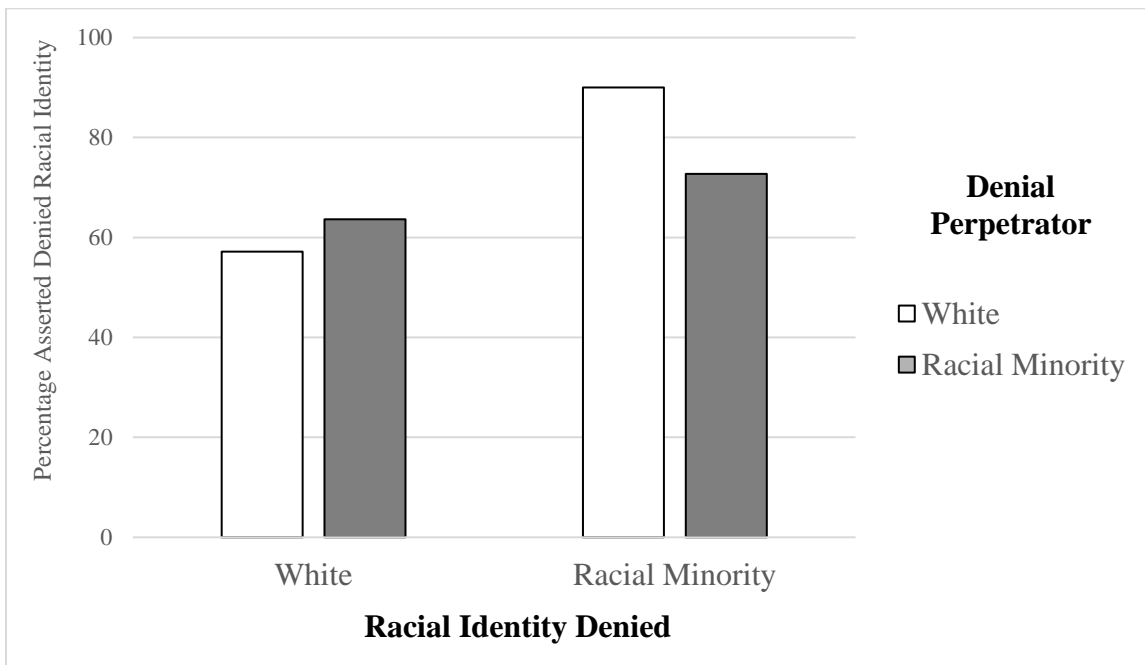


Figure 4. Chi-square analysis comparing identity assertion behavior as a function of race of identity denied and race of denial perpetrator.

Racial Identification

Next, I conducted a series of 2 (Racial Identity Denied: White vs. racial minority) \times 2 (Race of Denial Perpetrator: White vs racial minority) \times 2 (Racial Identification: pre vs. post identity denial) mixed model ANOVAs with repeated measures on the last factor. These analyses were employed to examine changes in racial identification following the experience of identity denial. In prescreening, all participants completed scales measuring identification with their White racial identity and racial minority (i.e., Asian or Latinx) identity. The same scales were completed following the identity denial manipulation.

Racial Minority Identification

A mixed ANOVA produced a main effect of racial minority identification, $F(1, 81) = 58.49, p < .001, \eta_p^2 = .419$, with participants identifying more strongly with their racial minority identity following the identity denial experience ($M = 5.14, SD = 1.05$) compared to prior to the identity denial ($M = 4.45, SD = 1.13$). This main effect was qualified by a three-way interaction between race of identity denied, race of denial perpetrator and pre and post measures of racial minority identification, $F(1, 81) = 7.04, p = .01, \eta_p^2 = .08$. I decomposed this three-way interaction by separately examining changes in racial minority identification as a function of the race of the denied identity. When participants' racial minority identity was denied, there was a main effect of denial perpetrator, $F(1, 81) = 9.18, p = .003, \eta_p^2 = .10$. Simple effects revealed that when the denial perpetrator was White, participants' racial minority identification became significantly stronger compared to when the denial perpetrator was a racial minority, M difference = 0.743, $SE = .258$, 95% CI [0.23, 1.26]; $F(1, 81) = 5.79, p = .005, \eta_p^2 = .093$. In contrast, when participants' White identity was denied,

there was no effect of denial perpetrator, $F(1, 81) = 0.02, p = .904, \eta_p^2 = .00$. See Figure 5 and note that in order to maintain consistency in presentation of findings, the repeated measures factor was converted to a difference score.

