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IMPACTS OF RACIAL MICROAGGRESSIONS ON WHITE AMERICAN AND
ETHNIC MINORITY STUDENTS IN THE COLLEGE CLASSROOM

by

Lesther A. Papa

A dissertation submitted in partial fulfillment
of the requirements for the degree

of

DOCTOR OF PHILOSOPHY

in

Psychology

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2020

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ABSTRACT

Impacts of Racial Microaggressions on White American and Ethnic
Minority Students in the College Classroom

by

Lesther A. Papa, Education Specialist

Utah State University, 2020

Major Professor: Melanie Domenech Rodríguez, Ph.D.
Department: Psychology

The racial and ethnic makeup of college is becoming more diverse as the general trend heads towards more bachelor's degrees being conferred to ethnic minority students. Racial and ethnic microaggressions (REMAs) are subtle, chronic, and negative verbal and nonverbal exchanges that communicate hostility, degradation, or dismissiveness towards a member of an ethnic minority group. From the literature, REMAs have been found to impact both White and ethnic minority students and both White and ethnic minority professors commit microaggressions towards student of color. In addition, colorblind racial ideation (CBRI), along with ethnocultural empathy, and ethnic identity are often linked with REMA studies and their impact on students' racial attitude and awareness.

Using Bandura's social cognitive theory as a framework to conceptualize the findings, the present study focuses on determining if the impacts of microaggressions

differed based on the participant's ethnic identity (i.e., college students) and/or the ethnicity of the professor that commits the microaggression. Experimental vignettes were developed along with a measure for witnessing microaggressions to simulate microaggressions that are depicted in the classroom. The data from a national sample of 375 ($N = 375$) students were recruited for the study. One hundred seventy one participants identified as White Americans while 204 identified as being non-White. Each participant was assigned to either an overt or covert microaggression condition or a neutral race-based interaction condition. In each condition, they read vignettes that depicted a student-instructor interaction with either a White or ethnic minority professor and an ethnic minority student. Participants rated each interaction from positive to negative and briefly justified each rating. Participants also rated their microaggression experiences, microaggressions witnessed, colorblind racial attitudes, ethnocultural empathy, and ethnic identity. White and ethnic minority students did not differ in their ratings of professor behavior or impact of microaggressions on their affect. However, in the overt microaggression condition White professors were still viewed more positively, and for White participants, their positive affect decreased significantly compared to their ethnic minority counterparts. These results largely align with past research and provide evidence for the need to increase the detection and intervention of microaggressions in the classroom.

PUBLIC ABSTRACT

Impacts of Racial Microaggressions on White American and Ethnic
Minority Students in the College Classroom

Lesther A. Papa

The racial and ethnic makeup of college is becoming more diverse as the general trend heads towards more bachelor's degrees being conferred to ethnic minority students. However, ethnic minority students often experience racial and ethnic microaggressions (REMAs) on campus either in the classroom or in the dorms. REMAs are subtle, chronic, and negative verbal and nonverbal exchanges that communicate hostility, degradation, or dismissiveness towards a member of an ethnic minority group. From the literature, REMAs have been found to impact both White and ethnic minority students and both White and ethnic minority professors commit microaggressions towards student of color. In addition, a person's awareness of race and racial dynamics, along with empathy for persons of other cultural groups, and how one identifies ethnically are often linked with REMA.

Bandura's Social Cognitive Theory was used as a framework to conceptualize the research and make sense of findings. The present study focused on determining if the impacts of microaggressions differed based on the ethnic identity of the participant or of the professor that commits the microaggression. A national sample of 171 White American students and 204 non-White students were recruited. Each of the students were randomly assigned to either an overt or covert microaggression condition or a neutral

race-based interaction condition. In each condition, they read vignettes that depicted a student-instructor interaction, rated each interaction from positive to negative, and briefly justified each rating. Participants also rated their microaggression experiences, microaggressions witnessed, colorblind racial attitudes, ethnocultural empathy, and ethnic identity. White and ethnic minority students did not differ in their ratings of professor behavior or impact of microaggressions on their affect. However, in the overt microaggression condition White professors were still viewed more positively, and for White participants, their positive affect decreased significantly compared to their ethnic minority counterparts. These results largely align with past research and provide evidence for the need to increase the detection and intervention of microaggressions in the classroom.

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It took a community of people to support me in completing this dissertation that spanned a half-decade to complete. Fondly called Diamanda, like a diamond, this dissertation was formed over a long period of time, constantly under pressure, hard as hell to complete, weighty, and took hard work to make sure she sparkled. First, I would like to thank the half-dozen undergraduate research assistants who helped me with my pilot studies and laid the foundation for the present study, the hundreds of undergraduate students who provided their data to this work, and the Emma Eccles Jones College of Education and Human Services for the dissertation award that allowed me to recruit a national sample of participants. A special thanks goes to Emily Murphy. Her hard work and dedication in improving the lives of diverse students made a her a powerful ally and paved the path for her to obtain her own graduate degree.

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thank you for cheering me on as we celebrated weddings, houses bought, and children born. For my community here in California, thank you for your support as I crossed the finish line. You know how important you are and how much you mean to me. Thank you for making me feel loved and make me feel like I belonged.

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In conclusion, I dedicate this dissertation to my late colleague and friend, Jerusha Sanjeevi, and my dearly departed grandmother, Rosita Partoriza. It has been 3 years since you have passed, Jerusha. That was one of the hardest losses I have experienced and I still remember the pain of you being gone. Your passing was not vain. I have made it an integral part of my clinical work to shape youth to choose compassion over bullying and help parents become bigger, stronger, wiser, and provide comfort and guidance to their children. I hope that Diamanda will also help others become aware of how racial

discrimination, no matter how subtle, affects everyone. Lola Rosing, limang taon na mula noong lumipas po kayo. Hiling ko lang na kasama kayo sa aking pagtatapos at katabi sa aking mga litrato noong araw. Naiisip ko lang ang mga bagay-bagay na maaring ninyong masabi tungkol sa aking pagtatapos. Lola, salamat po para sa pag-aalaga ninyo sa akin. Nakatapos na po ako.

Lesther A. Papa

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CHAPTER I

INTRODUCTION

Racial and ethnic diversity in higher education is generally increasing. The number of bachelor's degrees conferred to Latinx students increased 118% between 2005-2006 and 2015-2016 from 107,588 to 235,014. The number of Black students with bachelor's degrees increased by 37% (142,420 to 194,473), 35% (102,376 to 138,270) for Asian/Pacific Islander students, but lowered 11% (10,940 to 9,737) for American Indian/Alaska Native students (U.S. Department of Education, National Center for Education Statistics, 2017). These generally increasing numbers are certainly exciting. However, with higher representation, there are also unique and chronic stressors that emerge for college students of color.

A specific stressor that has been implicated in the adjustment of students of color attending colleges and universities is the chronic exposure to subtle forms of prejudice known as *microaggressions*. Racial microaggressions are defined as “brief and commonplace daily verbal, behavioral, and environmental indignities, whether intentional or unintentional, that communicate hostile, derogatory, or negative racial slights and insults to the target person or group” (Sue et al., 2007, p. 273). Addressing prejudice and microaggressions is important as they have been found to negatively impact students' cognitive functioning (Bair & Steele, 2010), alcohol use in higher education (Blume et al., 2012), mental health (Syed, 2010; Torres et al., 2010), increase negative affect such as anger (J. Wang et al., 2011), and lead to a negative perception of the campus racial climate (Yosso et al., 2009). Thus, the *perception* of prejudiced or

negative interaction (i.e., microaggression) is one of the outcome variables of the present study.

Within the context of higher education, racial microaggressions or discrimination have been largely experienced on-campus in college classrooms (Forrest-Bank & Jenson, 2015; Grier-Reed, 2010; Lewis et al., 2013; Suárez-Orozco et al., 2015; Syed, 2010; Yosso et al., 2009) and in residence halls (Harwood et al., 2012). In addition, an observational study of microaggression in the classroom identified that the bulk of microaggressions are from instructors to students (Suárez-Orozco et al., 2015). This latter context is the primary focus of the present study.

One research study documented that microaggressions were committed by instructors of various ethnicities (Suárez-Orozco et al., 2015). Most of these microaggressions were directed at individual students of color. However, it is unclear if there were any differences in the prevalence or impact of microaggressions between White instructors and instructors of color and little is known about interracial microaggressions (Wong et al., 2014), though one study has at least documented its existence (Allen, 2010).

Many of the published studies on microaggressions, especially in the classroom, are qualitative, descriptive, or quasi-experimental (Wong et al., 2014) and therefore lack causal inference. Current studies have included experimental studies to address a gap in the literature by experimentally examining how race/ethnicity of the student/faculty influences participants' experiences of microaggressions (e.g., Tao et al., 2017). Affect was chosen as one aspect of this experience because at least two studies presented

evidence that reading vignettes of subtle discrimination situations can directly affect emotions (Tao et al., 2017; J. Wang et al., 2011) and has been linked to negative outcomes.

Student perception of the professor student interaction was also included as another aspect of the participant experience. Past literature supports that student perception of instructors, especially ethnic minority faculty, impact the student's overall evaluation of the instructor (Ho et al., 2009; Reid, 2010). Individual characteristics also play a part on the impact of microaggressions on individuals (Ogunyemi et al., 2019; Wong et al., 2014). Variables such as colorblind racial attitudes (Neville et al., 2000) ethnocultural empathy (Y. Wang et al., 2003) address participants understanding of racial dynamics and empathy for those outside of their ethnic group. Ethnic identity (Phinney & Ong, 2007) has also been identified as a key variable in understanding the impact of microaggressions as the impact does differ for those that identify as White versus non-white and there are differences in experiences of microaggressions ethnic group. Thus, the present study was aimed to advance research on the impact of microaggressions on college students by using an experimental paradigm to answer the following research questions:

Research Question 1: Do White American and ethnic minority students differ in their perception of racial and ethnic microaggressions?

Research Question 2: Do White American and ethnic minority students differ in terms of affect when exposed to racial and ethnic microaggressions?

Research Question 3: Can the impact of microaggressions on participants be

explained by experiencing microaggressions, witnessing microaggressions, colorblindness, ethnocultural empathy, or ethnic identity?

CHAPTER II

LITERATURE REVIEW

The following review of the literature will include an overview of Social Cognitive Theory (SCT), definitions of race, ethnicity, prejudice, discrimination, and racism, seminal research on racial and ethnic microaggressions (REMA), incidence of REMAs for students in higher education, current impacts of REMA, and an overview of the present study within an SCT framework.

Social Cognitive Theory

The present study was not built to test Social Cognitive Theory (SCT) but rather the theory was used to guide the conceptualization of this study. Bandura's (1986) *social cognitive theory* (SCT) is commonly used to evaluate factors in educational settings. SCT was developed as a unifying theory of behavior and thought and a way to conceptualize *human agency* (i.e., the extent to which persons have control over their own motivations and actions) and behavior change. Bandura (1989) explains that human agency can be "conceptualized in at least three different ways--as either *autonomous* agency, *mechanical* agency, and *emergent interactive* agency" (p. 1175). Autonomous agency posits that persons are independent agents of their own actions, a view that is not supported empirically. Explanations of mechanical agency posit that a person's environment is the sole determinant of human behavior. A person's thoughts and characteristics are merely conditioned responses to the environment and thus are not a determinant or contributor to human agency. SCT operates under the model of *emergent*

interactive agency, where persons are active contributors to their own actions while also being influenced by their environment.

This model of human agency is conceptualized in SCT within a triadic framework, *reciprocal determinism*, which is the reciprocal interaction of an individual, their behavior, and their environment. The *individual* component addresses internal factors such as cognitive and personal characteristics. The *behavior* component includes the actions of the individual and the *environment* component accounts for influences from the individual's setting, situation, and context. For example, in the classroom (environment), interactions occur between students and an instructor and among students as well. A student (person) brings certain personal factors like their appearance, personal experiences, and individual ability into the classroom setting. Students can vary their behavior in class, for example, by participating in discussions, actively taking notes, or even choosing whether to attend, which are influenced respectively in varying degrees by the instructor and other students in the classroom. Simultaneously, the students' behavior can also influence the behavior of other students and the instructor. For example, a student that raises their hand and asks questions, will influence the instructor to answer the question, which in turn could either increase or decrease other students engagement in the course.

In addition to personal agency, Bandura (2002) explains that there is *proxy* agency and *collective* agency that follow the reciprocal determinism framework as well. Proxy agency differs from personal agency because instead of a person exerting influence on their own behavior, one person exerts influence on another to obtain a desirable

outcome. For example, an instructor who encourages students to engage by asking questions that students are likely to answer or giving interesting discussion prompts exerts some influence by then increasing the likelihood that the students will answer or engage in discussion. Collective agency is the summative influence of many persons for a collective goal. Building on the previous example, the collective agency of the students and instructor in the class works towards the goal of student learning. Thus, SCT can be used to analyze behavior at individual, relational, and further up to system and societal levels.

Bandura (1986) theorized that persons have five basic cognitive capabilities: symbolizing, forethought, vicarious, self-regulatory, and self-reflective. The symbolizing capability refers to a person's ability to "process and transform transient experiences into internal models that serve as guides for future action" (p. 18). The forethought capability builds on the symbolizing capability to allow individuals to plan courses of action for themselves which results in self-directed behavior. Persons have the capability of mentally planning future behavior and inferring an appropriate outcome or consequence. For example, a student could imagine based on experience that answering the instructor's question will be viewed positively (or negatively) and infer what will happen if they do decide to answer. The vicarious capability allows persons to learn by observing people's behavior and their consequences. In a classroom setting, students who watch other students interact positively (or negatively) with the instructor in the form of verbal praise for class participation may be more inclined to participate themselves. The self-regulatory capability means that people can motivate and regulate their own internal standards. In

the classroom, this translates to how motivated (or not) students are to succeed following their own criterion of success. The self-reflective capability means that persons can analyze their own thought processes and gain knowledge about themselves and the world around them. Thus, students can analyze their own abilities, learning, and their perception of their environment.

These cognitive capabilities form the cognitive processes needed for *self-efficacy*, which is the belief a person has of their own capabilities to achieve a certain goal. The present study does not examine microaggression effects on self-efficacy per se but there is a body of evidence that links the vicarious impacts racism to negative effects on the cognitive aspects of self-efficacy (see Effects of Racism on Self-Efficacy Beliefs). Understanding this link is important as it has broader implications on various aspects of people of color's lives. Bandura (1997) asserted that self-efficacy as the most important aspect of personal agency. He explained that the belief of one's actions producing the desired effect is core to personal agency and environmental factors serve to guide and motivate this belief. Without self-efficacy, Bandura stated that there is no desire to overcome challenges or barriers that impede progress toward a desired goal. Take two students with poor grades and different academic self-efficacy beliefs. The student with low academic self-efficacy will perceive their ability as inadequate to improve his grades and thus not pursue means to improve their score. The other student with poor grades and high academic self-efficacy will likely seek office hours, study with peers, and set themselves up for improving their grade.

Self-efficacy beliefs regulate human functioning through cognitive, motivational, affective, and decisional processes. They affect whether individuals think in self-

enhancing or self-debilitating ways; how well they motivate themselves and persevere in the face of difficulties; the quality of their emotional life, and the choices they make at important decisional points which set the course of life paths. (Bandura 2002, pp. 270-271).

He has also described self-efficacy as being domain-specific (e.g., academic self-efficacy, career self-efficacy, coping self-efficacy) and that creating a good measurement of self-efficacy requires specific behavior within that domain (e.g., raising hand in class, make a plan for your goals in the next five years, break an upsetting problem down into smaller parts; Bandura, 1997).

I think you need to say here how SCT informed this research. We don't measure any of the variables listed in SCT (which is traditionally what you do when theory is guiding your research) ... so the reader will need a quick but clear way in which to make sense of how this awesome section connects to your research study and the variables you chose.

Race, Ethnicity, Prejudice, Discrimination, and Racism

For the purposes of the present study *race*, *ethnicity*, *prejudice*, *discrimination*, and *racism* are defined. Race is as the “category to which others assign individuals on the basis of physical characteristics, such as skin color or hair type, and the generalization and stereotypes made as a result” (American Psychological Association [APA], 2003, p. 380). In the U.S., racial labels include African American, American Indian or Alaska Native, Asian American, Native Hawaiian or Pacific Islander, White American/European American?. Ethnicity is the “acceptance of the group mores and practices of one’s culture of origin and the concomitant sense of belonging” (APA, 2003, p. 380). Examples of

ethnic labels include Latino or Hispanic, Filipino American, or Italian. Prejudice is described as negative attitudes and beliefs toward another group or member of that group (e.g., Muslims are terrorists) while behavior that results in unequal treatment of a group or its members (e.g., poor service for a Black family dining and excellent service for a White family) are forms of discrimination (Gaertner & Dovidio, 2005).

Racism has been conceptualized in the literature as consisting of structural and ideological components, consisting of four identified types, and evolving over generations and across geographical regions (Thompson & Neville, 1999). The structural component of racism speaks to the way society is organized to advantage White Americans and disadvantage racial and ethnic minorities. The ideological component includes ideas about race and race relations to maintain the inequality of White Americans and ethnic minorities. There are four identified types of racism. The first three are individual, institutional, and cultural (Jones, 1981) and the fourth is environmental (Thompson & Neville, 1999).

The four types of racism are defined as follows (Jones, 1981; Thompson & Neville, 1999): *individual racism* includes interpersonal acts of discrimination from White Americans and directed towards ethnic minorities. A consequence of individual racism is *everyday racism* or the commonplace occurrence of discrimination towards ethnic minorities. Examples include name-calling, being followed around stores, and mistreatment due to skin color. *Institutional racism* “refers to the policies, practices, and norms that incidentally, but inevitably perpetuate inequality” (Thompson & Neville, 1999, p. 167). *Cultural racism* is described as practices based on the belief that White

American cultural values are superior to the cultural practices and values of ethnic minorities. Lastly, *environmental racism* is discrimination in the form of environmental policies that lead to systematic and disparate harm from pollution or contaminants for communities of color.

Racism changes over time and by region (Thompson & Neville, 1991). Historic or *old-fashioned* racism has been showed to be no longer acceptable as part of the mainstream (Dovidio et al., 2002, 2016; McConahay et al., 1981). However, research has documented this shift from historic racism that was hostile, intentional, and conspicuous, to contemporary racism (Sue et al., 2007). This contemporary vein of racism has been called *modern racism* (McConahay et al., 1981) or *aversive racism* (Dovidio et al., 2002) but all describe a type of racism that is difficult to identify and manifests in ways that are subtle, abstruse, and seemingly benign, descriptors that fit the description of racial microaggressions (Sue et al., 2007). Indeed, *racial microaggressions* are a contemporary form of racism.

A Brief Overview of Racial and Ethnic Microaggressions

Pierce et al. (1977) are credited as first coining the term *microaggression* in his work on television ads and their promotions or reinforcement of racist attitudes and behavior. In 2000, Solórzano et al. examined microaggressions and their relationship with campus racial climate for African American college students within a critical race theory (CRT) framework. Since then Derald Wing Sue and a variety of colleagues have provided significant scholarship in this area. For the present study, racial

microaggressions will be defined as “brief and commonplace daily verbal, behavioral, and environmental indignities, whether intentional or unintentional, that communicate hostile, derogatory, or negative racial slights and insults to the target person or group” (Sue et al., 2007, p. 273). This definition synthesizes those provided from Pierce and Solórzano et al. and captures the aspects of everyday racism experienced by ethnic minorities in a way that is relevant to psychological examination of predictors and outcomes.

In their elaboration of the construct of microaggressions, Sue et al. (2007) identified three types of racial microaggressions: *microassaults*, *microinsults*, and *microinvalidations*. Microassaults are defined as “an explicit racial derogation characterized primarily by a verbal or nonverbal attack meant to hurt the intended victim through name-calling, avoidant behavior, or purposeful discriminatory actions” (Sue et al., 2007; p. 274). Due to their explicit nature, these types of microaggressions are often overt and the closest resemblance to old-fashioned racism. Microinsults are “characterized by communications that convey rudeness and insensitivity and demean a person’s racial heritage or identity” (Sue et al., 2007; p. 274) while microinvalidations “are characterized by communications that exclude, negate, or nullify the psychological thoughts, feelings, or experiential reality of a person of color” (Sue et al., 2007; p. 274). These two latter types of microaggressions are typically more covert and can be further categorized into different themes.

Under the umbrella of microinsults, *ascription of intelligence* denotes a designation of person’s intelligence based on their race, *second class citizen* describes

being treated as an inferior person or group, *pathologizing cultural values/communication styles* describes the view that ethnic minority principles, ideals, and ways of communicating are incorrect or maladaptive, and finally *assumption of criminal status* captures the presumption that an individual is unlawful, treacherous, or aberrant based on race (Sue et al., 2007). Under microinvalidations, *alien in own land* captures the belief that visible ethnic minorities are always foreigners, *color blindness* describes the rejection of the existence of ethnicity or race, *myth of meritocracy* denotes the idea that race and success are mutually exclusive, and *denial of individual racism* is the refusal to own one's own racist biases or behavior.

Together, these three types of microaggressions capture aspects of individual, institutional, and cultural racism defined earlier. In addition, while Sue and his colleagues refer to these microaggressions as racial microaggressions, microinsults and microinvalidations capture aspects of ethnic identity and therefore can be considered ethnic microaggressions as well. Thus, Sue et al.'s (2007) racial microaggressions will be referred to as racial and ethnic microaggressions (REMAs) in the present study.

Since this taxonomy of racial microaggressions was published in 2007, there have been a multitude of studies focused on studying racial microaggressions. Between 2007 to 2014, 112 studies were published (Wong et al., 2014). Some of these studies focused on capturing the experience of racial microaggressions (e.g., Sue et al., 2009, 2011; Nadal, 2011). Many others have examined their negative impacts, for example on mental health (Blume et al., 2012; Okazaki, 2009; Syed, 2010).

Racial and Ethnic Microaggressions and Discrimination in Higher Education

Racial and ethnic diversity in higher education is increasing. The number of bachelor's degrees conferred to Latino, Black, Asian/Pacific Islander, and Native American students have increased between 2002-2003 and 2012-2013, with increases ranging from 110-16% (U.S. Department of Education, National Center for Education Statistics, 2016). While the trend is increasing for students of color to attend higher education and replace White Americans as the numerical majority, ethnic minority students face difficulties not shared by their White American counterparts.

Ethnic minority students face barriers in term of college predisposition (factors leading to college enrollment) and deviate from White American peers in their search and selection of which institutions to apply to and attend (Bergerson, 2009). When ethnic minority students do attend college, qualitative evidence shows that they experience prejudice and the most reported the setting for this prejudice was the college classroom (Syed, 2010). African American students attending predominantly White institutions face psychological barriers related primarily to racism, such as intentional and unintentional discrimination, forms of intimidation, alienation, as well as problems with procuring adequate financial aid (Lett & Wright, 2003).

These intentional and unintentional forms of race-based discrimination and alienation are often racial microaggressions. While the experience of racial microaggression is common among ethnic minority students, its impacts appear to be unique between ethnic groups and between ethnic minority and White students.

Specifically, White students experienced significantly fewer microaggressions than Asian, Latinx, or Black students, and Black students typically experienced more microaggressions than their Asian or Latinx counterparts (Forrest-Bank & Jenson, 2015). The authors concluded that racial microaggressions are an experience primarily for people of color and that White participants' colorblindness may not allow them to detect/acknowledge racial dynamics. In addition, research shows that microaggressions increase negative emotions. In a comparison between White and Asian Americans, exposure to racial microaggressions increased negative emotions such as anger, scorn/contempt, anxiety, sadness, and shame for Asian Americans significantly more than their White counterparts (J. Wang et al., 2011). Thus, it is important to capture differing experiences of microaggressions especially between ethnic minority students and White students.

Within the context of higher education, racial microaggressions or discrimination have been largely experienced on-campus in college classrooms (Forrest-Bank & Jenson, 2015; Grier-Reed, 2010; Lewis et al., 2013; Suárez-Orozco et al., 2015; Syed, 2010; Yosso et al., 2009) and in residence halls (Harwood et al., 2012). In addition, an observational study of microaggression in the classroom identified that the bulk of microaggressions are from instructors to students and that the microaggressions were committed by instructors of various ethnicities (Suárez-Orozco et al., 2015).

A recent systematic review of microaggressions in the learning environment has synthesized two decades of research from 1998 to 2018 (Ogunyemi et al., 2019). The most common microaggressions explored in the 40 studies reviewed were

microinvalidations (82.5%), followed closely by institutional microaggressions (27.5%), and microassaults (20%). What is unclear is if there were any differences in the prevalence or impact of microaggressions between White instructors and instructors of color and little is known about interracial microaggressions (Wong et al., 2014), though one study has at least documented its existence (Allen, 2010).

Student perception of the professor-student interaction is an important aspect of microaggression experiences in the classroom. Past literature supports that student perception of instructors, especially ethnic minority faculty, impact the student's overall evaluation of the instructor (Ho et al., 2009; Reid, 2010). These perceptions are important as they are often tied to faculty promotion and tenure and thus instructor's careers. As it connects to microaggressions in the classroom, past research has shown that students do perceive microaggressions as negative and also see intervention on the microaggression (e.g., direct or indirect confrontation, creating a discussion) as more effective than doing nothing (Boysen, 2012). A qualitative study found that ethnic minority students had felt negatively towards REMAs in class (Sue et al., 2009). They found discussions, validation of feelings, acceptance of racial differences, and directly managing race-based discussions helpful while instructors being passive, disengaging, becoming emotional, and ignoring the dialogue was seen as unhelpful. However, perception of REMAs as negative can vary depending on the types of microaggressions witnessed. Studies have found that microinsults and microinvalidations can be interpreted as someone being understanding or acting with good intentions (Tao et al., 2017).

Experimental Studies of Racial and Ethnic Microaggressions

Many of the published studies on REMAs were qualitative, descriptive, or quasi-experimental (Wong et al., 2014) and therefore lack causal inference. Over the course of the present research (2017-2019) there were three experimental microaggression studies that included types of microaggression as the independent variable. One group of sociologists examined the impact microaggressions between professors and students have on racial attitudes (Hughey et al., 2017). They used vignettes that depicted microaggressions in the college classroom and its impact on participants' racial attitudes. Another group of researchers examined the emotional reactions of White and non-white college-students to videos that depicted microaggressions of varying ambiguity (Tao et al., 2017) and examined the detection of microaggressions in therapy by therapists (Owen et al., 2018). These experimental studies share similar aspects to the current study and will discussed further below (see Discussion under Present Study).

Effects of Racism on Self-Efficacy Beliefs

The effects of racism on self-efficacy beliefs has been well documented in the literature and has shown detrimental effects in the areas of career interest and health. Traditional and non-traditional career interests for African American college students were found to be positively associated with self-efficacy beliefs about those careers (Witherspoon & Speight, 2009). The authors posited that while racist experiences did not directly impact self-efficacy beliefs or career interests, they play a role in what occupations are considered traditional and non-traditional for African Americans.

Relatedly, cultural mistrust (African American mistrust in White culture) was associated with poorer career decision-making self-efficacy. However, personality characteristics and career thoughts (negative thoughts that impede career decision making) were better predictors of career decision-making self-efficacy (Bullock-Yowell et al., 2011). The authors of this study posited that while cultural mistrust does influence poorer career decision-making self-efficacy, personality and career thoughts accounted for this relationship and thus cultural mistrust has an indirect effect on career decision-making self-efficacy.

This pattern of racism's indirect effects on self-efficacy can be seen with adolescents as well. Perceived racism in African American adolescents has been documented to increase career decision-making self-efficacy but only for careers that matched the participants expectations for African Americans such as music, clerical works, literature, and especially social services (Rollins & Valdez, 2006). Thus, adolescent African Americans appeared to internalize racist messages about their group and developed efficacy for those areas. Additional support for this finding came from another study that focused on African American adolescents and math careers. Perceived individual and institutional racism was negatively associated with math efficacy and math outcome expectations (expecting to do well or poorly in math) but positively for math interest (Alliman-Brissett & Turner, 2010). The authors concluded that greater knowledge/experiences of interpersonal/institutional racism correlated with greater interests in math but also less confidence and poorer expectation that they will do well. This in turn leads to fewer adolescents who would ultimately consider pursuing a math-

related career. However, they acknowledged that positive parental support could mitigate some of these effects.

In terms of racism's effect on health, it has already been well documented that racism negatively impacts health-care related trust, satisfaction, and communication (see Ben et al., 2017 for a review and meta-analysis). Recent studies that include health, racism, and self-efficacy support that racism negatively impacts self-efficacy that is related to health. Both subtle and overt racism has been negatively associated with sexual well-being and condom use self-efficacy for women (Zucker et al., 2016), self-efficacy to communicate with a physician among U.S. college students (which lead to poorer health care utilization; Cavallieri et al., 2019), and problem-focused and emotion-focused self-efficacy (which has been found to link the relationship between experiences of discrimination with psychological distress for sexual minority people of color; Ouch & Moradi, 2019). Thus, self-efficacy is a key variable for positive health outcomes and is negatively impacted by racism. Moreover, from the previous research it can be inferred that racism negatively impacts the cognitive capacities (i.e., symbolizing, forethought, vicarious, self-regulatory, and self-reflective) of self-efficacy.

For example, from the study of career-decision self-efficacy, the authors posited racist experiences did not directly impact self-efficacy beliefs or career interests but they did play a role in what occupations are considered traditional and non-traditional for African Americans (Witherspoon & Speight, 2009). From this, we can infer that racist experiences negatively affected the symbolizing and forethought capacities such that African American participants in the study symbolically learned what careers could be

considered traditional and non-traditional for African Americans and used the forethought capacity to use what they learned to guide their own career decisions. The self-regulatory and self-reflective capacities were not negatively impacted because their racist experiences did not negatively impact their how motivated the participants were to choose a career or their ability to analyze their own thought processes and gain knowledge about themselves and the careers available to them.

Racial and Ethnic Microaggressions and Discrimination's

Impact on Affect

Affect was chosen as the outcome measure because at least two studies presented evidence that reading vignettes of subtle discrimination situations can directly affect emotions of their readers such that watching or reading a depiction of a REMA lead to increased negative affect of research participants (Tao et al., 2017; J. Wang et al., 2011) and one study was able to directly link microaggression experiences with increased negative affect over two weeks (Ong et al., 2013). In the latter study, the researchers found that days with increased microaggression experiences lead to increased negative affect and somatic symptoms such as aches (e.g., muscular, head), gastrointestinal symptoms (e.g., poor appetite, upset stomach), upper respiratory symptoms (e.g., sore throat, runny nose) and other physical discomforts (e.g., allergies, hangover). Participants with multiple days of experiencing microaggressions in the two weeks felt the additive effect of increased negative affect and somatic symptoms each day.

Thus, increases in negative affect due to REMAs can be linked to poorer mental

health outcomes such as depression, which has been shown in a systematic review of the mental health impacts of REMAs (Nadal et al., 2012) and supports research that already links perceived discrimination to poorer psychological well-being more generally (Schmitt et al., 2014). Affect is also directly tied to vicarious experiences and self-efficacy according social cognitive theory (Bandura, 1989; Bandura & Rosenthal, 1966). Vicarious experiences are most impactful when there is emotional arousal (e.g., increased affect) associated with what is being experienced. In turn, this negative emotional arousal heavily impacts the self-regulation and self-reflexive capacities of individuals and lead to lower self-efficacy related to the vicarious experience (e.g., racism).

White Americans and Racial and Ethnic Microaggressions

Starting with seminal articles of White Racial Identity Development (WRID), it has been clear that White Americans are generally unaware of racism and their Whiteness and either move through stages of knowledge and acceptance of racial differences (Helms, 1984) or to more advanced statuses of White racial consciousness (Rowe et al., 1994). In either case, the changes in identity stages or statuses are fueled by some discomfort of realizing their own Whiteness and/or acknowledgement and understanding of how Whiteness differs from the experience of ethnic minorities with the ultimate goal of owning one's Whiteness and actively working towards racial and ethnic equity. In addition, as stated previously, historic or *old-fashioned* racism has been showed to be no longer acceptable as part of the mainstream (Dovidio et al., 2002, 2016; McConahay et al., 1981) and research has documented this shift from historic racism that was hostile,

intentional, and conspicuous, to contemporary racism (Sue et al., 2007) such as racial microaggressions. These societal changes have also exerted their own impact on White Americans and the aversion to being seen or depicted as racist and has expanded the focus on Whiteness to include White Privilege and colorblind racial attitudes (Edwards, 2017).

White privilege is the unearned/granted advantages given to White persons that is backed systemically by society, making White the default, objective, and ideal (McIntosh, 1988). A complement of White Privilege is *colorblindness*, the denial of race and racial dynamics, which includes denial of White Privilege itself (McIntosh 1988; Neville et al., 2000). Contemporary dialogue of colorblindness can be characterized as colorblind racial ideology (CBRI) which consists of *color-evasion* (emphasis of sameness to deny racial differences that exist) and *power-evasion* (denial of racial inequality and discrimination by accepting that all opportunities are equal to everyone; Neville et al., 2013). Without knowledge, awareness, and acknowledgement of race and racial dynamics, it is impossible to truly address racial discrimination. Thus, there is a body of research targeted towards understanding and intervening on CBRI, especially for White American college students (Edwards, 2017; Lewis et al., 2012; Patterson & Domenech Rodríguez, 2019; Patterson et al., 2018; Poteat & Spanierman, 2012; Sue et al., 2009, 2010). CBRI has also been a target for understanding microaggressions generally as well (Oguyenmi et al., 2019).

Generally, microaggressions focus on the impact for persons of color. However, there is also evidence that White Americans feel the impact, albeit obliquely, of

microaggressions. The authors of one qualitative study that delved into the experiences of White trainees reported that the trainees felt an increase in negative affect when difficult dialogues related to race, including microaggressions. Specifically, they felt anxious, helpless, and wanted to avoid the dialogue (Sue et al., 2010). Relatedly, other research investigating the vicarious impact of microaggressions on White American college students have found that exposure to in-vivo microaggressions (subtle and overt) negatively impacted participants both physiologically (increase in systolic blood pressure) and their affect (increase in negative affect; Torres et al., 2020). Thus, the vicarious impacts are still important. The discomfort of engaging in conversations of race and witnessing microaggressions leads to White persons being forced to encounter their own White Privilege and challenges their own CBRI (Patterson & Domenech, 2019; Sue et al., 2010). Thus, it is important to build on previous literature to examine the impacts of REMAs for White American students as well.

Changes in Colorblind Racial Ideology

As mentioned, there is a body of research targeted towards understanding and intervening on CBRI, especially for White American college students. Within the body of research that focuses on understanding CBRI in White American students, it has been found that CBRI mediates the relationship between social dominance orientation (SDO; support for hierarchical systemic structures) and right-wing authoritarianism (RWA; deference to authority figures, support for conformity to the norm, and punishment of norm violators) on modern racist attitudes (MRA; e.g., racial minorities should not push

themselves where they are not wanted; Poteat & Spanierman, 2012). Thus, decreasing CBRI can challenge the ideas of SDO and RWA and reduce the motivation to hold on to MRA.

Significant decreases in CBRI has been identified as a desirable outcome for one study that examined social justice attitudes and diversity experiences for first year college students (Lewis et al., 2013). The authors of this study examined the CBRI of African American, Latinx, and White American students along with social justice attitudes (affirmative action beliefs and interest in social issues), diversity experiences during their first year in college, and CBRI at the beginning and end of their first year. They statistically controlled for influences from multicultural high school classes before they were enrolled at the university. The authors found that for ethnic minority students positive affirmative action beliefs were connected to low CBRI at the beginning of their first year. They also found that greater interest in social issues were associated with significant decreases in CBRI. For White American students, decreases in CBRI predicted higher affirmative action beliefs. Decreases in CBRI along with attendance in high school multicultural courses, and involvement with diversity experiences predicted greater interest in social issues. Thus, decreases in CBRI affects first-year White and ethnic minority students differently. Ethnic minority students' decrease in CBRI predicted greater interest in social issues, likely as they apply to their own lives and experiences. White American students' decrease in colorblindness predicted higher affirmative action beliefs which is likely because as students' awareness of racial inequity increases there is better understanding for the need for affirmative action policies.

Interestingly, decreases in CBRI paired with early exposure to multiculturalism (multicultural high school classes) plus contact with diversity (campus diversity experiences such as ethnic studies and diversity related events) is what increases White American student interest in social issues, likely due to the fact that those social issues do not necessarily impact White American students directly like it does for ethnic minority students. The early exposure and diversity contact serves as extra forces to help challenge White American students into looking into social issues.

Finally, intervention on CBRI has been implicated in multicultural education (Edwards, 2017; Oguyenmi et al., 2019; Sue et al, 2009). One study examined the effects of a multicultural course on cultural competence for undergraduate students (multicultural knowledge, awareness of self and other, and skills; Patterson et al., 2018). They examined shifts in colorblindness, ethnic identity, ethnocultural empathy, multicultural experiences, and personal beliefs about diversity from the beginning to the end of the course. The authors found that the students in the course significantly decreased in CBRI while increasing their multicultural experiences and ethnocultural empathy. They attributed these changes to the course structure and the students' engagement in learning multicultural concepts and increased diversity experiences, which has also been replicated to an online format and resulted in similar outcomes (Alvarez & Domenech Rodríguez, 2020). They also pointed out that ethnic identity had decreased for White students in one of the classes (two classes were examined) and had cited White racial identity as a possible explanation for why this shift happens. They cite the work of Helms' White racial identity model (Helms, 1984) and allude to the Disintegration stage

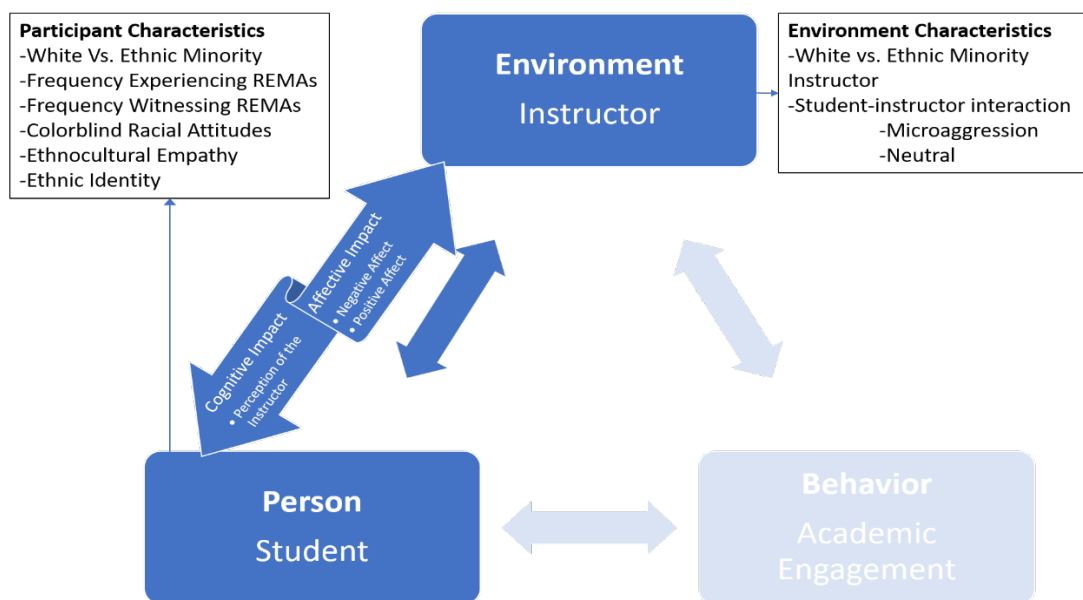
where White persons acknowledge their Whiteness due to acknowledgement that racism exists and may opt to identify less with their racial group due to the discomfort of acknowledging that their racial group is that of the oppressor.