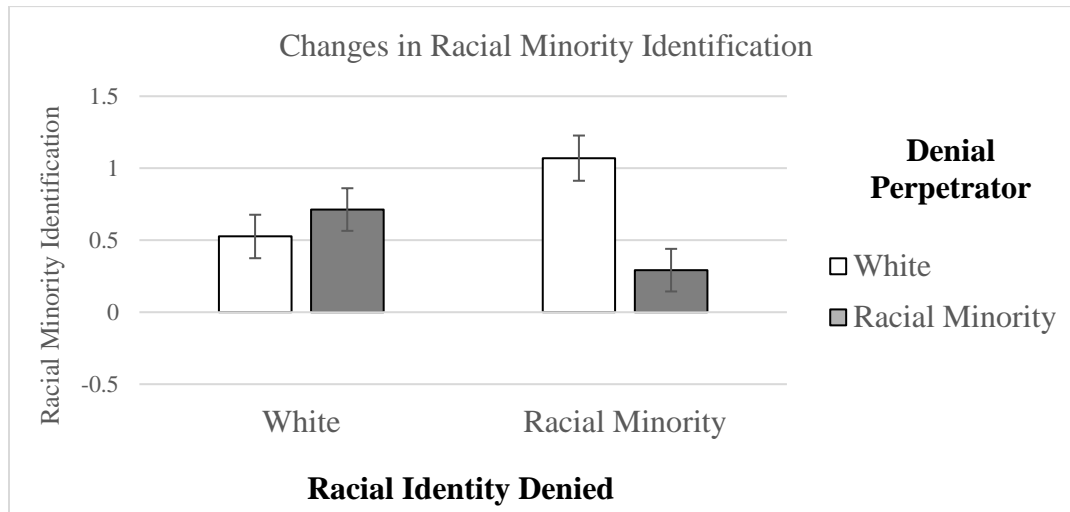


Figure 5. Effects of race of denial perpetrator and racial identity denied on changes in racial minority identification. Values above 0 indicate participants became more strongly identified following the denial experience. Error bars indicate standard error of the mean for each column.

White Identification

Unlike the measure of racial minority identification, a mixed ANOVA did not produce a main effect of White identification, $F(1, 81) = 1.83, p = .179, \eta_p^2 = .022$. Participants did not differ in White identification following the identity denial experience ($M = 3.82, SD = 0.99$) compared to prior to the identity denial ($M = 3.65, SD = 1.22$). However, consistent with racial minority identification, there was a significant three-way interaction between race of identity denied, race of denial perpetrator and pre and post measures of White identification, $F(1, 81) = 4.24, p = .043, \eta_p^2 = .05$. I decomposed this three-way interaction by separately examining changes in White identification as a function of the race of the denied identity.

When participants' racial minority identity was denied, there was a main effect of denial

perpetrator, $F(1, 81) = 10.32, p = .002, \eta_p^2 = .11$. Simple effects revealed that when the denial perpetrator was White, participants' White identification became significantly weaker and when the denial perpetrator was a racial minority member, participants become more White-identified, M difference = -0.835 $SE = .335$, 95% CI $[-1.50, -0.17]$; $F(1, 81) = 6.21, p = .015, \eta_p^2 = .071$. In contrast, when participants' White identity was denied, there was no effect of denial perpetrator, $F(1, 81) = 0.03, p = .870, \eta_p^2 = .00$. See Figure 6.

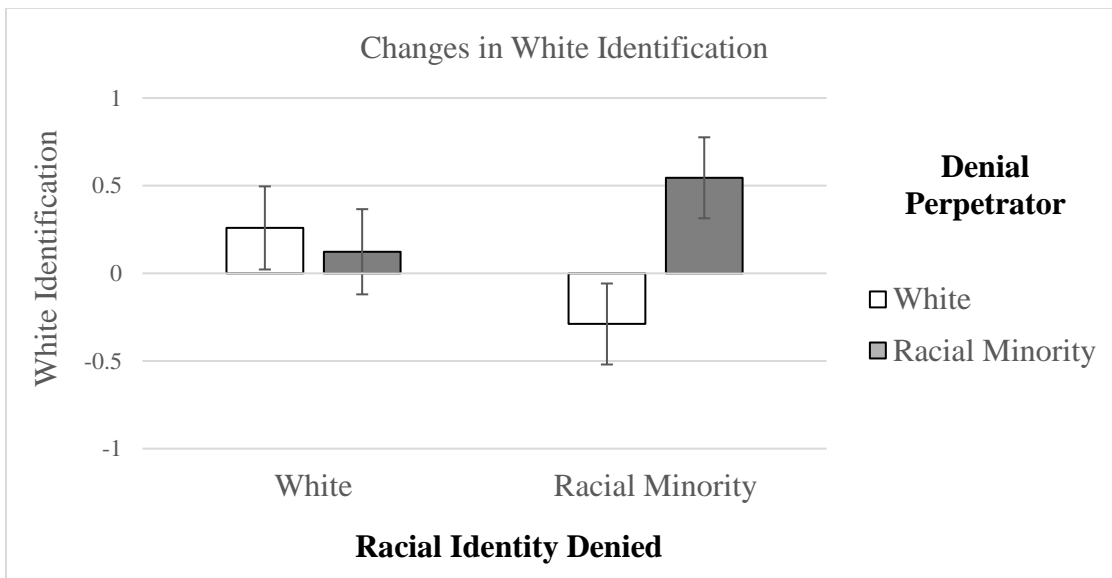


Figure 6. Effects of race of denial perpetrator and racial identity denied on changes in White identification. Values above 0 indicate participants became more strongly identified following the denial experience and values below 0 indicate participants became less strongly identified following the denial experience. Error bars indicate standard error of the mean for each column.

Moderator Analyses

Two individual difference measures (Multiracial identification and identity autonomy) were collected to be tested as potential moderators for the four key dependent measures. Of the 8 opportunities to observe moderation, there was only one significant

interaction (See Table 5). An identity denied \times Multiracial identification significant interaction on self-presentation at $p = .047$. Because there were no consistent patterns regarding moderation and because the only significant interaction was unpredicted, these individual difference variables will not be discussed.

Table 5

Moderation Analyses for Multiracial Identification and Identity Autonomy (Study 2)