Present Study Conceptualized Within a Social Cognitive

Theory Framework

The present study was conceptualized using the Social Cognitive Theory (SCT; Bandura 1986) framework reviewed earlier (Figure 1). Many past studies of microaggressions focus on the experiences of colleges students, were correlational and quasi-experimental, and most recently studies have begun including more experimental studies. The present study continues to add to the body of microaggression literature by using an experimental design to continue the work of examining the impacts of microaggressions on college students.

From the literature, it is known that perceived discrimination and microaggressions negatively impact the cognitive capacities of self-efficacy and that vicarious impacts require some emotional arousal to be impactful. Thus, both the *perception* of the microaggression and the *affective response* must be measured to examine vicarious impacts of microaggressions. In addition, there is ample evidence to suggest that White Americans and ethnic minority students experience microaggressions differently. There is also evidence that both ethnic minority professors and White American professors commit microaggressions toward students of color and that students' perceptions of how their professors handle the microaggression is important.

Figure 1*Study Variables Within the Reciprocal Determinism Framework*

Note. Emphasis is placed on the reciprocal influences of the student and instructor. REMAs = racial and ethnic microaggressions.

However, what is less clear is if the impact of microaggressions differ from White American professors or ethnic minority professors. This leads to the first two research questions.

The first asks, “Do White American and ethnic minority students differ in their perception of White American and ethnic minority professors that commit REMAs”? To answer this question, participants were asked to rate interactions between a student and a professor. The interactions would either be neutral or contain a microaggression. It was predicted that student-instructor interactions with microaggressions would be rated more negatively and that the most negative ratings would be from ethnic minority participants rating student-interactions with White professors.

The second asks, “Do changes in affect occur differently for White American and ethnic minority students when exposed to REMAs”? It was predicted that ethnic minority participants would have a greater increase in negative affect than their White American counterparts.

From the literature, personal characteristics such as colorblind racial attitudes, ethnocultural empathy, and ethnic identity each factor into learning more about racial dynamics. Colorblind racial attitudes affect the symbolizing capacity of self-efficacy beliefs by using knowledge (or ignorance) of racial dynamics to affect the perception of an interaction as racial discrimination or not. This in turn could then impact other cognitive capacities by allowing planning of future action being unaware of race/racial dynamics (forethought capacity), not perceiving racial microaggressions as racist (vicarious), denying their own racist beliefs/behavior (self-regulatory), and using colorblindness to dismiss issues regarding racism (self-reflexive). Ethnocultural empathy impacts the vicarious capacity by allowing the person to empathize with experiences of others that do not match their own and ethnic identity is shaped by both exploration of ethnic identity (symbolizing and forethought capacities) and the commitment of ethnic identity (self-regulatory and self-reflective capacities). Thus, inclusion of these variables may help explain the cognitive and affective impacts of microaggressions on participants (Figure 2).

This led to the third research question, “Can the impact of microaggressions on participants be explained by experiencing microaggressions, witnessing microaggressions, colorblindness, ethnocultural empathy, or ethnic identity”?

Figure 2*Individual Characteristics within the Five Cognitive Capacities of Self-Efficacy*

Symbolizing	Mental representation of personal experiences
<ul style="list-style-type: none"> • CBRI = knowledge/awareness of racial dynamics • Ethnic Identity (Exploration) = awareness of self as an ethnic being 	
Forethought	Planning future courses of action
<ul style="list-style-type: none"> • CBRI = planning future courses of action with (or without) the knowledge/awareness of racial dynamics • Ethnic Identity (Exploration) = awareness of self as an ethnic being and actions that align or deviate from cultural norm 	
Vicarious	Learning by witnessing consequences to others' behavior
<ul style="list-style-type: none"> • Ethnocultural Empathy = emotional arousal to witnessing racial discrimination • CBRI = lack of emotional arousal and negative attitude in response to witnessing racial discrimination 	
Self-Regulatory	Motivating and regulating internal standards
<ul style="list-style-type: none"> • Ethnic Identity (Commitment) = Behaving in accordance to (or not) cultural norm • CBRI = denial of individual racism 	
Self-Reflexive	Analysis of one's thoughts and their environment
<ul style="list-style-type: none"> • Ethnic Identity (Commitment) = Salience of ethnic identity and behavior in a context/setting • CBRI = dismissal/denial of race and race dynamics 	

Note. CBRI = Colorblind racial ideology.

Study Development and Progression

Since college classrooms were where microaggressions were common, focus was placed on the student-instructor interaction in the college classroom. Within the reciprocal-determinism framework, the connection between environment and person was the focus (see Figure 1). The classroom serves as the environment and the depiction of a microaggression serves as the environmental stimuli for participants (persons) to respond. Thus, vignettes depicting microaggressions were chosen to allow participants to “witness microaggressions” within a classroom setting. In Study 1, vignettes were developed to

determine if vignettes did in-fact impact affect. In addition, an adapted measure of microaggression experiences was used to measure the frequency of witnessing microaggressions. The literature suggests that witnessing microaggressions influences a person's cognitive capacities *and* increase the salience of discrimination, making an affective reaction likely as well. In Study 2, the vignettes were refined so that they matched three conditions: overt (microaggression present), covert (microaggression present), and neutral (no microaggression present). They were also changed so all characters in the vignettes were men and the target student was an ethnic minority student. The ethnicity of the professor was either White or ethnic minority. Perceptions of the student-instructor interaction were measured along with affect to ensure the vignettes has the intended effect in each condition. Finally, the Present Study used the newly created vignettes, measures of affect, perception of the student-instructor interactions, and included measures of witnessing and experiencing microaggressions, colorblind racial attitudes, ethnocultural empathy, and ethnic identity.

CHAPTER III

METHOD

The present research required pilot work to examine the suitability of the stimuli to be used in the experimental research (i.e., experimental vignettes). The purpose of Pilot Study 1 was to determine which developed vignettes would be used in the final study and to pilot an adapted measure for witnessing microaggression. Originally, only two conditions were conceptualized, microaggression present or absent. However, three conditions emerged from participant responses, an overt microaggression condition, neutral condition, and a covert microaggression condition. In Pilot Study 2, vignettes were revised and piloted to determine the impact of the different conditions on student affect. The methods and results of the two pilot studies are presented in the Method section because they inform the methods used in the third study (i.e., Present Study). In the Present Study, the vignettes were used to examine the impact of microaggression on White and ethnic minority college student participants. Results for the Present Study are found in Chapter IV.

Pilot Study 1

Design

A pre-post study design was used to evaluate pilot study measures and vignettes. Measures of affect, experimental race-related vignettes, experiences of microaggressions, and an adapted measure of witnessing microaggressions were used to determine their efficacy for subsequent research.

Participants

Participants were 61 students at Utah State University. The opportunity to participate was announced in upper division psychology classes (PSY 2000+) during the 2016 summer semester. Participants were 18 to 45 years of age ($M = 21.50$, $SD = 4.15$), mostly White American ($n = 54$, 77.1%), women ($n = 50$, 71.4%), and in their third year in school ($n = 18$, 25.7%). See Table 1 for all demographics.

Table 1

Demographics (N = 61)

Demographic variable		Frequency	Percentage
Sex	Male	11	18.0
	Female	50	82.0
Race	White	54	88.5
	Asian	1	1.6
	Mixed	4	6.6
	Prefer not to answer	2	3.3
Year in school	First	14	23.0
	Second	10	16.4
	Third	18	29.5
	Fourth	15	24.6
	Fifth+	4	6.6

Measures

Affect

The Positive and Negative Affect Scale (PANAS; Watson et al., 1988) was used to measure the participant's affect before and after reading the experimental vignettes. The two 10-item scales measure both positive and negative affect. Positive Affect (PA) has 10 different characteristics: *attentive*, *interested*, *alert*, *excited*, *enthusiastic*, *inspired*, *proud*, *determined*, *strong*, and *active*. Negative Affect (NA) lists 10 negative emotions

that include: *distressed, upset* (distressed); *hostile, irritable* (angry); *scared, afraid* (fearful); *ashamed, guilty* (guilty); and *nervous, jittery* (anxious). Participants were asked to rate each item on a 5-point Likert scale where: 0 = *slightly or not at all*, 1 = *a little*, 2 = *moderately*, 3 = *quite a bit*, and 4 = *very much*. They rated each item based on how they are feeling “right now”. Scores are calculated as means of all items. The authors also presented evidence for acceptable scale (Cronbach’s $\alpha = .84 - .87$) and test-retest reliability, as well as converging and discriminant validity (Watson et al., 1988). In the present sample, Cronbach’s α for pretest and posttest affect: Positive Affect = .88 and .91; Negative Affect = .81 and .71.

Vignettes

A total of 18 vignettes were created using Sue et al.’s (2007) taxonomy, examples of microaggressions from the literature (e.g., Allen, 2010; Syed, 2010), and experiences on campus. Each vignette was constructed by the researcher and a research assistant and contained an interaction in the classroom between a male professor and a student. The ethnicity of the professor (ethnic minority vs. White) and the student (ethnic minority vs. White) varied as well as if there was a microaggression (present vs. absent). The specific microaggressions also varied but were either microinsults or microinvalidations, which was common in the literature. The 18 vignettes were then assigned to one of two blocks such that each of the two blocks (A or B) contained nine vignettes. Participants were randomly assigned to Block A or B and asked to respond to the following question for each vignette: “What did you notice about the interaction between the teacher and the student?” The participant provided a response by writing into a text box. Participants then

responded to an instructor rating question for each vignette that asked: “How would you rate the interaction between the professor and the student?” on a 5-point Likert-type scale, that ranged from: *negative* (1), *slightly negative* (2), *neutral* (3), *slightly positive* (4), *positive* (5).

Experiencing Racial Microaggressions (ERM)

The Revised 28-Item Racial and Ethnic Microaggressions Scale (R28REMS; Forrest-Bank et al., 2015) was used to examine experiences or perceptions of microaggressions. The 28-item scale measures five factors. The five factors included: second class citizen & criminality, inferiority, similarity, microinvalidations, and media microaggressions. All scale items can be found in Forrest-Bank et al., 2015). Participants responded to each item on a six-point Likert-type scale (0 = *never*, 1 = *very rarely*, 2 = *rarely*, 3 = *sometimes*, 4 = *moderately*, 5 = *often*, 6 = *always*). Forrest-Bank et al. presented evidence of acceptable reliability for all five subscales (Cronbach’s $\alpha \geq .80$) and across Black, Latino/Hispanic, and Asian racial groups (Cronbach’s $\alpha \geq .73$). The authors also suggested that there are qualitative differences in the meaning given to microaggression by individuals from different racial or ethnic groups. The scale composite and subscales are scored as mean of items. Higher scores are evidence of more frequent experiences in experiencing racial microaggressions. The scale reliability for the overall scale in the present sample was a Cronbach’s $\alpha = .80$, indicating acceptable scale reliability. In addition, subscale reliabilities were calculated for each of the five subscales: second class citizen & criminality ($\alpha = .72$), inferiority ($\alpha = .82$), similarity ($\alpha = .79$), microinvalidations ($\alpha = .78$), and media microaggressions ($\alpha = .94$).

Witnessing Racial Microaggressions (WRM)

The R28REMS (Forrest-Bank et al., 2015) was adapted to create a measure to capture students' experiences of *witnessing* a microaggression. Each item was reworded to reflect an event witnessed in the third person. For example, "Someone clenched his/her purse or wallet upon seeing *me* because of my race" was reworded to read "Someone clenched his/her purse or wallet upon seeing *someone else* because of their race".

Participants rated each event on the same six-point Likert-type scale: *never* (0) to *always* (6). The scale composite and subscales were scored as mean of items. Higher scores are indicative of more frequent witnessing of racial microaggressions. The scale reliability of the overall scale for the present sample was a $\alpha = .91$, indicating excellent reliability. In addition, subscale reliabilities were calculated for each of the five subscales and were acceptable: second class citizen & criminality ($\alpha = .91$), inferiority ($\alpha = .96$), similarity ($\alpha = .82$), microinvalidations ($\alpha = .90$), and media microaggressions ($\alpha = .91$).

Demographic Information

Participants reported their age, sex, ethnicity, and year in college.

Procedure

The pilot study was approved by the IRB and was announced in classes or by contacting instructors via e-mail. The announcements informed participants to complete a Qualtrics survey online. Instructors disseminated the link to the surveys for the students via Canvas. Students interested in participating accessed Canvas, clicked on the link, provided consent for participation, and completed the surveys and vignettes. If

participants needed to debrief, they were instructed to contact the researchers and the researchers could provide debriefs or refer them to counseling at Counseling and Psychological Services (CAPS). No participants contacted the researchers for a debrief nor indicated that they needed a referral for counseling.

Results

Independent samples *t* tests showed no significant differences on the pre- or post-test measures between participants assigned to block A or B ($ps = .313-.783$). The same analyses were conducted to determine if there were significant differences between men and women on the pre or post affect measures and no significant differences were found ($ps = .121-.417$).

The first pilot research question --Will the vignettes impact student's affect?— was answered with two paired-samples *t* tests to determine if positive and negative affect significantly changed over time. Both positive and negative affect significantly decreased across time (see Table 2). The second pilot research question 2 was: Will the R28REMS witnessing scale have acceptable reliability? The scale reliability of the adapted R28REMS was excellent at .91.

Table 2

*Results of Paired-Samples *t* Tests*

	Pre		Post		Difference	<i>t</i>	<i>df</i>	<i>p</i>	<i>d</i>
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>					
Affect									
Positive (<i>n</i> = 61)	2.70	0.81	2.44	0.88	0.26	3.61	60	.001	0.30
Negative (<i>n</i> = 60)	1.59	0.53	1.43	0.41	0.16	4.74	59	< .001	0.29

Posthoc Analyses and Findings

Correlational Findings. Correlations between the experiencing and witnessing microaggressions composite scales (R28REMS and R28REMSW) and subscales were conducted to determine if experiencing racial and ethnic microaggressions had any relation to witnessing them and to determine if there were any significant correlations among subscales (see Table 3). There was no significant relationship between the witnessing and experiencing microaggression composite scales. Thus, these two constructs appear to be independent of each other.

The experiencing microaggressions composite scale was significantly correlated to each of its own subscales. The same results were found for the witnessing microaggressions composite scale and its subscales except for the witnessing media microaggressions subscale where no correlation was found (see Table 3).

Among the rest of the subscale scores, there were other notable patterns of correlations. Among the experiencing microaggressions subscales, assumption of criminality was strongly positively correlated with assumption of inferiority ($r = .61$), and moderately positively correlated with assumption of similarity ($r = .32$) and media microaggressions ($r = .32$). Assumption of inferiority was also moderately correlated with assumption of similarity ($r = .27$) and media microaggressions ($r = .32$). Media microaggressions were moderately negatively correlated ($r = -.35$) to microinvalidations. Interestingly, microinvalidations were not associated with assumption of criminality, inferiority, or similarity. In addition, assumption of similarity was not significantly correlated with media microaggressions. This pattern of correlations show that the

Table 3*Correlation Matrix of Witnessing and Experiencing Microaggressions and Subscales*

Variables	1	2	3	4	5	6	7	8	9	10	11	12
<i>Experiencing</i>												
1. Criminality	-											
2. Inferiority	.61***	-										
3. Similarity	.32*	.27*	-									
4. Invalidations	.08	.10	.02	-								
5. Media	.32*	.32*	.19	-.35**	-							
<i>Witnessing</i>												
6. Criminality	.23	.18	.04	.23	-.03	-						
7. Inferiority	.02	.02	-.07	.25*	-.06	.65***	-					
8. Similarity	.15	.07	.12	.14	.15	.40**	.57***	-				
9. Invalidations	-.08	-.06	-.17	.40**	-.13	.31*	.39**	.54***	-			
10. Media	.10	.09	-.03	-.09	.11	-.04	-.13	-.35**	-.35**	-		
<i>Composite</i>												
11. R28REMS	.70***	.73***	.64***	.37**	.49***	.21	.08	.22	.03	.04	-	
12. R28REMSW	.12	.08	-.05	.32**	-.01	.78***	.86***	.73***	.63***	-.05	.18	-
<i>M</i>	0.37	0.41	1.13	1.70	1.77	3.55	3.37	4.02	3.42	2.24	1.00	3.38
<i>SD</i>	0.62	0.81	1.41	1.32	1.75	1.58	1.71	1.59	1.63	1.65	0.63	1.06

Note. Experiencing = Experiencing Microaggressions; Witnessing = Witnessing Microaggressions; R28REMS = Revised 28-Item Racial and Ethnic Microaggressions Scale; R28REMSW = Adapted Revised 28-Item Racial and Ethnic Microaggressions Scale; Criminality = Second-Class Citizen and Assumption of Criminality Subscale; Inferiority = Assumption of Inferiority Subscale; Similarity = Assumption of Similarity; Invalidations = Microinvalidations; Media = Media Microaggression.

* $p < .05$.

** $p < .01$.

*** $p < .001$.

experience of microaggressions that involve assumption of criminality, inferiority, or similarity seem to co-occur while microinvalidations appear to be a unique experience of microaggressions.

Among the witnessing microaggression subscale scores, correlations were stronger in magnitude and ranged from $r = .65$ to $.31$ for witnessing assumption of criminality, inferiority, similarity, and microinvalidation. In contrast, the witnessing media microaggressions subscale was not significantly correlated with witnessing assumption of criminality ($r = -.04$) or inferiority ($r = -.13$) and was negatively correlated with both assumption of similarity ($r = -.35$) and microinvalidations ($r = -.35$). Thus, the witnessing media microaggressions subscale may need to be considered an independent scale since it either does not significantly correlate with the other witnessing microaggression subscales or it negatively correlates. In other words, witnessing media microaggressions occur in independent frequency of other types of REMAs.

No significant correlations were found between the witnessing microaggressions composite and the experiencing microaggressions subscales, except for one. The witnessing microaggressions composite was positively correlated with experiencing microinvalidations, $r = .32, p < .01$. On the subtest level, experiencing microinvalidations was moderately and positively correlated with witnessing microinvalidations, $r = .40, p < .01$, and positively correlated with witnessing assumption of inferiority, $r = .25, p < .05$. There were no significant correlations between the experiencing microaggression composite scores and the witnessing microaggressions subscales.

Open-Ended Vignette Results. Samples of open-ended results (responses that

were longer than one word and representative of the general consensus) can be found in Appendix A. There were typically four types of response categories expressed by participants: positive, neutral, negative, and mixed. The responses seem to vary in terms of their intensity but responses could generally be sorted into one of these response categories.

Positive Responses. Examples of positive responses are as follows: “It was pleasant. Both the student and professor were engaged and interested,” “Very positive and uplifting feedback was given,” “The professor acknowledge his mistake and was willing to change to make the student more comfortable.” In each of these instances, participants included words such as “pleasant,” “positive,” and “willing to change” to communicate their approval of the interaction between professor and the student.

Neutral Responses. Participant responses that stated there was an interaction or described the interaction as typical were placed into this response category. For example, “Their interaction seemed fairly normal, I didn't notice anything out of the ordinary,” “The professor answers the question that was asked,” and “The professor asked where he was born because of his race” all were typical neutral responses. It may be possible, such as in the last example, that the participant felt negatively about the interaction but their response did not have sufficient information to make that determination.