	Multiracial Identification	Identity Autonomy
External Negative Affect	F(1,77), p , η_p^2	F(1,77), p , η_p^2
Effect of ID Denied.	4.220, $p = .043$, .052	4.434, $p = .038$, .054
Effect of ID Perp	6.427, $p = .013$, .077	7.469, $p = .008$, .088
Effect of Ind. Diff.	0.611, $p = .437$, .008	4.964, $p = .029$, .061
ID Denied x ID Perp	4.834, $p = .031$, .077	6.682, $p = .012$, .080
ID Denied x Ind. Diff.	0.037, $p = .847$, .000	0.049, $p = .825$, .001
ID Perp x Ind. Diff.	1.217, $p = .273$, .016	0.002, $p = .967$, .000
3-way Interaction	0.343, $p = .560$, .004	0.157, $p = .693$, .002
Internal Negative Affect	F(1,77), p , η_p^2	F(1,77), p , η_p^2
Effect of ID Denied	4.196, $p = .044$, .052	4.777, $p = .032$, .058
Effect of ID Perp	2.343, $p = .130$, .030	2.902, $p = .093$, .036
Effect of Ind. Diff.	0.049, $p = .825$, .001	1.336, $p = .251$, .017
ID Denied x ID Perp	0.539, $p = .465$, .007	1.089, $p = .300$, .014
ID Denied x Ind. Diff.	0.359, $p = .551$, .005	1.823, $p = .181$, .023
ID Perp x Ind. Diff.	0.351, $p = .555$, .005	0.122, $p = .727$, .002
3-way Interaction	0.000, $p = .985$, .000	0.007, $p = .936$, .000
Self-perception	F(1,77), p , η_p^2	F(1,77), p , η_p^2
Effect of ID Denied.	0.435, $p = .511$, .006	0.280, $p = .599$, .004
Effect of ID Perp	4.317, $p = .041$, .053	6.529, $p = .013$, .078
Effect of Ind. Diff.	3.332, $p = .072$, .041	0.003, $p = .956$, .000
ID Denied x ID Perp	6.922, $p = .010$, .082	8.425, $p = .005$, .099
ID Denied x Ind. Diff.	0.067, $p = .797$, .001	3.818, $p = .054$, .047
ID Perp x Ind. Diff.	0.489, $p = .487$, .006	0.033, $p = .856$, .000
3-way Interaction	0.594, $p = .443$, .008	0.066, $p = .798$, .001
Self-presentation	F(1,77), p , η_p^2	F(1,77), p , η_p^2
Effect of ID Denied.	0.908, $p = .344$, .012	0.249, $p = .620$, .003
Effect of ID Perp	5.156, $p = .026$, .063	6.817, $p = .011$, .081
Effect of Ind. Diff.	0.058, $p = .810$, .001	0.001, $p = .979$, .000
ID Denied x ID Perp	1.452, $p = .232$, .019	3.321, $p = .072$, .041
ID Denied x Ind. Diff.	4.073, $p = .047$, .050	0.183, $p = .670$, .002
ID Perp x Ind. Diff.	3.234, $p = .076$, .040	1.217, $p = .273$, .016
3-way Interaction	1.157, $p = .286$, .015	1.287, $p = .260$, .016

Note. Significant effects are bolded.

Discussion

The results of this experiment partially replicate those of Study 1 and extend them by demonstrating behavioral and identity-specific responses to an actual experience of identity denial. As in Study 1, participants whose racial minority identity was denied reported greater external and internal negative affect and were more likely to assert their identity than participants whose White identity was denied. Additionally, Study 2 showed that affective, behavioral and identity-specific responses to denial of one's racial minority identity differed as a function of the race of the denial perpetrator. Participants reported the strongest external negative affect and were most likely to assert their identity when the denial perpetrator was White. Similarly, the way in which they perceived and presented their racial identity and the way they self-identified diverged based on the race of the denial perpetrator. When the denial perpetrator was White, participants whose racial minority was denied chose a morphed version of their face that appeared most racially minoritized; they generated avatars that were rated by an independent sample as appearing significantly more racially minoritized than their actual face; they became more strongly identified with their racial minority identity, and they became more weakly identified with their White identity. The opposite trends emerged for participants whose racial minority was denied by a racial minority perpetrator. They chose a morphed version of their face that appeared whiter; they generated avatars that were rated by an independent sample as appearing significantly whiter than their actual face and they became more strongly identified with their White identity.

Importantly, and unexpectedly, these results are not moderated by initial levels of racial identification, suggesting that the effects of experiencing identity denial – at least in the immediacy of the situation – override pre-existing racial identification. Prior research

suggests that Multiracial individuals may be less likely to establish strong racial identity with their sub-identities due to experiences such as identity denial from both the majority and minority racial groups (Comas-Diaz, 1996; Gibbs, 1987; Poston, 1990; Root, 1996; Winn & Priest, 1993) which could partially explain the lack of moderation by initial levels of identification.

Another consistent finding is when participants' White identity was denied there was a null effect of the race of the denial perpetrator. Regardless of whether the denial perpetrator was White or a racial minority group member, there were no differences in likelihood of identity assertion, self-presentation or self-perception, nor shifts in racial identification following denial of one's White identity. Experimentally induced instances of identity denial have exclusively focused on denial of White identity, yet the findings from Study 2 indicate that denial of one's racial minority identity is more impactful in terms of identity-relevant responses.

General Discussion

The current research provides a more nuanced examination of Multiracial individuals experiences with and responses to identity denial in several ways. First, by exploring Multiracials' identity-specific responses to experiencing identity denial such as racial identity flexibility related to self-presentation, self-perception and self-identification. Second, by examining the independent and interactive effects of the race of denial perpetrator and race of identity denied on psychological and behavioral consequences of identity denial.

Across two studies, the findings from this dissertation demonstrated that when majority-minority Multiracials imagined experiencing identity denial, those who imagined

their racially minoritized identity was denied forecasted more negative affect and greater likelihood of identity assertion (Study 1). In Study 2, when their racial minority identity was actually denied, participants similarly responded more negatively than when their White identity was denied; however, these responses were moderated by the race of the denial perpetrator. When the perpetrator was White, participants countered denial experiences via behavioral identity assertion, displays of group-prototypical identification in alignment with their racially minoritized denied identity and approach-motivated negative affective responses. Prior research finds that people react to acute categorization threats by resisting and challenging the categorization (see Ellemers et al., 2002 for review) and verifying their pre-existing self-conceptions. The findings from Study 2 indicate that when Multiracials' racial minority identity is denied (i.e., they are miscategorized as White) by a White perpetrator, individuals do indeed resist categorization threat via self-verification processes such as identifying more strongly with the denied identity and presenting and perceiving one's racial identity in more prototypical ways in alignment with the denied identity.

An alternative interpretation of Multiracials' adjustment to the way they perceived, presented and identified with their racial minority identity when it was denied by a White perpetrator is the lesser known and scarcely researched offshoot of the affiliative social tuning hypothesis called "antituning". According to research conducted by Sinclair and colleagues (2005) when affiliative motivation is low, self-evaluations shift *away* from the perceived views of another social actor. Rather than adjusting one's self-views in alignment with another individual (as did participants whose racial minority identity was denied by a racial minority perpetrator), antituning is characterized by adjusting away from other-views. Importantly, the goal to antitune need not be a conscious behavior and is capable of operating

outside of one's awareness. Considering that majority-minority Multiracials are less motivated to affiliate with Whites (Root, 1992), the responses observed in Study 2 may be representative of antituning.

While participants engaged in self-verification and/or antituning processes in response to having their racial minority identity denied by a White perpetrator, a different pattern emerged when their racial minority identity was denied by a racial minority perpetrator. Participants instead internalized denial experiences by displaying group-prototypical identification in alignment with their White identity – i.e., the racial identity the perpetrator categorized them into. The self-verification literature finds that people are more likely to seek verification of self-views held with high certainty. Facing denial of one's racial minority identity by an individual who holds more legitimacy (i.e., a monoracial racial minority) to membership in that group could trigger greater doubt in Multiracials' self-views about their racial minority identity. An alternative interpretation is that individuals engaged in social tuning processes by identifying more strongly and in more prototypical alignment with the identity they were miscategorized into. Because majority-minority Multiracials are more likely to identify with their racial minority group, affiliative motivation should be higher when interacting with a racial minority member. Thus, when one's racial minority is denied by a racial minority ingroup, there is increased likelihood of social tuning; in this case changing one's beliefs about the self in alignment with the interaction partner.

As discussed, the greatest divergence in affective, behavioral and identity-specific responses to identity denial occurred when one's racial minority identity was denied. In contrast, when Multiracials' White identity was denied, there were no differences in the primary outcome measures as a function of the race of the denial perpetrator. In other words,

when participants White identity was denied, it didn't matter if the person who denied their identity was also White or a racial minority ingroup member. The most likely explanation is that being barred access to one's White identity (and subsequently being categorized as a monoracial minority member) is less psychologically threatening than being denied access to one's racial minority identity. On average, in the current study, participants identification with their White identity fell below the midpoint and almost a full point lower than identification with their racial minority identity. Thus, experiencing identity denial of one's White identity may not represent a categorization threat. In turn, attempts to respond to that threat (either through self-verification or social tuning processes) is less necessary and not conditional on the race of the denial perpetrator.