Negative Responses. Negative responses either communicated feelings of being uncomfortable with the professor-student interaction (e.g., “I feel a little awkward after reading this one. The professor singled a student out, and didn't try to help them. Instead, they turned to the whole class when the first student didn't know the answer.”), describes

the interaction as negative, (e.g., “The professor asks a student to explain how they solved a problem, which Alex does, but the professor interrupts in the middle of her explanation, which is a bit inconsiderate”), or makes negative evaluations of the professor (e.g., “The professor is not doing his job correctly if he is only showing the white side.”).

Mixed Responses. Any responses that combined components of other response categories in the same response were considered a mixed response. For example, “It seemed a little uncomfortable at first, but ended very well. The professor was understanding and sounds like he will attempt to change” has both disapproving (i.e., expressing discomfort) and approving (i.e., understanding and change) response components.

Quantitative Vignette Responses. A frequency table was used to summarize quantitative vignette responses, Table 4. Four vignettes that were rated most often as *slightly negative* all contained microaggressions, regardless of the ethnicity of the professor or the student in the vignette. Four vignettes rated most often as *neutral* had no microaggressions present, regardless of the ethnicity of the professor or the student.

Four vignettes were rated most often as *positive*. Three of these vignettes contained microaggressions (vignette numbers 3, 5, & 12), two of these involved microaggressions from a White American professor to White American (3) student and ethnic minority student (12), while the third was from an ethnic minority professor to an ethnic minority student (5). These microaggressions involved microinsults (specifically, ascriptions of intelligence) and a microinvalidation (denial of racism). These types of microaggressions appeared to be perceived as uplifting or encouraging. In the vignettes

Table 4
Quantitative Results from Vignettes

Vignette #	Condition			Negative		Slightly negative		Neutral		Slightly positive		Positive	
	PE	SE	MA	f	%	f	%	f	%	f	%	f	%
1	W	M	P	4	12	15	45	6	18	2	6	6	18
2 / 11	W	M	A	0	0	4	6	33	52	8	13	16	25
3 a	W	W	P	1	3	7	21	4	12	9	27	12	36
4 / 13	W	W	A	0	0	0	0	22	35	4	6	37	59
5	M	M	P	4	12	5	15	2	6	9	27	10	30
6	M	W	A	1	3	4	12	20	60	3	9	5	15
7	M	-	P	9	27	14	42	8	24	1	3	1	3
8 / 16	M	W	P	14	22	32	51	9	14	4	6	4	6
9 / 18	W	M	A	1	2	1	2	38	60	8	13	15	24
10 a	W	M	P	2	7	4	13	2	7	7	23	16	53
12	W	W	P	1	3	15	50	4	13	4	13	4	13
14	M	M	P	10	33	13	39	4	13	1	3	2	7
15	M	W	A	2	7	4	13	16	53	2	7	6	20
17	W	-	P	6	18	14	47	7	23	3	10	0	0

Note. Bold values indicate most frequent response type. PE = Professor Ethnicity; Student Ethnicity; W = White American; M = Ethnic Minority; - = no student was specified (interaction involved the entire classroom); MA = Microaggression; P = present; A = absent; f = frequency.

with the ascription of intelligence, the student in both vignettes were women and the professor made encouraging statements about how they should not let others underestimate them. In the vignette with the microinvalidation, the professor excused his own racist comment by empathizing with the student's experience and likening it to his own experiences with ageism. The fourth vignette contained no microaggressions and was an interaction between a White American professor and student. The professor competently answered a question asked by a student and that competence may have led to more positive ratings.

Conclusion

The results of Pilot Study 1 provided valuable insights to design the Present Study. The vignettes impacted participants' affect; however, the vignettes needed to be sorted and presented in blocks of microaggression-present and microaggression-absent to determine their respective impacts on affect. In addition, microaggression-present vignettes had both negative and positive qualitative responses and quantitative ratings. The negative responses were for vignettes that contained microaggressions that could more easily be perceived as rude, hostile, or negatively impactful on the student while positive responses contained more microaggressions that could be perceived as seemingly benign or helpful but were inadvertently or covertly hostile. Thus, three different types of vignettes conditions emerged: overtly hostile microaggressions (overt condition), covertly hostile microaggressions (covert condition), and microaggression-absent (neutral condition) vignettes. The vignettes that were selected for the final study were vignette numbers 1 and 3/10 for the covert condition, 2 and 9 for the neutral condition, and 5 and

8 for the covert condition. The two vignettes for the covert condition were modified to be shorter and the microaggressions were changed to microassaults to depict the professor as more overtly hostile (see Table 5). Thus, microassaults were depicted in the overt condition, microinvalidations and microinsults made up the covert condition, and a neutral race-based interaction comprised the neutral condition vignettes. To increase experimental control, the vignettes were edited by changing the gender of students in the vignettes to all men to ensure focus was placed on the race-related professor-student interaction, and eliminate the multiplicity of marginalized identities that might be present for women of color. All students depicted in the vignettes were men of color, with various ethnic/racial labels to focus on the collective of ethnic minority men instead of a particular ethnic group (e.g., microaggressions towards Latinx men, microaggressions toward Black men). Focus on ethnic minority men was intended to minimize confounds due to the gender of the student.

Pilot Study 1 also provided valuable information regarding the measurement of experienced and witnessed microaggressions. The R28REMS and R28REMSW were administered to both White American and ethnic minority participants and it supports that witnessing and experiencing microaggressions are indeed separate constructs. However, there were more White American participants than ethnic minority participants. It is possible that these correlations reflect more of the White experience of microaggressions (i.e., racial microaggressions are not experienced directly but can be witnessed). Thus, it will be important to oversample ethnic minority students as participants to compare their scores on the frequency they experience and witness microaggressions.

Table 5*Original and Edited Vignettes*

Original vignette	Edited vignette
<i>Covert microaggression condition</i>	
Vignette 1: You are sitting in the first day of your English 2010 class, the professor, Dr. Mitchell Brown , wants everyone to get acquainted and familiar with each other since these are relatively small classes. The introductions begin making their way around the room, the guy sitting next to you, who is Chinese, introduces himself and says “Hi! I’m Mike and I am 19 years old and I am from Salt Lake City”. Your professor then proceeds with a smile “Oh really?! That is so interesting Mike! Where were you born?”	You are sitting in the first day of your English 2010 class, the professor, Dr. Diego Lopez , wants everyone to get acquainted and familiar with each other since these are relatively small classes. The introductions begin making their way around the room, the guy sitting next to you, who is Chinese, introduces himself and says “Hi! I’m Mike and I am 19 years old and I am from Salt Lake City”. Your professor then proceeds with a smile “Oh really?! That is so interesting Mike! Where were you born?”
^a Microinvalidation-Alien in Own Land	
Vignette 3/10: As you are entering your history class, your professor, Dr. Jason Miller, is waiting at the door with your most recent essays that you have handed in. As you stand behind Sam, who is White, the professor hands her, her paper and says “You should be so proud of this writing, you had the best one out of any of your classmates. Don’t let them underestimate you, keep up the good work!”	As you are entering your history class, your professor, Dr. Jason Miller, is waiting at the door with your most recent essays that you have handed in. As you stand behind Sam, who is African American, the professor hands him, his paper and says “You should be so proud of this writing, you had the best one out of any of your classmates. Don’t let them underestimate you, keep up the good work!”
^a Microinsult-Ascription of intelligence	
<i>Neutral race-based interaction condition</i>	
Vignette 2/11: Imagine you are in your English Literary Analysis class when your professor Dr. Michael Gulbin asks a Latino student named Jayme a question. He asked “Jayme, how did you feel about the length of the previous exam that tested on cultural differences and perspectives in modern literature?” Jayme responds “I felt the exam was fairly easy but the essay portion was far too long for the time period given”.	Imagine you are in your English Literary Analysis class when your professor Dr. Michael Gulbin asks a Latino student named Jayme a question. He asked “Jayme, how did you feel about the length of the previous exam that tested on cultural differences and perspectives in modern literature?” Jayme responds “I felt the exam was fairly easy but the essay portion was far too long for the time period given.”
^a Race based interaction. No microaggression present.	
Vignette 9/18: Imagine you are in your World History class when your professor Dr. Devon Fullard asks an African American student named Michael a question. He asked “Michael what did you think about the cross cultural differences in Asia in the film that we finished last class?” Michael responds “I was surprised by the cultural differences in those countries.”	Imagine you are in your World History class when your professor Dr. DeShawn Davis asks an African American student named Michael a question. He asked “Michael what did you think about the cross-cultural differences in Asia in the film that we finished last class?” Michael responds “I was surprised by the cultural differences in those countries.”
^a Race-related interaction. No microaggression.	

(table continues)

Original vignette	Edited vignette
<i>Overt microaggression condition</i>	
<p>Vignette 5: Joe, an African American student, who is in a US history class, wants to speak with Dr. Lopez, who is an elderly man, about something that has been bothering him. Joe approaches the professor at the front of the room when mostly all of the students have cleared out. "Professor Lopez, I am having trouble with something, I think you are a great professor but it makes me pretty uncomfortable when you always direct questions about the civil rights movement towards me. I cannot speak for my entire race, I wasn't even born yet! It just makes me feel singled out and as if I am expected to know all this information just because of my race." Dr. Lopez responds with "Joe! I have had a ton of black friends in my day! I didn't even realize I was doing that (chuckles to himself). I just call on anyone who looks like they're paying attention to me! I know exactly how you feel, as the old guy among the faculty my colleagues always ask me about the Great Depression just because I am old! That is not even my subject of interest in my field and it gets annoying! I am glad you said something."</p>	<p>You are sitting in your U.S. history class and your professor Dr. Nathan Baker begins discussing the Civil Rights Movement. The professor is consistently referring to African Americans as "colored people". A student named Avery, who is African American approaches the professor after class and asks if he could use African American or Black when discussing his racial group. Dr. Baker responds with "Gosh, you people are so sensitive, no one can say anything these days. I am just trying to teach."</p>
^a Microinvalidation – denial of individual racism	
<p>Vignette 8/16: Your professor in your Math 1050 class, Dr. Anthony Rodriguez, asks the class if someone could explain how they did problem number 56 on the homework aloud to the class. A classmate of yours Alex, who is White, raises her hand then proceeds "First, I like to look at all the information I know and put alike things on one side of the equation, then." Alex is then interrupted by the professor, addressing the class. "What she means is, she likes to isolate the variables and combine like terms."</p>	<p>You are sitting in your biology course and the professor Dr. Abu Abadi is discussing a research method frequently used during lecture. A student named Dakota who is Native American asks the professor if he could elaborate on how this method contributes to an overall benefit in the medical field. The professor responds by saying "Oh, I don't see why you need to know that, your people don't really go into the medical field do they?"</p>
^a Microinsult-Ascription of intelligence.	
<p><i>Note.</i> Changes from the original vignette are indicated with red font. ^a Description if microaggression is present or absent.</p>	

Pilot Study 2

Design and Purpose

A second pre-post study design was used to evaluate the revised pilot study vignettes. A measure of affect and the revised experimental race-related vignettes, was used to determine their efficacy for the proposed study. It was hypothesized that changes

in affect and the perception of the student-instructor interaction would differ across the vignette conditions. Specifically, it was hypothesized that participants would rate the student-instructor interactions in the overt microaggression condition as negative and that negative affect would increase while positive affect decreased. In the neutral condition, it was hypothesized that affect would largely be unchanged and ratings of the student-instructor interaction would be neutral while in the covert condition positive affect would increase and ratings of the student-instructor interaction would decrease. Finally, it was also expected that ethnic minority professors would have lower student-instructor interaction ratings than for White American professors.

Participants

Participants were enrolled Utah State University students, ages 18 and over. All participants were recruited via SONA and were informed that their participation was voluntary. A total of 120 participants were recruited however four participants declined to have their data used in the study. Thus, the final sample size was 116 participants. The participants were mostly first year students (49%), White American (86%), and about 22 years old ($M = 21.91$, $SD = 6.95$).

Measures

Affect

The Positive and Negative Affect Scale (PANAS; Watson et al., 1988) was used to measure the participant's affect before and after reading the experimental vignettes (see Pilot Study 1 for more details).

Vignettes

A total of six revised vignettes were used (see Table 6). Each vignette contained an interaction in the classroom between a professor and a student of color, both men. The ethnicity of the professor (ethnic minority vs. White) varied as well as if there was a microaggression (present in the Overt and Covert condition vs. absent in the Neutral condition). The six vignettes were assigned to one of three conditions (Neutral, Covert, Overt) such that each of the conditions contained a classroom interaction with a White American professor and an interaction with an ethnic minority professor.

Participants were randomly assigned to a condition. In order to provide an attention check, participants were asked to identify the name of the professor, name of student, and student's stated race/ethnicity. Next, participants responded to an instructor rating question for each vignette that asked: "How would you rate the interaction between the professor and the student?". The possible responses were on a 5-point Likert-type scale, that ranged from: *negative* (1), *slightly negative* (2), *neutral* (3), *slightly positive* (4), *positive* (5). They were then prompted, "Please provide a justification for your answer" and provided an open ended text box field to provide their justification.

Procedure

Participants signed up for the study on SONA. They were then provided a Qualtrics link to participate in the study. Once in the survey, the participants first rated their affect, then read the vignettes, completed the vignette items, and rated affect again before reporting their demographics. This study involved deception in that participants were not informed about their experimental assignment. At the conclusion of the

Table 6*Experimental Vignettes*

Vignette #	Condition			Experimental vignettes
	PE	SE	MA	
1	W	M	C	As you are entering your history class, your professor, Dr. Jason Miller, is waiting at the door with your most recent essays that you have handed in. As you stand behind Sam, who is African American, the professor hands him, his paper and says “You should be so proud of this writing, you had the best one out of any of your classmates. Don’t let them underestimate you, keep up the good work!”
2	M	M	C	You are sitting in the first day of your English 2010 class, the professor, Dr. Diego Lopez, wants everyone to get acquainted and familiar with each other since these are relatively small classes. The introductions begin making their way around the room, the guy sitting next to you, who is Chinese, introduces himself and says “Hi! I’m Mike and I am 19 years old and I am from Salt Lake City”. Your professor then proceeds with a smile “Oh really?! That is so interesting Mike! Where were you born?”
3	W	M	N	Imagine you are in your English Literary Analysis class when your professor Dr. Michael Gulbin asks a Latino student named Jayme a question. He asked “Jayme, how did you feel about the length of the previous exam that tested on cultural differences and perspectives in modern literature?” Jayme responds “I felt the exam was fairly easy but the essay portion was far too long for the time period given”.
4	M	M	N	Imagine you are in your World History class when your professor Dr. DeShawn Davis asks an African American student named Michael a question. He asked “Michael what did you think about the cross-cultural differences in Asia in the film that we finished last class?” Michael responds “I was surprised by the cultural differences in those countries.”
5	W	M	O	You are sitting in your U.S. history class and your professor Dr. Nathan Baker begins discussing the Civil Rights Movement. The professor is consistently referring to African Americans as "colored people". A student named Avery, who is African American approaches the professor after class and asks if he could use African American or Black when discussing his racial group. Dr. Baker responds with "Gosh, you people are so sensitive, no one can say anything these days. I am just trying to teach."
6	M	M	O	You are sitting in your biology course and the professor Dr. Abu Abadi is discussing a research method frequently used during lecture. A student named Dakota who is Native American asks the professor if he could elaborate on how this method contributes to an overall benefit in the medical field. The professor responds by saying "Oh, I don't see why you need to know that, your people don't really go into the medical field do they?"

Note: PE = Professor Ethnicity; SE = Student Ethnicity; W = White American; M = Ethnic Minority; MA = Microaggression; C = Covert microaggressions present; N = neutral (microaggressions absent); O = Overt microaggressions present.

research, all participants were informed that they were assigned to one of three study conditions and that their data would be compared to those in other study conditions. They were provided an option to either allow or refuse the researchers to use their data prior to the study conclusion.

Results

Manipulation Checks

All participants correctly identified the professor's name and the student's name in each vignette suggesting they were paying attention to the study stimuli. Almost all participants correctly identified the student's race/ethnicity with four or less in each condition identifying the student's race/ethnicity incorrectly (indicated student's race/ethnicity as "other") but were still included in the analysis.

Comparisons and Correlations

Overall, participant ratings of student-instructor interactions for White professors ($M = 2.72$; $SD = 1.51$) and ethnic minority professors ($M = 2.58$; $SD = 1.52$) did not differ significantly from each other, $t(115) = 1.42$, $p = .156$, and were strongly positively correlated, $r = .73$, $p < .001$ (see Table 7). However, a multivariate analysis was needed to determine if there were differences in ratings across vignette conditions and if there are interactions effects of professor-student interactions by condition. In addition, pre and posttest PANAS scores for both positive and negative affect respectively were positively correlated at the same magnitude, $r = .83$, $p < .001$. Posttest negative affect scores on the PANAS were moderately correlated with both White and ethnic minority professor

interaction ratings in the negative direction such that higher student-instructor interaction ratings for ethnic minority professors were associated with lower posttest negative affect.

Table 7

Correlation Matrix of Vignette Ratings with Pre and Posttest PANAS Scores

Variables	1	2	3	4	5	6
1. EM Interaction Rating	-					
2. White Interaction Rating	.73***	-				
3. Pretest Negative PANAS	-.05	-.10	-			
4. Pretest Positive PANAS	.03	.02	.06	-		
5. Posttest Negative PANAS	-.24**	-.30**	.83***	.08	-	
6. Posttest Positive PANAS	.07	.05	.03	.83***	.07	-
<i>M</i>	2.58	2.72	1.55	2.91	1.50	2.81
<i>SD</i>	1.52	1.51	0.62	0.76	0.58	0.83

Note. EM Interaction Rating = Participant rating of the student-professor interaction with an ethnic minority professor; White Interaction Rating = Participant rating of the student-professor interaction with a White professor; PANAS = Positive and Negative Affect Schedule.

** $p < .01$.

*** $p < .001$.

Multivariate Analysis Findings

Differences in Ratings by Condition. A mixed-methods multivariate factorial analysis of variance (MANOVA) was conducted to determine if there were significant ratings of the professor-student interaction between White and ethnic minority professors across the different vignette conditions. White and ethnic minority professor-student interaction ratings were the within-subject variable and vignette condition (i.e., Negative, Positive, and Neutral) was the between subject variable. The descriptive statistics are presented in Table 8.

Table 8*Descriptive Statistics of MANOVA*

Ratings	Vignette condition	<i>M</i>	<i>SD</i>	<i>N</i>
White professor	Overt	1.00	0.00	38
	Neutral	3.90	0.96	40
	Covert	2.76	1.32	38
	Total	2.58	1.52	116
Ethnic minority professor	Overt	1.31	0.34	38
	Neutral	3.78	0.89	40
	Covert	3.21	1.44	38
	Total	2.72	1.51	116

As was found previously, there were no statistically significant differences in professor-student interaction ratings between vignettes that depicted White versus ethnic minority professors, Wilks' $\Lambda = .98$; $F(1, 113) = 2.23$, $p = .138$, $\eta_p^2 = .02$. There was also no significant interaction effect of interaction rating by vignette condition conditions, Wilks' $\Lambda = .95$; $F(2, 113) = 2.70$, $p = .07$, $\eta_p^2 = .05$. However, there were significant between-subject differences of professor-student interaction ratings by vignette condition, $F(2, 113) = 121.60$, $p < .001$, $\eta_p^2 = .68$.

Through comparisons of the estimated marginal means, the average rating for the Negative vignette condition was significantly lower than both the Neutral and Positive condition. The average rating for the Neutral condition was significantly higher than the Positive and Negative condition while the Positive condition was significantly higher than the Negative condition but significantly lower than the Neutral condition (see Table 9). Thus, the student-professor interactions did significantly differ by condition *and* significantly differed from each other.

Table 9*Marginal Mean Estimates for Between-Subjects Effects*

Vignette condition	Estimated marginal mean	Standard error estimate
Overt	1.07 ^a	0.13
Neutral	3.84	0.13
Covert	2.99	0.13

Note. All comparisons of mean differences were $p < .001$.

^a Ratings for White professors were all 1.