Limitations and Future Directions

Like previous research, the current studies only examine part-White Multiracials experiences with identity denial. Only one study has explored identity denial and questioning among dual-minority Multiracials, (e.g., Albuja et al., 2020) and found that dual-minority Biracial people (like majority-minority Multiracials) who reported greater experiences of denial also reported lower feelings of autonomy, greater conflict, and lower levels of belonging. Research has yet to experimentally manipulate identity denial among dual-minority Multiracials nor explore how the components of the denial experience (race denied and denial perpetrator) might influence responses. In the current study, having one's racial minority identity denied triggered stronger affective and identity-specific responses; however, that may be a result of being simultaneously miscategorized as White. When dual-minority Multiracials experience identity denial it is less likely they will be misperceived as White and thus might result in different responses.

The current study expands work on Multiracials experiences with identity denial by featuring two of the fastest growing Multiracial groups: Asian-White and Latinx-White Multiracials (U.S. Census, 2020). Of the majority-minority Multiracial groups, Black-White Multiracials are most likely to strongly identify with their minority group and research from the Pew Center finds that Asian-White Multiracials are most likely to identify as Multiracial (2015). These differences in initial levels of racial identification may be influential in navigating instances of identity denial, especially denial scenarios targeting minority identities. Whereas the participants in the current study may be more flexible in their willingness to identify as Multiracial and/or identify less strongly with their racial minority identity following instances in which their racial minority is denied, Black-White Multiracials may exhibit even stronger challenges to denial experiences by White perpetrators. Additionally, Black-White Multiracials may be less likely to distance from their minority identity when responding to denial by racial minority perpetrators than participants in the current study. Future research should include additional Multiracial groups to examine differential responses to identity denial as a function of the race denied and race of the perpetrator.

Identity denial research has focused primarily on self-reports of distress (e.g., Cheryan & Monin, 2005; Huynh et al., 2011; Sanchez, 2010). It is unclear whether identity denial experiences and specifically the factors introduced in the current work impact physiological manifestations of stress. Given that identity denial experiences simultaneously undermine Multiracial people's sense of social belonging and challenge their status as group members (Albuja et al., 2019), they may be experienced as stressors that manifest physiologically (Pascoe & Smart Richman, 2009). The biopsychosocial model of challenge

and threat (Blascovich, 2008a; Blascovich & Tomaka, 1996) uniquely allows the ability to test different profiles of cardiovascular reactivity (CVR) in response to identity denial experiences. Research based on this model has shown that distinct CVR profiles characterize these differing motivational states of threat vs. challenge. The model states that challenge occurs when an individual experiences sufficient resources to meet situational demands and threat occurs when the resources available are deemed insufficient to handle situational demands. As evidenced by the different negative affective responses to identity denial as a function of the joint effects of the denial perpetrator and racial identity denied, certain instances of identity denial may be more likely to elicit a challenge response and others a threat response. Multiracial individuals should be more likely to perceive that they have sufficient resources to assert their denied identity when they have a more legitimate claim to the denied racial identity compared to the denial perpetrator (i.e., when an Asian-White Biracial individual has their Asian identity denied by a White perpetrator). However, Multiracials may perceive that they do not have the requisite resources to assert their denied identity when they have a less legitimate claim to the denied racial identity compared to the denial perpetrator (i.e., when an Asian-White biracial individual has their Asian identity denied by an Asian perpetrator).

Finally, the current research adds to a depository of literature highlighting the impactful role of identity denial experiences on Multiracials. Experiencing identity denial can have deleterious effects on mental health; repeated exposure has been shown to relate to higher rates of depression and anxiety and lower rates of self-esteem (Coleman & Carter, 2007; Lou et al., 2011; Sanchez, 2010; Townsend et al., 2009). The current research also finds that responding to identity denial alters the way Multiracials conceptualize, present and

even perceive their own racial identity and racial appearance. To date, we know little about how instances of “identity confirmation” – or experiences in which specific racial identities are validated and recognized by interaction partners – impact racial identification processes. Prior qualitative work suggests that Multiracials whose border identity choice is “validated” over time by members of their social network fare better psychologically compared to those whose identity choice is not validated” (Rockquemore & Brunnsma, 2004). However, to my knowledge, no work has examined specific instances of identity validation nor whether the specific combination of the racial identity confirmed and/or race of denial confirmer differentially impacts these experiences.

Conclusion

Despite the relatively steep incline in research on the Multiracial population, this demographic remains severely understudied relative to its share of the U.S. population. There are consequences to this paucity of research. Compared to monoracial adolescents (except Native Americans), mixed-race adolescents show higher risk on general health outcomes, negative school experiences, smoking and drinking behavior, and other risk variables (Udry et al., 2003) yet potential underlying mechanisms of these outcomes have only narrowly been explored or ignored altogether. Identity denial is unique to the Multiracial experience and occurs at the interpersonal, intergroup and institutional level. To this point, only a handful of experimental studies have examined the psychological consequences experiencing identity denial has on Multiracials. In the current research, I find that specific components of the identity denial experience – race of the denied identity and race of the denial perpetrator – play important roles in determining responses to such experiences. Additionally, I find that Multiracials do not passively experience instances of identity denial; rather they actively alter

the ways in which they perceive and present their racial identities in response to such experiences. This research can help in the movement to build social psychological identity theories that account for a broader range and variation regarding group membership and add to the growing literature on individuals that occupy multiple identities within the same social identity domain.

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Appendix A

PANAS Scale (Studies 1 and 2)

Using a scale of 1 (Not at all) to 5 (Extremely), please indicate the extent to which you are **currently** feeling:

Angry

Irritated

Offended

Annoyed

Unhappy

Sad

Ashamed

Betrayed

Confused

Excited

These items were randomly presented to participants. The first four items made up the “External Negative Affect” cluster and the next three items made up the “Internal Negative Affect” cluster. The remaining three items were discarded and not analyzed.

Appendix B

Racial Identification Scale

1-Strongly disagree to 7-Strongly agree

1. In general, being [Multiracial/Asian/White/Latinx] is an important part of my self-image.
2. Being [Multiracial/Asian/White/Latinx] is unimportant to my sense of what kind of person I am. **(R)**
3. I have a strong sense of belonging to [Multiracial/Asian/White/Latinx] people.
4. Being [Multiracial/Asian/White/Latinx] is an important reflection of who I am.
5. Being [Multiracial/Asian/White/Latinx] is not a major factor in my social relationships. **(R)**
6. Overall, being [Multiracial/Asian/White/Latinx] has very little to do with how I feel about myself. **(R)**
7. I have a strong attachment to other [Multiracial/Asian/White/Latinx] people

In Study 1, these items were used to measure Multiracial identification. In Study 2, these items were used to measure pre and post identity denial racial identification with minority (Asian or Latinx) and White racial identities.