Changes in affect by condition. A mixed-methods multivariate factorial analysis of variance (MANOVA) was completed to determine if there were significant changes in affect across the three vignette conditions (descriptive statistics in Table 10). Pre and Post PANAS scores were the within-subject variable and the vignette conditions (i.e., Overt, Covert, and Neutral) was the between subject variable.

Table 10*Descriptive Statistics of MANOVA*

PANAS	Vignette condition	<i>M</i>	<i>SD</i>	<i>n</i>
Pretest positive	Overt	2.91	0.74	38
	Neutral	3.04	0.79	40
	Covert	2.77	0.73	38
	Total	2.91	0.76	116
Posttest positive	Overt	2.84	0.77	38
	Neutral	2.92	0.88	40
	Covert	2.67	0.83	38
	Total	2.81	0.83	116
Pretest negative	Overt	1.63	0.68	38
	Neutral	1.47	0.55	40
	Covert	1.56	0.63	38
	Total	1.55	0.62	116
Posttest negative	Overt	1.77	0.69	38
	Neutral	1.33	0.46	40
	Covert	1.40	0.48	38
	Total	1.50	0.58	116

There were no statistically significant differences in affect across the vignette conditions, Wilks' $\Lambda = .93$; $F(4, 226) = 2.05$, $p = .089$, $\eta_p^2 = .09$. However, there were significant changes in affect on the PANAS, Wilks' $\Lambda = .94$; $F(2, 112) = 3.55$, $p = .032$, $\eta_p^2 = .06$, from pre to post and a significant interaction effect on change in affect by condition, Wilks' $\Lambda = .86$; $F(4, 224) = 4.53$, $p = .002$, $\eta_p^2 = .08$. Thus, participant's moods changed during the study and changed differently by each condition. Univariate analyses provide further detail on these changes in affect below.

Posthoc Analyses

There were significant changes in positive affect, $F(1, 113) = 4.80$, $p = .033$, $\eta_p^2 = .04$, but not for negative affect, $F(1, 113) = 2.68$, $p = .105$, $\eta_p^2 = .02$, across participants. The average rating for positive affect significantly decreased across all conditions while negative affect stays relatively constant (see Table 11).

Table 11

Marginal Mean Estimates for Within-Subjects Effects

Condition	Time	Positive		Negative	
		Estimated marginal mean	Standard error estimate	Estimated marginal mean	Standard error estimate
	Pre	2.91*	0.07	1.55	0.06
	Post	2.81*	0.08	1.50	0.05
Overt	Pre	2.91	0.12	1.63	0.10
	Post	2.84	0.14	1.77	0.09
Neutral	Pre	3.04	0.12	1.47	0.10
	Post	2.92	0.13	1.33	0.09
Covert	Pre	2.77	0.12	1.55	0.10
	Post	2.67	0.14	1.40	0.09

* $p < .05$

However, there were significant differences in the interaction effect of affect by condition for negative affect, $F(2, 113) = 9.45, p < .001, \eta_p^2 = .14$; but not for positive affect, $F(2, 113) = 0.13, p = .883, \eta_p^2 = .02$. The change in negative affect increased for those in the overt vignette condition but decreased in both the neutral and covert conditions (see Table 11 and Figure 3).

These results show that over the course of the study, participant positive affect significantly decreased regardless of vignette condition. For those in the Covert and Neutral vignette conditions, their negative affect also decreased. This replicates the findings of the previous pilot study.

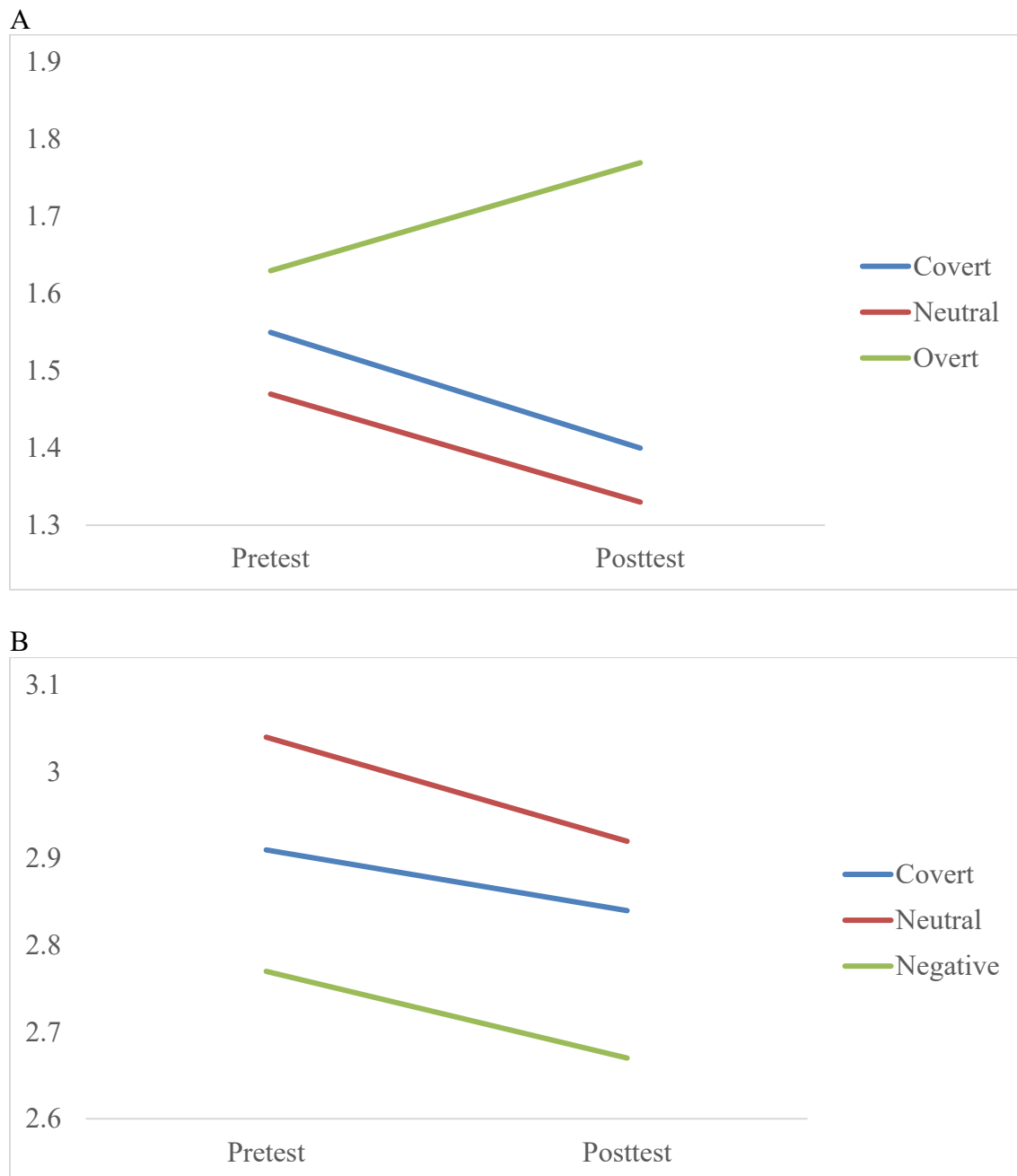
Discussion and Conclusion

It was hypothesized that participants would rate the student-instructor interactions in the overt microaggression condition as negative and that negative affect would increase while positive affect decreased. The findings support this hypothesis and it was shown that almost unanimously, participants rated the student-instructor interactions as negative and there was a significant increase in negative affect that was not present for the other vignette conditions.

In the neutral condition, it was hypothesized that affect would largely be unchanged and ratings of the student-instructor interaction would be neutral while in the covert condition positive affect would increase and ratings of the student-instructor interaction would also be positive. However, our findings show that there were no significant differences in student-instructor interaction ratings nor affect for both the neutral and covert vignette conditions.

Figure 3

Estimated Marginal Means for Pre and Posttest Affect by Condition.



Note. Estimated marginal means for pre and posttest positive affect by condition are shown for changes in negative affect in Panel A and for positive affect in Panel B.

In addition, the overall change in positive affect may reflect decreased interest in the study, boredom with the experiment, or decreases in specific aspects of positive affect such as feeling “excited” or “attentive.” However, the more interesting finding is that negative affect increased in the negative condition but decreased in the neutral and positive conditions. Thus, the correlations of posttest negative affect and student-professor interaction ratings likely reflect the relationship between negative affect and student-professor interaction ratings of the neutral and positive condition more than it does the negative condition. This suggests that our constructed vignettes did impact affect and these impacts differed according to condition.

Finally, it was expected that ethnic minority professors would have lower student-instructor interaction ratings than for White American professors. Participants rated both ethnic minority and White professors similarly across all conditions. Our manipulation check clearly demonstrated that participants attended to the names of each of the professors in the vignette, as indicated by the perfect reports on this item. Thus, it may be that the professor’s race does not impact student-professor interaction ratings. However, ratings of White and ethnic minority student-professor interactions were negatively correlated with posttest negative affect scores so that the more positive participants’ ratings were of the student-professor interaction the lower their negative affect score were. This finding provides guidance in that how participants *perceived* the outcome of a race-related interaction somehow reduced negative mood *without* improving positive mood. This is clearly reflected in the examination of within-subject findings.

The purpose of Pilot Study 2 was to establish the efficacy of newly edited

vignettes in terms of its effect affect and student-instructor interactions. The Present Study will then build on these findings to help understand *why* these changes occurred and, with a stratified sample, help elucidate if these changes are the same or different for the White and ethnic minority student participants.

Present Study

Design

For the Present Study, the design is a 2 (White American, Ethnic Minority participant) X 2 (White American, Ethnic Minority professor) X 3 (covert microaggression, over microaggression , and neutral) X 2 (Pretest, Posttest affect) factorial mixed-method experimental design.

Participants

Participants were recruited via a Qualtrics Panel. They were all provided with a letter of information about the study that was approved by the Utah State University Institutional Review Board (IRB). The participants completed a four-part screener to be eligible for the study. They were asked if they were enrolled in a college or university, ages 18 and older, domestic students, and if they identified as “White,” “Non-White,” or “Neither.” Participants were included in the study if they answered “Yes” to the first three screener questions and answered “White” or “Non-White” to the final screener question. Otherwise participants were excluded from the study. There were 430 participants initially recruited. Of the 430, 19 were ultimately dropped due to incorrect identification of the teacher or student (e.g., named the teacher as “Jay Leno”), nonsense

responding (e.g., provided justification for rating as “I love you, you love me.”), and incorrect completion of demographics (e.g., identified their gender as “straight,” provided the name of their school instead of the amount of years in school). Of the 411 students that remained, 36 additional students were excluded from further analysis. They indicated that they were “White” in the screener but did not select “White/Caucasian” as their specific race/ethnicity at the conclusion of the study. This created ambiguity of the participant’s racial/ethnic identity and were not included in the analyses. Thus, a final sample size of 375 was included in the final analyses. Their demographic information is presented in Table 12.

Measures

Scale reliabilities and descriptive statistics for all measures are presented in Table 13.

Affect

The Positive and Negative Affect Scale (PANAS; Watson et al., 1988) was used to measure the participants’ affect (see description in Pilot Study 1).

Vignettes

Vignettes from Pilot Study 2 were used (see Pilot Study 2).

Experiencing Racial Microaggressions

Participants responded to the R28REMS (see Pilot Study 1) but the prompt was changed to read: “Think about your experiences with race. Please read each item and

Table 12*Demographics for Present Study (N = 375)*

Demographics	Frequency	Percent	Range	Mean	SD
Gender					
Cisgender woman	312	83.3			
Cisgender man	46	11.9			
Transgender woman	0	0.0			
Transgender man	7	1.9			
Other	10	2.7			
Year in school					
First year	97	25.9			
Sophomore	88	23.5			
Junior	74	19.7			
Senior	70	18.7			
Fifth Year +	48	12.3			
White	171	50.4			
Non-White	204	49.6			
African American/Black	85	41.6			
Hispanic or Latino	40	19.6			
American Indian/Alaska Native	6	2.9			
Asian/Asian American	57	27.9			
Native Hawaiian/Pacific Islander	0	0.0			
Mixed	9	4.4			
Other/Unknown	7	3.4			
Age			18-41	22.39	4.45
GPA			1.00-5.00	3.39	0.51
Years at Current School			0.00-7.00	2.232	1.30

Note. Participants were able to choose “White” or “Non-White” during the screener step and then a specific racial category for their demographics.

think of how many times this event has HAPPENED TO YOU in the PAST SIX

MONTHS.” Participants also answered on a scale from 0 = *I did not experience this event*

to 5 = *I experienced this event five or more times*. This was the prompt originally

provided by the authors of the R28REMS (Forrest-Bank et al., 2015).

Table 13

Descriptive Statistics and Scale Reliability for Total, White Participants, and Non-White Participants

Variable	Total (<i>N</i> = 375)		White (<i>n</i> = 171)		Non-White (<i>n</i> = 204)		Cronbach's α
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	
Age	22.28	4.35	23.01	4.32	21.65	4.29	-
GPA	3.39	0.52 ^a	3.47	0.49	3.31	0.55	-
Years at current university	2.22	1.33	2.25	1.30	2.20	1.35	-
Affective experiences							
Pretest negative affect	1.72	0.75	1.65	0.62	1.79	0.83	.89
Posttest negative affect	1.50	0.61	1.50	0.61	1.68	0.79	.91
Pretest positive affect	2.77	0.96	2.76	0.93	2.77	0.98	.90
Posttest positive affect	2.68	1.02	2.60	1.00	2.76	1.03	.92
Microaggression experiences							
R28REMS total score	1.01	0.89	0.62	0.71	1.34	0.90	.93
Witnessing microaggressions							
R28REMSW total score	1.72	0.97	1.67	0.99	1.77	0.93	.89
Colorblind racial attitudes							
CoBRAS total score	51.87	17.53	55.09	18.49	49.16	16.25	.91
Ethnocultural empathy							
SEE total score	4.53	0.70	4.43	0.69	4.62	0.70	.92
Ethnic identity							
MEIM-R total score	3.42	.99	3.01	0.97	3.76	0.86	.90
Ratings of professor student interaction							
Ratings of the ethnic minority professor	2.78	1.54	2.73	1.54	2.83	1.54	-
Ratings of the White professor	2.99	1.61	2.89	1.62	3.07	1.59	-

Note: R28REMS = Revised 28-item Racial and Ethnic Microaggressions Scale; R28REMSW = Adapted Witnessing Microaggressions Scale.

^a *n* = 367; Not all participants provided a GPA.

Witnessing Racial Microaggressions (WRM)

The same measure is the same in Pilot Study 1 (i.e., R28REMSW) but the prompt was changed to read: “Think about your experiences with race. Please read each item and think of how many times you have WITNESSED this event in the PAST SIX MONTHS.” Participants also answered on a scale from 0 = *I did not witness this event* to 5 = *I witnessed this event five times*. This was the prompt originally provided by the authors of the R28REMS (Forrest-Bank et al., 2015) but was simplified in Pilot Study 1.

Racial Colorblindness

The Color-Blind Racial Attitudes Scale (CoBRAS; Neville et al., 2000) is a 20-item scale that measures perceptions of racial colorblindness on a 6-point Likert-type scale (1 = *strongly disagree* to 6 = *strongly agree*) with higher scores indicating stronger perceptions of colorblindness. The measure contains statements that represent the denial of racial dynamics and/or an unawareness of the existence of racism, represented by three subscales: Racial Privilege, Institutional Discrimination, and Blatant Racial Issues. Sample statements from each subscale are as follows: “White people in the US have certain advantages because of the color of their skin,” “English should be the only official language in the US,” and “Talking about racial issues causes unnecessary tension.” Each of the subscales along with the CoBRAS total had acceptable reliability ranging from Cronbach’s $\alpha = .84 - .91$. The authors also presented evidence for concurrent, discriminant, and criterion-related validity for the CoBRAS subscales and total score. For the present study, only the total CoBRAS score was used. Scale reliability for the present study was Cronbach’s $\alpha = .91$.

Ethnocultural Empathy

The Scale of Ethnocultural Empathy (SEE; Y. Wang et al., 2003) was used to measure empathy toward others of a different racial and ethnic background. The 31-item measure is comprised of four subscales: *Empathic Feeling and Expression* (concern about the communication of discriminatory or prejudiced attitudes and the affective responses to others of a differing racial and ethnic group; Cronbach's $\alpha = .90$), *Empathic Perspective Taking* (understanding the experiences and emotions of people from another racial or ethnic group; Cronbach's $\alpha = .79$), *Acceptance of Cultural Differences* (understanding, acceptance, and valuing of cultural traditions and customs of individuals from differing racial and ethnic groups; Cronbach's $\alpha = .71$), and *Empathic Awareness* (awareness/knowledge about experiences of people from a differing a racial or ethnic group; Cronbach's $\alpha = .74$). The SEE total scale reliability was Cronbach's $\alpha = .91$. Participants were asked to rate the extent to which each item described them (1 = *strongly disagree that this describes me* to 6 = *strongly agree that it describes me*). Sample items from each subscale respectively include: "I share the anger of those who face injustice because of their racial and ethnic backgrounds," "I know what it feels like to be the only person of a certain race or ethnicity in a group of people," "I feel annoyed when people do not speak standard English [reverse coded item]," "I am aware of how society differentially treats racial or ethnic groups other than my own." The authors presented evidence for discriminant, concurrent, and criterion validity as well. The SEE total scale was used in the present study and obtained a scale reliability of Cronbach's $\alpha = .92$, which was comparable to what the authors of the SEE presented.

Multigroup Ethnic Identity

The Multigroup Ethnic Identity Measure – Revised (MEIM-R; Phinney & Ong, 2007) was used to measure ethnic identity. The MEIM-R is a revised version of the original Multigroup Ethnic Identity Measure (Roberts et al., 1999) and consists of six items. Three items measure identity exploration (seeking information and experiences relevant to one's ethnicity) and the other three measure identity commitment (sense of belonging). Example items from each measure respectively include: "I have done things that will help me understand my ethnic background better" and "I have a strong sense of belonging to my own ethnic group." Cronbach's α for each subscale, respectively, was .76 and .78 while Cronbach's α for the overall scale was .81. Confirmatory factor analysis was used to determine fit of a correlated two factor model and excellent fit was found. Additional evidence for structural validity was also examined using a community sample (Chakawa et al., 2015) and the MEIM-R had reliabilities that were acceptable across differing ethnic groups and gender (Herrington et al., 2016). The total score of the MEIM-R was used in the present study and the obtained scale reliability, Cronbach's α = .90, is commensurate with results found by the authors of the MEIM-R.

Demographics

Participants reported their age, sex, ethnicity, and year in college.

Procedure

Participants were provided a link to a Qualtrics survey (see Appendix C).

Participants had an opportunity to download a copy of the letter of information before

continuing to the survey. They were asked four screener questions to identify that they were older than 18, enrolled at a college or university, were not international students, and identified as either “White” or “Non-White.” All participants rated their current affect on the PANAS. Each participant was then assigned to one of three vignette conditions (i.e., Positive, Negative, Neutral) and were instructed to identify the name of the professor, the name of the student, and the race/ethnicity of the student. They rated the professor-student interaction and provided justification for their rating. Next, participants completed the ERM and WRM scales as well as the CoBRAS, SEE, and MEIM-R. Then, participants reported their demographic information. Finally, all participants were informed that they were assigned to one of three study conditions and informed of how their data will be compared to those in the other study conditions. They were provided an option to either allow the researchers to use their data or deny the researchers the data and have their data be destroyed. All participants in the present study volunteered their information to the researchers. After they made their selection, the study concluded.