Appendix C

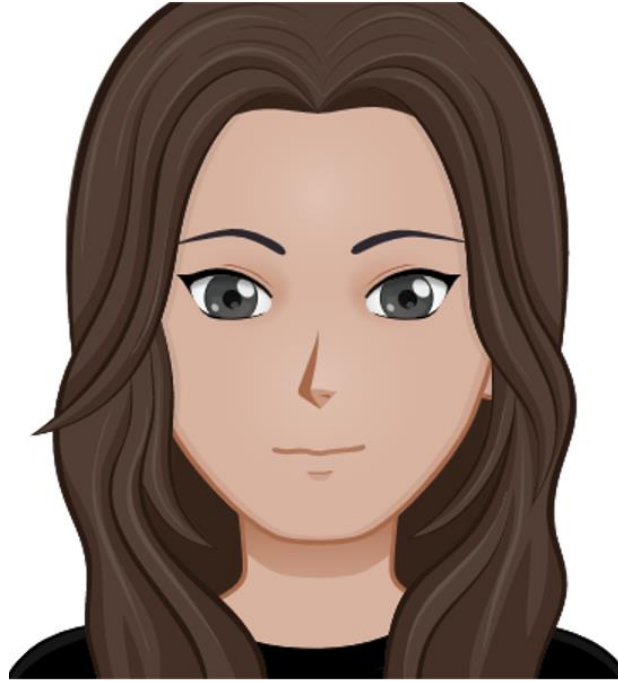
Link to Recording of Identity Denial Manipulation

<https://drive.google.com/file/d/1PqCSRT8VPc9EeTXEU7SI06QgvzONgKWG/view?usp=sharing>

For this particular clip, an Asian experimenter (racial minority denial perpetrator) denied the participant's Asian identity (racial minority identity denied).

Appendix D

Sample avatar generated by participant



Link to avatar generator website

<https://avatarmaker.com/>

Appendix E

Instructions for Independent Raters Prior to Racial Prototypicality Ratings

Within a particular racial/ethnic group, faces differ from one another. Although individuals may belong to the same racial/ethnic group, some faces look more representative of the group, while other faces are not as clearly members of the group.

Please take a minute to consider what an average member of the racial/ethnic group 'Asian' looks like. Think about the features that typically characterize individuals in the racial/ethnic group 'Asian,' – the hair color, skin color, the shape of the face, the shape of the features, etc.

Now, picture in your mind an individual who has features that are extremely representative of those who belong to the racial/ethnic group 'Asian'. Imagine all of the features of this person and form a picture in your head.

Next, take a minute and think about someone who looks less obviously like a member of the racial/ethnic group 'Asian,' but who is still definitely a member of the racial/ethnic group 'Asian.' Think about that person's facial features and form an image in your mind. Keep these images in mind for the duration of the study when you are asked to rate 10 faces based on their racial prototypicality.

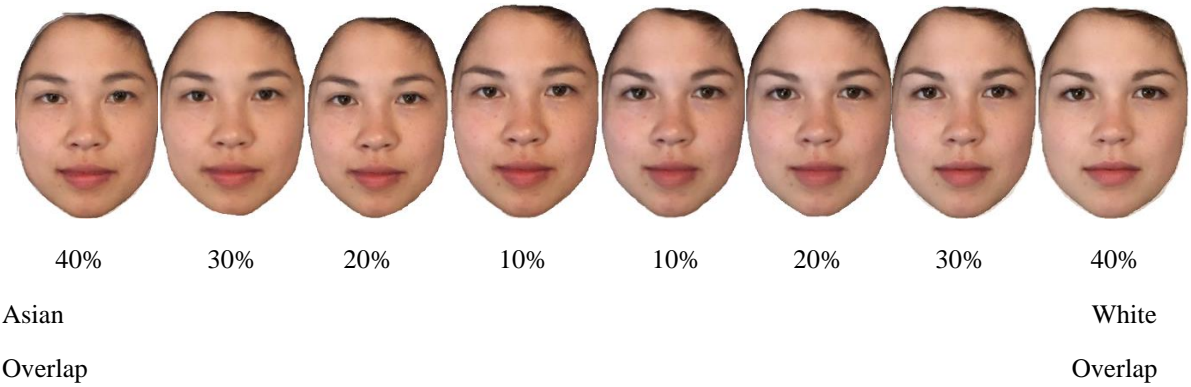
Appendix F

Sample self-portrait photograph uploaded by participants and accompanying morphs



“Seed” photograph for participant

Morphs ranging from highest overlapping with racial minority morph to highest overlapping with White morph



Asian Monoracial Morph



White Monoracial Morph