CHAPTER IV

RESULTS

Data Quality Checks

In order to check the quality of the data and exclude random responders, respondents' accuracy in responses was verified before inclusion into the analyses. Participants were asked to provide the name of the professor and student in the vignettes; all participants correctly identified the professor's name and the student's name in each vignette. All participants correctly identified the student's race/ethnicity. All participants provided justifications with only a few participants stating that they "did not know." In addition, qualitative responses aligned with participants' respective conditions (see Appendix B). Participants in the negative condition provided responses that reflected disapproval of the professor-student interaction ("The professor was rude to the student" "I feel that the professor had the right to say colored people because not all black individual's [sic] in the United States are from Africa. But, he spoke un [sic] a rude, out of line manner"). Participants in the neutral condition merely commented on the professor-student interaction ("The student seemed engaged in the question and the professors [sic] question was objective." "The professor asked for his opinion on the test and Jayme pointed out pros and cons of the test.") while participants in the positive condition provided mixed responses that showed approval and disapproval of the professor's responses ("The Professor [sic] seems enthusiastic and friendly during student introductions." "Asking him where he was born seems like an out of place question for a minority when he already said where he was from").

Random Assignment Check

A one-way analysis of variance (ANOVA) with the study variables, GPA, age, and years at current institution was conducted to determine if there were any systematic differences in participants among the vignette conditions. No significant differences were found for any demographic variables or the study variables (excluding posttest affect measures and professor-student interactions). Thus, the random assignment of participants appeared to be successful at controlling for possible confounding variables.

Comparisons and Correlations

Mean comparisons for study measures reflect some significant differences. Specifically, non-White students scored significantly higher on microaggression experiences, ethnocultural empathy, ethnic identity and lower on colorblind racial attitudes than White students (seen Table 14).

Correlations among study variables are presented in Table 15. Correlations were in the expected directions. Pre and posttest measures of affect were positively correlated, professor-student interaction ratings of ethnic minority and White professors were positively correlated, and, consistent with literature, colorblindness and ethnocultural empathy were significantly negatively correlated. In addition, witnessing microaggressions was positively correlated to experiencing microaggressions and pre and posttest measures of affect. Thus, it appears that participants who witnessed microaggressions experience them more frequently and were more affectively engaged in the study. Higher posttest negative affect was weakly related to lower ratings of White

Table 14

Mean Comparisons Between White and Non-White Participants

Variable	White (<i>n</i> = 171)		Non-White (<i>n</i> = 204)		<i>t</i>	<i>df</i>	<i>p</i>	Cohen's <i>d</i>
	Mean	<i>SD</i>	Mean	<i>SD</i>				
Experiencing microaggressions	0.62	0.71	1.34	0.90	-8.80	371.29	<.001	0.79
Witnessing microaggressions	1.67	0.99	1.77	0.93	-1.30	373.00	.196	0.10
Colorblind racial attitudes	55.09	18.49	49.16	16.25	5.93	341.53	.001	0.34
Ethnocultural Empathy	4.43	0.69	4.62	0.70	-2.56	373.00	.01	0.27
Ethnic Identity	3.01	0.97	3.76	0.86	-7.97	373.00	<.001	0.81
Ethnic minority professor rating	2.73	1.54	2.83	1.54	-0.67	373.00	.518	0.06
White professor rating	2.89	1.62	3.07	1.59	-1.05	373.00	.297	0.11

Note. Degrees of Freedom (other than 373) were adjusted for heterogeneity of variance.

Table 15*Correlation Matrix of Study Variables*

Variable	1	2	3	4	5	6	7	8	9	10	11
1. Pre Neg Affect	-	.87***	.04	.08	.31***	.27***	0.04	-.02	.12	-.11	-.03
2. Post Neg Affect	.83***	-	.06	.09	.37***	.29***	-.01	-.04	.11	-.22***	-.15*
3. Pre Pos Affect	-.06	-.08	-	.91***	.17*	.21**	.08	.04	.19**	.17*	.13
4. Post Pos Affect	-.03	-.06	.90***	-	.20**	.19**	.03	.14	.20**	.19**	.18**
5. EMA	.08	-.01	.28***	.34***	-	.59***	-.17*	.16**	.15*	-.02	-.04
6. WMA	.25***	.30***	.18*	.20**	.32***	-	-.10	.15*	.16*	-.07	-.11
7. Colorblindness	-.05	-.11	.10	.10	.23**	-.06	-	-.64***	-.32***	.12	.05
8. Eth. Emp.	-.04	.03	.09	.14	.04	.20**	-.63***	-	.49***	-.05	.02
9. Ethnic Identity	-.01	.03	.22**	.24**	.08	.13	-.11	-.18*	-	-.11	-.12
10. EMP Rating	.08	-.04	.06	.05	.22**	.09	.09	-.05	.03	-	.72***
11. WMP Rating	.09	-.10*	-.09	.12*	.05	-.04	.06	.01	.00	.74***	-

Note. White participant correlations presented on lower diagonal and Non-White participant correlations are presented above diagonal. Pre Neg Affect = Pretest Negative Affect; Post Neg Affect = Posttest Negative Affect; Pre Pos Affect = Pretest Positive Affect; Post Pos Affect = Posttest Positive Affect; EMA = R28REMS, Experiencing Microaggressions; WMA = R28REMSW, Witnessing Microaggressions; Colorblindness = CoBRAS, Colorblind Racial Attitudes; Eth. Emp. = SEE, Ethnocultural Empathy; Ethnic Identity = MEIM-R, Ethnic Identity; EMP Rating = Ethnic Minority Professor Rating; WMP Rating = White Professor Rating.

* $p < .05$.

** $p < .01$.

*** $p < .001$.

professor interactions while greater posttest positive affect was associated with higher ratings of White professor interactions. Increased ethnocultural empathy was associated with increased witnessing of microaggressions and decreased colorblindness. Finally, increased ethnic identity was associated with higher levels of positive affect. There were some notable differences in correlations between White and non-White participants, particularly with ethnic identity, ethnocultural empathy, and colorblindness. For White participants, ethnic identity was negatively correlated with ethnocultural empathy. In other words, White participants with stronger ethnic identities had less empathy for those of another ethnocultural group. For non-White participants, ethnic identity was positively correlated to positive affect, experiences and witnessing microaggressions, ethnocultural empathy, and negatively correlated to colorblindness. Thus, non-White participants with stronger ethnic identity have higher positive affect, witness and experience more microaggressions, have more empathy for those from other ethnocultural groups, and greater understanding of racial dynamics and/or awareness of the existence of racism.

Participant ratings of ethnic minority and White professors in the vignettes correlated with few study variables, besides each other. White participants' ratings of ethnic minority professor-student interactions appeared to be correlated with experiences of microaggressions such that participants with higher experiences of microaggressions also rated the ethnic minority professor more favorably. Non-White students appeared to rate student professor interactions more favorably with mood such that lower negative affect and higher positive affect was linked with more favorable student-professor interactions.

Primary Data Analysis

To answer the present study research questions, two separate mixed-methods multivariate factorial analysis of variance (MANOVA) were conducted along with follow-up hierarchical regressions. MANOVAs were selected as the primary analyses because they can examine both within and between-subject effects concurrently and decrease family-wise error. Additional hierarchical regressions were used primarily to answer research question three. After impacts of microaggressions on participants were examined with the MANOVAs, hierarchical regressions were used to create a more parsimonious model of the variables (i.e., change in affect, professor race, and participant race) and determine what other variables (i.e., experiencing microaggressions, witnessing microaggressions, colorblindness, ethnic identity, and ethnocultural empathy) could account for the relationship.

Examining Differences in Professor-Student Interaction Ratings by Race and Condition

A mixed-methods MANOVA was completed to determine if there were significant differences in ratings, between White and non-White participants, across the three vignette conditions, and by White or ethnic minority professor. Participant ratings of White professor scores and ratings of ethnic minority professor scores were the within-subject variable and the vignette conditions (i.e., over, covert, and neutral) and student race (White or non-White) were the between subject variables (see descriptive statistics in Table 16).

Table 16

Descriptive Statistics of MANOVA for Professor-Student Interaction Rating by Condition and Race

Professor rating	Vignette condition	Participant race	<i>M</i>	<i>SD</i>	<i>N</i>
White	Overt	White	1.16	0.42	55
		Non-White	1.22	0.52	65
		Total	1.20	0.47	120
	Neutral	White	3.56	1.08	54
		Non-White	3.67	1.01	72
		Total	3.62	1.03	126
	Covert	White	3.85	1.47	62
		Non-White	4.22	1.14	67
		Total	4.02	1.32	129
	Total	White	2.89	1.62	171
		Non-White	3.07	1.59	204
		Total	2.99	1.61	375
Ethnic minority	Overt	White	1.09	0.29	55
		Non-White	1.18	0.63	65
		Total	1.14	0.51	120
	Neutral	White	3.70	0.84	54
		Non-White	3.65	0.91	72
		Total	3.67	0.87	126
	Covert	White	3.33	1.52	62
		Non-White	3.54	1.44	67
		Total	3.43	1.48	129
	Total	White	2.72	1.54	171
		Non-White	2.83	1.54	204
		Total	2.78	1.54	411

Multivariate Findings

There was a statistically significant main effect for professor-student interaction ratings, Wilks' $\Lambda = .97$; $F(1, 369) = 12.06$, $p = .001$, $\eta_p^2 = .03$, and significant interaction of ratings by condition, Wilks' $\Lambda = .93$; $F(2, 369) = 13.68$, $p < .001$, $\eta_p^2 = .07$. Thus, participant ratings significantly differed between vignettes that depicted a White

professor and an ethnic minority professor and these differences also varied significantly by condition. However, there were no significant interactions of rating and participant race, Wilks' $\Lambda = 0.93$; $F(1, 369) = 0.64$, $p = .423$, $\eta_p^2 = .00$. Thus, whether the participant identified as White or non-White there was no effect on the professor-student interaction ratings and also no interaction effect of ratings by condition by participants race, Wilks' $\Lambda = 1.00$; $F(1, 369) = 0.34$, $p = .715$, $\eta_p^2 = .00$.

Univariate Findings

There was a significant between-subjects main effect for condition, $F(2, 369) = 375.06$, $p < .001$; $\eta_p^2 = .65$, but not for student race, $F(1, 369) = 2.12$, $p = .146$; $\eta_p^2 = .01$, or the interaction between condition and race, $F(2, 405) = 1.15$, $p = .319$; $\eta_p^2 = .01$. Therefore, professor-student interaction ratings significantly differed across conditions but not by the race of the participant or in combination of the participant's race and assigned vignette condition.

There were also significant within-subjects effects for professor ratings, $F(1, 369) = 12.06$, $p = .001$; $\eta_p^2 = .03$, and an interaction effect between professor ratings and condition, $F(2, 369) = 13.68$, $p < .001$; $\eta_p^2 = .07$. Thus, participants rated the professors differently based on race and additionally rated the professors differently among the three experimental conditions. However, there were no interaction effects for professor ratings by student race, $F(2, 369) = 0.64$, $p < .001$; $\eta_p^2 = .00$.

Posthoc Analyses

From the results of the previous omnibus analyses, significant differences were

found between professor-student interaction ratings and professor-student interaction ratings across vignette conditions. Additional post-hoc analyses using the estimated marginal means were conducted to determine the direction of these findings and are presented in Table 17. Ratings of White professor interactions were significantly higher than those of ethnic minority professors. For the main effect of ratings across conditions, professor ratings in the Overt condition were lower than in the Neutral or Covert conditions. This was consistent with findings in Pilot Study 2. When examining the estimated marginal means of White and ethnic minority professor-student interactions by condition, it was clear that within the positive condition, ratings for the White professor were more positive than that of the ethnic minority professor (see Figure 4).

Table 17

Marginal Mean Estimates for Main and Interaction Effects

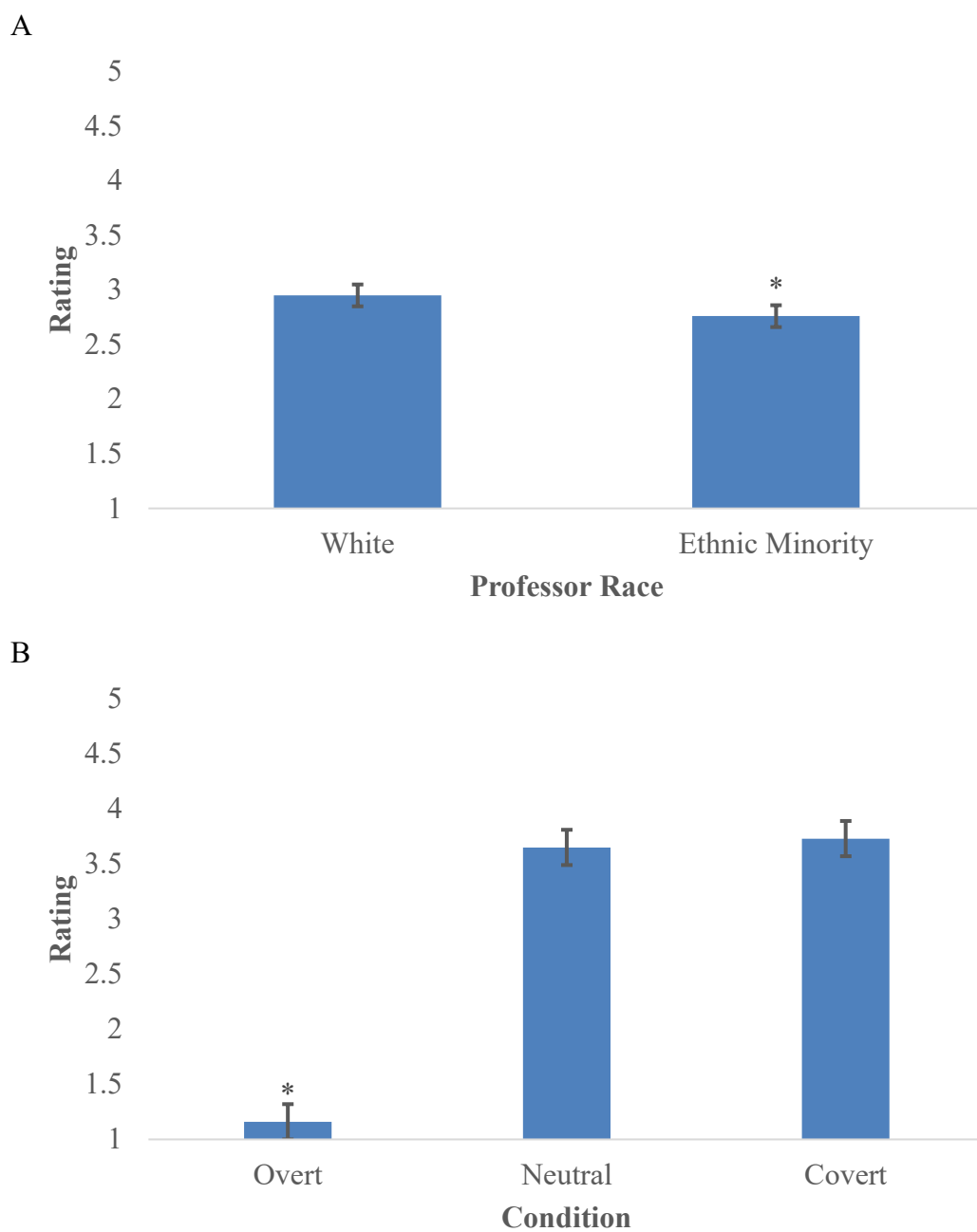
Variable	Vignette	Professor	<i>M</i>	<i>SE</i>	95% confidence intervals
Rating		White	2.95*	0.05	[2.84, 3.05]
		Ethnic minority	2.76*	0.05	[2.64, 2.86]
Condition	Overt		1.16 ^{ab*}	.08	[1.00, 1.32]
	Neutral		3.65 ^{a*}	.08	[3.50, 3.80]
	Covert		3.73 ^{b*}	.08	[3.58, 3.89]
Rating by condition	Overt	White	1.20	0.10	[1.00, 1.37]
		Ethnic minority	1.13	0.10	[0.95, 1.33]
	Neutral	White	3.61	0.09	[3.43, 3.79]
		Ethnic minority	3.69	0.09	[3.49, 3.86]
	Covert	White	4.04*	0.09	[3.86, 4.22]
		Ethnic minority	3.43*	0.09	[3.25, 3.61]

^a and ^b denotes pairs of significant differences.

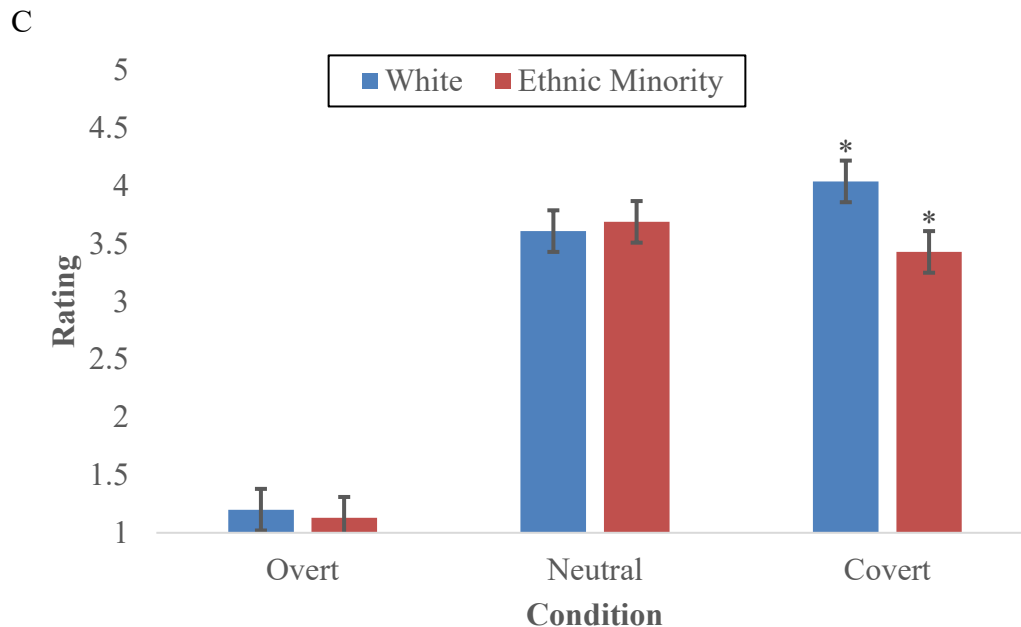
*Significant difference with $p \leq .001$.

Figure 4

Marginal Mean Estimates for Main and Interaction Effects



(figure continues)



Note. This figure depicts the estimated marginal means of the main effects of professor race (panel A), condition (panel B), and the interaction of professor race and condition (panel C) on professor rating. Errors bars represent standard error of the estimated marginal means. * = significant difference.

Examining Change in Affect by Race and Condition

A mixed-methods multivariate factorial analysis of variance (MANOVA) was completed to determine if there were significant differences in change in affect, between White and non-White participants, across the three vignette conditions. Pre and post affect scores were the within-subject variable and the vignette conditions (i.e., negative, positive, and neutral) and student race (White, non-White) were the between subject variables (see descriptive statistics in Table 18). No other variables were included since there were no significant correlations between the study variables and professor-student interaction ratings.

Table 18*Descriptive Statistics of MANOVA of Affect by Condition and Participant Race*

PANAS	Vignette condition	Participant race	<i>M</i>	<i>SD</i>	<i>N</i>
Pretest positive	Negative	White	2.69	0.87	55
		Non-White	2.65	0.95	65
		Total	2.67	0.91	120
	Neutral	White	2.85	0.88	54
		Non-White	2.65	0.95	72
		Total	2.90	0.96	126
	Positive	White	2.75	0.93	62
		Non-White	2.72	1.03	67
		Total	2.73	1.03	129
	Total	White	2.77	0.93	171
		Non-White	2.77	0.98	204
		Total	2.77	0.96	375
Posttest positive	Negative	White	2.54	0.94	55
		Non-White	2.55	0.92	65
		Total	2.68	1.02	120
	Neutral	White	2.60	0.97	54
		Non-White	2.97	1.05	72
		Total	2.81	1.03	126
	Positive	White	2.65	0.94	62
		Non-White	2.73	1.10	67
		Total	2.69	1.09	129
	Total	White	2.60	1.00	171
		Non-White	2.76	1.03	204
		Total	2.68	1.02	375
Pretest negative	Negative	White	1.60	0.59	55
		Non-White	1.90	0.87	65
		Total	1.76	0.77	120
	Neutral	White	1.72	0.66	54
		Non-White	1.73	0.84	72
		Total	1.73	0.77	126
	Positive	White	1.61	0.62	62
		Non-White	1.75	0.78	67
		Total	1.68	0.71	129

(table continues)

PANAS	Vignette condition	Participant race	<i>M</i>	<i>SD</i>	<i>N</i>
Pretest negative (continued)	Total	White	1.65	0.62	171
		Non-White	1.79	0.83	204
		Total	1.72	0.75	375
Posttest negative	Negative	White	1.56	0.67	55
		Non-White	1.94	0.81	65
		Total	1.77	0.77	120
	Neutral	White	1.50	0.66	54
		Non-White	1.52	0.74	72
		Total	1.51	0.70	126
	Positive	White	1.45	0.51	62
		Non-White	1.60	0.77	67
		Total	1.68	0.79	129
	Total	White	1.77	0.77	171
		Non-White	1.51	0.70	204
		Total	1.60	0.72	375

Multivariate Findings

There were no significant between-subjects effects. Thus, affect did not differ across condition or between White and ethnic minority participants when controlling for time. However, there were significant within-subject findings for pre to post (i.e., time) change in affect, Wilks' $\Lambda = .86$; $F(2, 368) = 29.90$, $p < .001$, $\eta_p^2 = .14$. In addition, there were significant interactions for time and vignette condition, Wilks' $\Lambda = .94$; $F(4, 736) = 5.79$, $p < .001$, $\eta_p^2 = .03$, and time and race, Wilks' $\Lambda = .97$; $F(2, 368) = 6.15$, $p = .002$, $\eta_p^2 = .00$. Thus, there were significant changes in affect over time and it varies by condition and the ethnicity of the participant. However, there were interaction effects for time, condition, and race.

Univariate Findings

Changes in affect were significant for both positive affect, $F(1, 369) = 17.13$, $p <$

.001; $\eta_p^2 = .04$, and negative affect, $F(1, 369) = 39.68, p < .001$; $\eta_p^2 = .10$. For time by condition, only changes in negative affect were significant, $F(2, 369) = 10.69, p < .001$; $\eta_p^2 = .06$. For time by participant race, changes in positive affect were significant, $F(1, 369) = 11.25, p = .001$; $\eta_p^2 = .03$. Thus, changes in both positive and negative affect happened for the overall sample. However, negative affect appears to have significantly changed by condition while changes in positive affect appear to be related to participant race.

Posthoc Analyses

Additional post-hoc analyses using the estimated marginal means were conducted to determine the direction in changes in affect of the above findings and are presented in Tables 19 and 20 and Figure 5. Overall, there were significant changes in both positive and negative affect such that the estimated marginal means of both decreased. Thus, over the course of the study participants' affect shifted towards neutral. In addition, in examining the change in affect by participant race, the marginal means of White participants' rating of their positive affect significantly decreased in comparison to their non-White counterparts. Thus, White participants experienced their positive affect significantly diminish while participating in the study, while non-White students did not. In examining the estimated marginal means of negative affect across conditions, negative affect was maintained from pre to posttest in the overt microaggression condition while it significantly reduced for both the neutral and covert microaggression condition.

Table 19*Marginal Mean Estimates for Main Effect of Time on Affect*

Affect	Time	<i>M</i>	<i>SE</i>	95% <i>CI</i>	<i>p</i> values
Positive affect	Pretest	2.77	0.05	[2.67, 2.86]	< .001
	Posttest	2.67	0.05	[2.57, 2.78]	
Negative affect	Pretest	1.72	0.04	[1.65, 1.80]	< .001
	Posttest	1.60	0.04	[1.52, 1.69]	

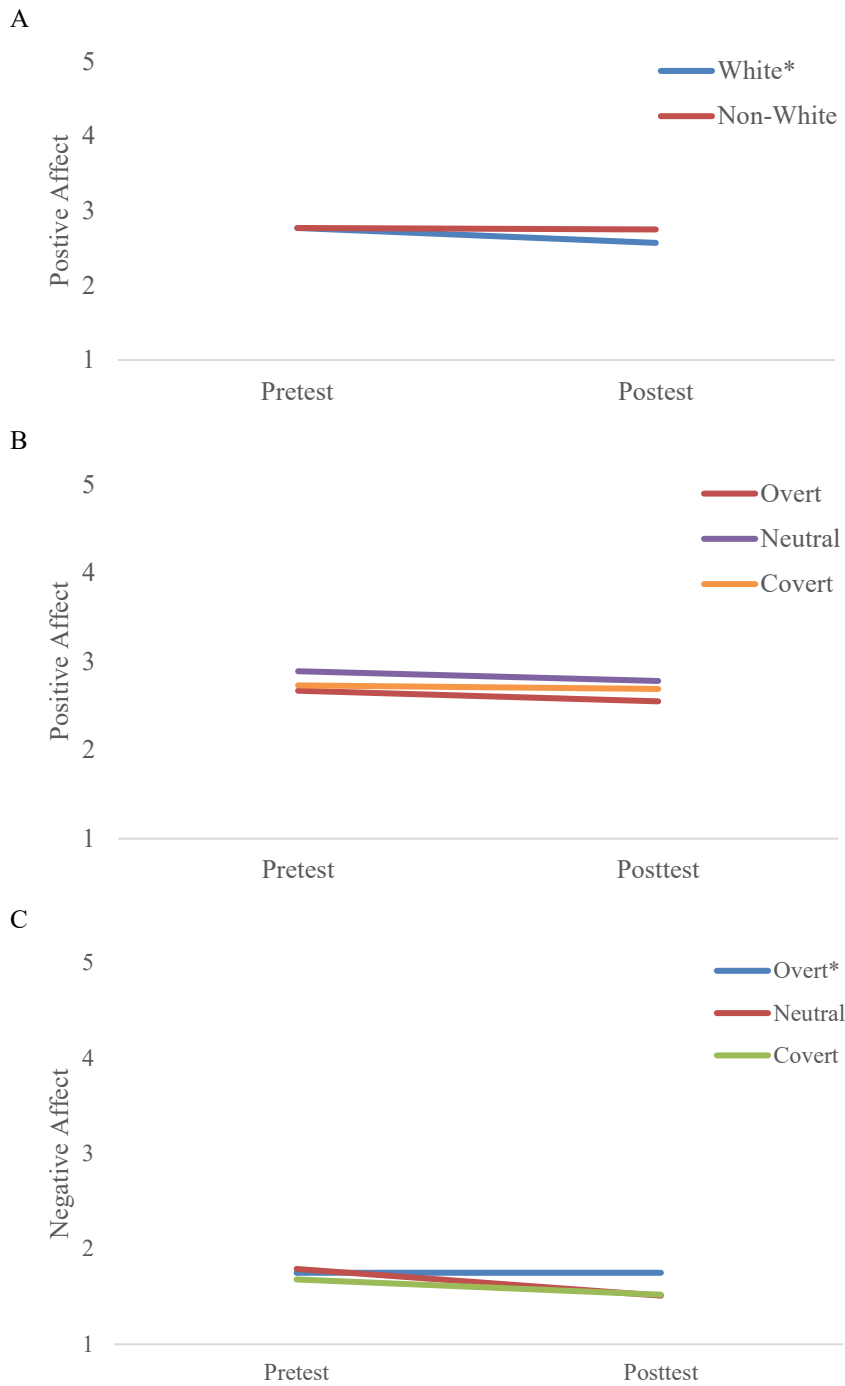
Table 20*Marginal Mean Estimates for Interaction Effects of Time by Race and Time by Condition*

Affect	Time	Participant race	<i>M</i>	<i>SE</i>	95% confidence intervals
Positive	Pretest	White	2.77	0.07*	[2.62, 2.91]
	Posttest		2.59	0.08*	[2.44, 2.75]
	Pretest	Non-White	2.77	0.07	[2.63, 2.90]
	Posttest		2.75	0.07	[2.61, 2.89]
Negative	Pretest	White	1.65	.06	[1.54, 1.76]
	Posttest		1.50	.05	[1.40, 1.61]
	Pretest	Non-White	1.79	.05	[1.69, 1.90]
	Posttest		1.69	.05	[1.59, 1.79]
Positive	Pretest	Overt	2.67	0.08	[2.50, 2.84]
	Posttest		2.55	0.07	[2.36, 2.73]
	Pretest	Neutral	2.89	0.07	[2.73, 3.06]
	Posttest		2.78	0.07	[2.60, 2.96]
	Pretest	Covert	2.73	0.08	[2.57, 2.90]
	Posttest		2.69	0.09	[2.57, 2.86]
Negative	Pretest	Overt*	1.75	.07	[1.62, 1.89]
	Posttest		1.75	.07	[1.62, 1.88]
	Pretest	Neutral	1.79	.07	[1.60, 1.86]
	Posttest		1.51	.06	[1.39, 1.63]
	Pretest	Covert	1.68	.07	[1.56, 1.81]
	Posttest		1.52	.06	[1.40, 1.65]

*Significant difference with $p \leq .05$

Figure 5

Marginal Mean Estimates of Affect by Time by Race and Time by Condition



Note. This figure depicts the estimated marginal means of the effect of time by participant race positive affect (panel A), time by condition on positive affect (panel B), and time by condition on negative affect (panel C) on professor rating. Errors bars represent standard error of the estimated marginal means. * = significant difference.

Follow-Up Analyses

To determine if the impact of microaggressions on participants be explained by experiencing microaggressions, witnessing microaggressions, colorblindness, ethnocultural empathy, or ethnic identity, hierarchical regressions were conducted. From the findings of the second MANOVA, participation in the study impacted White participant's positive affect. Positive affect for White participants was positively correlated with experiences of microaggressions, witnessing microaggressions, and ethnic identity (see Table 15). Thus, these variables were selected for the hierarchical regression. A two-step hierarchical regression was used. The first step used pretest positive affect to predict posttest positive affect. Then the second step included experiencing microaggressions, witnessing microaggressions, and ethnic identity. At step 1, pretest positive affect predicted posttest positive affect, $F(1,69) = 753.55, p < .001$, and shared 82% of the variance. At step two, the addition of ethnic identity, experiencing microaggressions, and witnessing microaggressions successfully accounted an additional 1% of variance in posttest positive affect, $F(3,166) = 3.38, p = .020$. However, only experiencing microaggressions significantly contributed to accounting additional variance in posttest positive affect (see Table 21). Thus, while witnessing microaggressions and White ethnic identity are correlated with changes in affect, the frequency that White participants *experienced* racial microaggressions is what significantly contributed to lowering of positive affect.

Table 21*Hierarchical Regression Results for White Participants' Change in Positive Affect*

Variable	<i>B</i>	95% CI for <i>B</i>		<i>SE B</i>	β	<i>R</i> ²	ΔR^2
		<i>LL</i>	<i>UL</i>				
Step 1						.82	.82***
Constant	-0.08	-0.27	0.12	0.10			
Pre pos affect	0.97***	0.90	1.04	0.04	.90***		
Step 2						.83	.01*
Constant	-0.21***	-0.48	0.05	0.13			
Pre pos affect	0.93	0.86	1.00	0.04	.87***		
Ethnic ID	0.05	-0.02	0.12	0.03	.05		
EMA	0.13	0.03	0.23	0.05	.09**		
WMA	0.01	-0.06	0.08	0.03	.01		

Note. *n* = 171; CI = confidence interval; LL = lower limit; UL = upper limit; Pre Pos Affect= Pretest Positive Affect; Posttest Positive Affect is the dependent variable. Ethnic ID = Ethnic Identity; EMA = Experiencing Microaggressions; WMA = Witnessing Microaggressions.

* $p < .05$.

*** $p < .001$.

The second finding is that for participants negative affect decreased across experimental conditions except in the negative condition. Both pre and posttest negative affect was correlated with witnessing microaggressions for both White and ethnic minority participants (see Table 15) and was selected as a predictor variable for the next two-step hierarchical regression. Changes in negative affect were examined in each experimental condition respectively with posttest negative affect as the outcome variable, pretest negative affect in step 1 and witnessing microaggressions at step 2. For both the neutral, $F(1,126) = 2.93, p = .090$, and covert, $F(1,123) = 1.16, p = .283$, vignette conditions, witnessing microaggressions did not account for any additional variance in posttest negative affect. However, for the overt condition, the addition of witnessing

microaggressions was a significant predictor, $F(1,117) = 6.31, p = .013$, and accounted for an additional 2% of the variance in posttest affect (see Table 22). Thus, for participants in the overt microaggression condition, changes in negative affect is linked with the frequency in which they witness microaggressions occur.

Table 22

Hierarchical Regression Results for Participants' Change in Negative Affect by Condition

Condition	Variable	<i>B</i>	95% CI for <i>B</i>		<i>SE B</i>	β	R^2	ΔR^2
			<i>LL</i>	<i>UL</i>				
Overt ($n = 120$)	Step 1						.72	.72***
	Constant	0.28**	0.09	0.46	0.10			
	Pre neg affect	0.85***	0.75	0.95	0.05	.85***		
	Step 2						.73	.02*
	Constant	0.17	-0.48	0.05	0.13			
	Pre neg affect	0.81***	0.72	0.91	0.05	.81***		
Neutral ($n = 129$)	WMA	0.10*	0.02	0.18	0.04	.13*		
	Step 1						.74	.74***
	Constant	0.17*	0.17	0.33	0.08			
	Pre neg affect	0.80***	0.72	0.89	0.04	.86***		
	Step 2						.83	.01
	Constant	0.11	-0.06	0.28	0.09			
Covert ($n = 126$)	Pre neg affect	0.79	0.70	0.87	0.04	.84***		
	WMA	0.06	-0.01	0.12	0.03	.08		
	Step 1						.82	.82***
	Constant	0.10	-0.04	0.24	0.07			
	Pre neg affect	0.82***	0.74	0.89	0.04	.89***		
	Step 2						.83	.01*
	Constant	0.06	-0.10	0.22	0.08			
	Pre neg affect	0.93	0.73	0.88	0.04	.87***		
	WMA	0.05	-0.03	0.09	0.03	.05		

Note. CI = confidence interval; LL = lower limit; UL = upper limit; Pre Neg Affect= Pretest Negative Affect; Posttest Negative Affect is the dependent variable. WMA = Witnessing microaggressions.

* $p < .05$.

** $p < .01$.

*** $p < .001$.

Summary

Research Question 1

The first question asked: Do White American and ethnic minority students differ in their perception of REMAs from White American and ethnic minority professors? The answer to this question is no. The results of the MANOVA on professor ratings show that perceptions of the professors do not differ by White or non-White participants in the study. In fact, White and Non-White participants shared the same perspective and viewed student-interactions in the Overt vignette condition as negative.

The first question also asked: Is there a difference in the perception of the professor-student interaction between White and ethnic minority professors depicted in the vignettes? Yes, student-instructor interactions with White professors were often perceived more positively than ethnic minority professors overall, regardless of the race of the participant or the vignette condition. This discrepancy was especially true in the Covert vignette condition.

Research Question 2

This question asked: Do White American and ethnic minority students differ in terms of affect when exposed to REMAs? No, both White and non-White students had similar impacts on their affect by condition. Specifically, the overt microaggression condition increased negative affect for participants. White participants' positive affect decreased significantly from before to after participating in this study though it is unclear if it were the microaggressions that are responsible for this effect and/or the participation

in a race-based experiment.

Research Question 3

Can the impact of microaggressions on participants be explained by experiencing microaggressions, witnessing microaggressions, colorblindness, ethnocultural empathy, or ethnic identity? The answer is partly. Based on the results of the follow-up hierarchical regressions, experiencing and witnessing microaggressions partly explain the impact of microaggressions on students. Specifically, White participants' decrease in positive affect was linked to their experiences of perceived racial discrimination and changes in negative affect by condition was also linked with witnessing microaggressions for those in the overt microaggression condition.

CHAPTER V

DISCUSSION

The results of the present study provides contributions to the ever-growing microaggressions research. First, it was predicted that student-instructor interactions that contained microaggressions would be rated lower. In addition, it was posited that ethnic minority participants would provide the lowest ratings for the student-instructor interactions with White professors. However, that was not the case. White and Non-White participants shared the same perspective and viewed student-interactions in the Overt vignette condition as negative. This was in line with findings of a similar study where the authors found that White and ethnic minority participants rated the professor who committed an overt microaggression significantly less positively when compared to neutral and more ambiguous microaggression conditions (Tao et al., 2017). In addition, in this study student-instructor interactions with White professor were perceived more positively than with ethnic minority professors regardless of the race of the participant or the vignette condition. This discrepancy was especially true in the Covert vignette condition. This result is unsurprising when considering the body of evidence that support that college students perceive White professors more positively than ethnic minority professors (Bavishi et al., 2010; Ho et al., 2009; Reid, 2010; Sue et al., 2011). This finding does add to that body of literature and provides more evidence of how White privilege benefits White professors. Even when students witness White professors commit an overt microaggression, students perceive that as less negative than if an ethnic minority were to commit a similar microaggression.

Second, it was predicted that ethnic minority participants would have a greater increase in negative affect than their White American counterparts when exposed to a REMA in the classroom. Instead what was found is that both White and ethnic minority participants had similar changes in affect in each condition and only significant changes in negative affect in the overt microaggression vignette condition. Again, this finding matches that of a similar study that also found that negative emotion significantly increases when participants witnessed a professor commit an overt microaggression (Tao et al., 2017). Interestingly, White participants' positive affect decreased significantly after participating in this study. One possibility may be that White student participants were encountering material that challenged their White privilege. They were possibly exposed to a microaggression condition and were definitely exposed to measures that made them think about their own experiences of witnessing or experiencing microaggressions, colorblindness, ethnocultural empathy, and ethnic identity. This exposure may have been enough to cause the discomfort to decrease positive affect in ways that are consistent with changes in White identity stages (Helms, 1984) or White identity statuses (Rowe et al., 1994). This finding is like that of another study where the authors found a decrease in ethnic identity for White college students after they had engaged in a diversity course (Patterson et al., 2018). Those authors also posited that the decrease in ethnic identity may be indicative of changes in White racial identity.

In addition, the follow-up hierarchical regressions to examine White participants' change in positive affect reveal that experiencing microaggressions significantly predicted change in affect. This may be an indicator of White student's experiences of

“reverse racism,” as seen in a study investigating Whiteness in White American men in college (Cabrera, 2014). The author found that the participants “frequently volunteered their thoughts on this subject” (p. 45) and reported that the participants viewed themselves as victims of racism that was socially acceptable and blamed institutional policies of equity and diversity organizations for marginalizing White men. White Americans in this sample may have felt similarly to the White men in this study which would coincide with the significantly higher colorblindness score and significantly lower ethnocultural empathy and ethnic identity scores than their ethnic minority counterparts. This in turn could be linked to the research that ties increased colorblindness with higher social dominance orientation and right-wing authoritarianism (Poteat & Spanierman, 2012).

Finally, we predicted that experiencing microaggressions, witnessing microaggressions, colorblindness, ethnocultural empathy, and ethnic identity could possibly explain the impact of REMAs on participants. The only variable that had potential for explaining the impact on microaggressions was the frequency to which participants witnessed microaggressions. For participants that had witnessed microaggressions in the Overt condition, the frequency with which they witnessed microaggressions predicted changes in their affect. This is might be expected since vicarious experiences as explained by Social Cognitive Theory (Bandura, 1986) require emotional arousal to be impactful (Bandura & Rosenthal, 1966) and there is a body of evidence that establish REMA’s impact on affect (e.g., Ong et al., 2013; Tao et al., 2017; J. Wang et al., 2011).

Present Study Findings and Social Cognitive Theory Insights

The present study findings align well with what would be expected of Bandura's (1986) Social Cognitive Theory. Specifically, when a microaggression was perceived as negative, it was also experienced as affectively negative, and previous experiences of witnessing microaggressions could also explain increases in negative affect (i.e., emotional arousal). First, if we examine the cognitive aspects of this finding students were using different cognitive capacities to appraise the interaction in the overt microaggression condition. From the analyses on Table 17 and depictions in Figure 3, it is glaringly obvious that students perceived the interaction as negative and were using the self-reflective capability to make judgments of the interaction. Additional evidence of this could be found in the open-ended responses provided by students.

Many students identified this interaction as racist (e.g., "The professor is racist towards the student," "it was kind of racist") or rude/disrespectful (e.g., "I thought the teacher was rude," "No Need [sic] for the disrespect"). Some students provided insight that the interaction deviated from their own experiences and expectations for a professor (e.g., "I can not [sic] say he did anything bad, but if the boys [sic] wants to be referred like them [sic] there should be no problem," "there was no reason for the prof to talk like that," "It was wasn't negative on the end of the student but the response the teacher gave the student was negative") and provided insights on their own vicarious learning. It can be inferred from the participants' comments that they expected the professor to behave differently from what was depicted in the vignettes. Namely, they expected the professor to be amenable to being asked to use different racial labels (i.e., African American) and

answer questions related to the material being taught, which a benevolent view of professors. However, when that expectation was met with a different outcome, this challenged what students had learned to expect (via symbolic and forethought capacities) about instructors and this vicarious learning lead to negative perception of the instructor-student interaction.

This vicarious learning aspect is important when considering the impact of witnessing microaggressions as well. Clearly students were able to identify and label the interaction as racist and this is likely due to past vicarious learning of seeing microaggressions in their everyday life. From the literature that connects negative affect with microaggression experiences, it is understandable that vicarious impacts of microaggressions make the overtly hostile microaggression condition more salient to the participants in the current study and helps explain why witnessing microaggressions previously impacts negative affect in the study.

In contrast, there was a significant decrease in negative affect in the neutral and covert vignette conditions. For students in the neutral condition, ratings of the instructor-student interaction were mostly neutral leaning positive (see Table 17). The open-ended responses also reflected this (e.g., “It seemed like a fairly simple questions and answer with honesty [sic],” “All he did was answer,” “The professor asked a general question about the cultures in different countries and the student responded respectfully”) and appeared to match student expectations of the student-instructor interaction (e.g., “They both interacted appropriately and were responsive”). The decrease in negative affect may have been a result of students expecting negative race-based interactions since the title of

the study was *Perceptions of Race-related Interactions in the Classroom* and some open-ended responses from students support this (e.g., “because there was no putting down of anything in the conversation” “There was no hostility in the conversation,” “They did not seem mean”).

In the covert vignette condition, student instructor-student interactions were rated similarly to those in the neutral condition (see Table 17). However, a distinguishing feature of the responses in the covert vignette condition from the neutral condition (and overt condition) can be found in the open-ended responses. Some students provide evidence that the professor matches positive expectations that they have about the professors interaction with the student (e.g. “He’s giving positive feedback,” “he was encouraging,” “The teacher could really be interested in learning about his student”). However, there was at least one student who perceived the interaction as blatantly negative (e.g., “It sounded condescending,” “I feel like the professor is assuming Mike was born outside of the USA because he is Chinese”) and other students who appeared confused “Mike said he was from Salt Lake City already,” “Weird from of praise. Why would her classmates underestimate her?”). This mix of positive, negative, and confused open-ended responses is a distinguishing feature for the covert vignette condition and is likely tied to the student’s abilities to *detect* microaggressions.

The microaggressions in the overt condition are microassaults and were meant to portray obviously hostile interactions that mimic old-fashioned or historic racism, racism that is no longer deemed acceptable (Dovidio et al., 2002, 2016; Edwards, 2017; McConahay et al., 1981) and, thus, were more easily detectible. However, since the

covert condition is comprised of a microinsult and microinvalidation, the racist meaning of the interaction may be lost on students who attend to the features of positive intent or are unsure of how to interpret the interaction, causing confusion. Focus on positive intent has been a feature of colorblindness and has been seen in the literature on White privilege. Focus on intent over impact has been documented as way to deny racism and to continue be oblivious to racial dynamics (Edwards, 2017; Lewis et al., 2013; Neville et al., 2013; Sue et al., 2009, 2010).

In terms of Social Cognitive Theory, students in the sample would have symbolic representations of what racist means and is likely shaped by knowledge of old-fashioned racism (e.g., internment camps, lynching, name-calling, racial segregation). The students would then be able to use those symbolic representations to identify interactions that are similar to those symbolic representations as racist. However, since modern racism and microinsults and microinvalidations are more subtle, they can look much closer to students symbolic representations of normal everyday encounters, friendly exchanges, and good teaching rather than racism. The students who were confused likely encountered a situation where the interaction represented both aspects of racism and everyday encounters and they had no idea how to evaluate the interaction.

Thus, interventions for the detection of microaggressions should focus on providing students with symbolic representations of microaggressions (i.e., raise awareness) and help them see the connection with racism. Studies that have examined microaggression detection have provided evidence that ambiguous racist interactions are far more difficult to be perceived as racist (Tao et al., 2017) even among mental-health

clinicians (Owen et al., 2018). However, there is evidence that focus on decreasing CBRI could pave the way for increased microaggression detection especially for White American students (Neville et al., 2013; Patterson et al., 2018; Patterson & Domenech Rodríguez, 2019). Another route would be to train people to intervene on microaggressions. One group of researchers have put together tactics for intervening when microaggressions occur at individual, institutional, and societal levels (Sue et al., 2019). Some of these recommendations are pertinent in educational settings for students to intervene in the classroom while also educating students and professors on concepts like prejudice, discrimination, racism, and increasing the awareness of microaggressions (Sue et al., 2019).

Other Educational and Clinical Implications of Current Findings

The present study provides additional support that witnessing microaggressions in college classrooms can increase negative affect. This is striking since the exposure to microaggressions for this study were from vignettes, which were brief and imaginary. Due to the commonplace nature of microaggressions, it is not difficult to extrapolate the long-term effect exposure to microaggressions can have on students in higher education and their perspective on professors over the semester and even further towards graduation. The effects would likely be deleterious for students given the large body of research that links REMAs and disclination to poor outcomes (e.g., Nadal et al., 2012; Schmitt et al., 2014).

As seen in the study, students who perceived the instructor-student interaction as

negative also had negative judgments of the professor, resulting in poor course evaluations of their professors. Additionally, professors of color could be perceived even less favorably than their White American counterparts and supports previous findings of poor evaluations of professors of color. Racial minority faculty members are not readily seen as intellectually competent and credible in the classroom (Ho et al., 2009). In addition, faculty members of color are evaluated more negatively by students than White faculty members (Reid, 2010). The author of this study also explained that these negative evaluations have detrimental effects on faculty promotion and tenure. This is problematic especially since there is research that shows using student evaluations for decisions on faculty evaluation, pay, and retention is flawed (Wines & Lau, 2006), sexist (Laube et al., 2007), racist, and course specific (Bavishi et al., 2010).

Research has documented that faculty members of diversity courses are better at acknowledging and addressing microaggressions in the classroom than their White American counterparts and that students and faculty members are both sensitive to acts of microaggressions in the classroom (Boysen, 2012) and that ethnic minority students especially feel the consequences (Sue et al., 2009). Additionally, White students can feel negatively about engaging in difficult dialogues about race (Sue et al., 2010). Thus, providing training to the detection and intervention of microaggressions could help reduce instances of microaggressions in the classroom and decrease their impacts on both students and faculty (see Sue et al., 2019).

Strengths and Limitations of the Current Study

There were a number of strengths in the present study. First, over the course of the study, experimental vignettes were developed that were able to simulate the experience of microaggressions in the classroom. These vignettes were derived from actual experiences documented in the literature and experienced and witnessed in real life. These six vignettes were the foundation for the present study's second contribution, an experimental study of microaggressions. The vignettes allowed for control over many aspects of the microaggression situation from the types of microaggressions to direct manipulation of the "microaggressor" and the microaggression recipient. Manipulation checks determined if participants were paying attention to the attributes of the "actors" in the vignettes (i.e., asking for names and race/ethnicity) and the interaction that contained the microaggression (i.e., asking for both a rating of response and a justification). Thirdly, the study included a wide range of variables that relate to microaggressions to allow the researcher to examine cognitive, affective, and individual aspects of the participants to draw meaningful conclusions. Thus, the data collected is rich with information for future studies (see Future Directions below).

While the study provides additional support to previous findings in the field of microaggressions, there were limitations in the study design that limited the amount of causal inference that could be made. First, since vignettes of White and ethnic minority professors were embedded together in the same vignette condition, it was impossible to disentangle the impacts of White and ethnic minority professor-student interactions on affect. Second, there was heterogeneity in the participant's ability to detect

microaggressions in the covert microaggression condition. This made it difficult to determine what the impacts of the seemingly-positive microaggressions were on affect. Third, whatever univariate effects that were statistically significant had modest effect sizes and thus must be interpreted within the given context of the overall study (e.g., negative affect remained stable within the overt condition, controlling for ethnicity of the student). Fourth, the vignette exposure was relatively brief, imaginary, and only presented in text. Much of the nuance of an interaction with microaggressions were missing such as tone of voice, nonverbal cues, and affective expression. Still, the fact that we found significant results could mean that participants are able to use their own daily experiences to infer this missing nuance. Fifth, the vignettes could have had better experimental control. The various ethnicities of the students and ethnic minority professors could have impacted the participants differently. In addition, it has been shown in the literature that courses impact student perception of professors as well (e.g., Bavishi et al., 2010). However, one study with a similar set of questions and tighter experimental controls had similar findings (Tao et al., 2017). In this study, the authors developed four videos that depicted an interaction between a professor and a student. The professor was a White American political science professor and the student was an African American woman. The first video contained no microaggressions, simply a request from the student for the professor to review her work. The second video included a microaggression where the professor encourages the student to “keep up the good work” and was labeled the “Very Ambiguous Microaggression” condition. The third video included the encouragement and added compliments such as being punctual, put together, intelligent,

and articulate. This was labeled the “Ambiguous Microaggression” condition.” The final condition included the compliments and “How can I put this...well...most African American student do just enough to get by, but you...you seem so punctual and well put together.” This condition was labeled the “Overt Microaggression” condition. The authors found that negative emotions increased significantly for the overt condition and that positive views of the professor significantly decreased. Thus, even with increased experimental control, there is evidence of very similar findings.

Finally, there was some ambiguity with identifying the race/ethnicity of our participants. During the screening phase of the data collection, there were participants who identified as “White” but later when provided options of different ethnic groups, they identified as something other than White. The ambiguity that ensues comes from whether these students identified as both White and ethnic minority or if they are identifying with their phenotype first and then later identified their ethnicity when they were able. This creates an interesting question of whether phenotype or ethnic identity should be used since it is documented that phenotypes affect your experiences with racism (Dovidio et al., 2002, 2016; Forrest-Bank & Jenson, 2015; Germain, 2004; Pittman, 2012).

Future Directions for Research

While difficult, it is possible to code participants to determine if they were able to detect and perceive the interaction as a microaggression. In many of the justifications of the professor-student interaction, participants either focused on the intent or outcome of

the microaggression. It would be difficult and time intensive to systematically code these responses and determine if they spotted the microaggression. However, this might be worthwhile. This newly coded variable could be used as an outcome measure with witnessing microaggressions, experiencing microaggressions, colorblindness, ethnic identity, and ethnocultural empathy as predictor variables for a profile analysis. The results of the profile analysis would help determine the levels of the study variables that distinguish participants who detected the microaggressions versus those who did not. For example, a participant with that has frequently experienced and witnessed microaggressions, has high ethnic identity, high ethnocultural empathy, and low colorblindness may have the optimum profile for detecting microaggressions versus a participant with the opposite profile. These profiles could prove vital for designing interventions to help college students increase their detections of microaggressions and in turn become allies to intervene when a microaggression is witnessed, perhaps implementing Sue et al.'s (2019) tactics.

Another aspect that could be further explored is the affective experience of the participants. Another profile analysis could be conducted to determine the predictors for the biggest and smallest change in affect for participants. The results of this analysis could uncover aspects of risk and resilience against the negative impact of witnessing or experiencing microaggressions. This would also inform interventions for increasing protective factors against the effects of microaggressions for college students.

Future studies could build on the vignettes of the present study changing aspects of the professor, student, and types of microaggressions depicted. For example, on

examining the impact of gender and racial microaggressions, it would be possible to manipulate the gender and race of the professor and student and then present a racial microaggression, a gender microaggression, and then one that incorporates both, along with a neutral vignette, to determine if impacts are incremental or not.

Conclusion

Overall, the present study advanced the knowledge of the impacts of racial microaggressions on White and ethnic minority participants by using an experimental research design to determine racial microaggression impacts on affect. In the process, cognitive impacts of racial microaggressions were also uncovered by examining participant ratings of professor-student interactions and through their justifications of these ratings. Together these findings do support the hypothesis that microaggressions do impact affect and the perspective of race-based interactions in the classroom. The present study also informs future research with its educational and clinical implications. Ultimately, the present study supports the growing body of literature that posits that racial microaggressions are harmful and that the ethnicity of the “microaggressor” and the witness do not change the microaggression’s impact.

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APPENDICES

Appendix A

Open-Ended Results from Vignettes in Pilot Study 1

<p>Vignette</p> <p>Vignette 1: You are sitting in the first day of your English 2010 class, the professor, Dr. Mitchell Brown, wants everyone to get acquainted and familiar with each other since these are relatively small classes. The introductions begin making their way around the room, the guy sitting next to you, who is Chinese, introduces himself and says “Hi! I’m Mike and I am 19 years old and I am from Salt Lake City”. Your professor then proceeds with a smile “Oh really?! That is so interesting Mike! Where were you born?”</p> <p>^aMicroinvalidation-Alien in Own Land</p>	<p>Responses (“What did you notice about the interaction between the student and professor.”)</p> <p>Mike says he is from Salt Lake City but the professor asks where he was born, as if the professor didn’t hear Mike.</p> <p>The professor automatically questions where Mike was born, even though he states that he is from Salt Lake City.</p> <p>She seems harmless and genuinely interested, so I wouldn’t be offended. But it is clear she noticed and acknowledged that Mike is “different”</p> <p>The professor made an automatic assumption that Mike could not originally be from Salt Lake because of his race.</p> <p>The professor asked where he was born because of his race.</p> <p>It was pleasant. Both the student and professor were engaged and interested.</p>
<p>Vignette 2/11: Imagine you are in your English Literary Analysis class when your professor Dr. Michael Gulbin asks a Latino student named Jayme a question. He asked “Jayme, how did you feel about the length of the previous exam that tested on cultural differences and perspectives in modern literature?” Jayme responds “I felt the exam was fairly easy but the essay portion was far too long for the time period given”.</p> <p>^aRace based interaction. No microaggression present.</p>	<p>Did the professor ask Jayme this question specifically because the previous exam was on cultural differences and perspectives in modern literature?</p> <p>Their interaction seemed fairly normal, I didn’t notice anything out of the ordinary.</p> <p>It honestly depends on the other students in the classroom. When reading the scenario, it’s clear Jayme is being pointed out, in reality I probably wouldn’t notice.</p> <p>Jayme was called out on the cultural portion possibly because of his race</p> <p>There student didn’t seem that it was strange the professor chose him out of all the students. It also seemed pleasant. They were both polite, and Jayme gave good feedback.</p> <p>Seemed like a normal student-teacher interaction.</p> <p>He may have chosen Jayme so he could specifically point out the culture part of the test</p> <p>The teacher is comfortable asking any student regardless of race and the student is comfortable answering.</p>
<p>Vignette 3: As you are entering your history class, your professor, Dr. Jason Miller, is waiting at the door with your most recent essays that you have handed in. As you stand behind Sam, who is White, the professor hands her, her</p>	<p>I honestly don’t know if I would have noticed or made any judgments except for the fact that you included that she is a white female, but I hope that this professor is as encouraging to all of his students regardless of whether they’re white or female.</p>

<p>paper and says “You should be so proud of this writing, you had the best one out of any of your classmates. Don’t let them underestimate you, keep up the good work!”</p> <p>^aMicroinsult-Ascription of intelligence</p>	<p>The professor gave Sam very positive feedback, although if anyone else had heard her claim that his was “the best one out of any of your classmates,” that might have been hurtful for others.</p> <p>I think it is unfair to tell any one student that they had the “best” work. It’s strange to say “don’t let them underestimate you.” Who is “them”</p> <p>The professor automatically assumed that because Sam was female her academic abilities were underestimated.</p> <p>It was very positive; however, the professor could’ve been overreacting slightly about the quality of the essay.</p>
<p>Vignette 4/13: As you are listening to your professor Dr. David Smithson in your economics class, a student raises his hand, who is White, and asks the professor a question. The student asks “Could you elaborate on the US’s position in foreign trade and how it effects the US government?” Your professor responds by answering the question correctly and in detail.</p> <p>^aNeutral interaction. No microaggression present.</p>	<p>The professor is doing his job by answering the question</p> <p>There is nothing out of the ordinary in this situation, a student is merely curious about their country’s position in foreign trade, and the professor helpfully answers.</p> <p>Nothing out of the ordinary</p> <p>The professor answers the question that was asked.</p> <p>The interaction followed as expected. It’s the professors job to answer the student’s questions</p> <p>The professor seems interested in what the student has to say, and takes the time to explain.</p>
<p>Vignette 5: Joe, an African American student, who is in a US history class, wants to speak with Dr. Lopez, who is an elderly man, about something that has been bothering him. Joe approaches the professor at the front of the room when mostly all of the students have cleared out. “Professor Lopez, I am having trouble with something. I think you are a great professor but it makes me pretty uncomfortable when you always direct questions about the civil rights movement towards me. I cannot speak for my entire race, I wasn’t even born yet! It just makes me feel singled out and as if I am expected to know all this information just because of my race.” Dr. Lopez responds with “Joe! I have had a ton of black friends in my day! I didn’t even realize I was doing that (chuckles to himself). I just call on anyone who looks like they’re paying attention to me! I know exactly how you feel, as the old guy among the faculty my colleagues always ask</p>	<p>I think the situation was handled well.</p> <p>The professor was subconsciously stereotyping but was happy to be corrected.</p> <p>The professor played it off like it wasn’t a big deal. He acted like the student was making it a bigger deal than it should’ve been.</p> <p>It seemed a little uncomfortable at first, but ended very well. The professor was understanding and sounds like he will attempt to change.</p> <p>The professor acknowledge his mistake and was willing to change to make the student more comfortable.</p> <p>Professor Probably could have handled it better (why mention the black friends thing) but the fact that he was willing to change and listen to joe is a good step</p>

me about the Great Depression just because I am old! That is not even my subject of interest in my field and it gets annoying! I am glad you said something."	
^a Microinvalidation – denial of individual racism	
Vignette 6: You are in your Psychology Statistics class when your professor Dr. Sachdeva, addresses a student by the name of Kelly who is White "Kelly, can you please interpret this graph on the this slide right here?" Dr. Sachdeva asks. "No, I am not sure what the outcome is by looking at this graph." Dr. Sachdeva then addresses the rest of the class and asks if anyone else knows the answer.	<p>There is nothing out of the ordinary, Kelly simply did not know the answer, so the professor asks if anyone else knows the answer.</p> <p>It seemed completely normal</p> <p>It is possible that Kelly was called on because Kelly was white but this situation was really vague.</p> <p>The professor let Kelly get away with not knowing the answer. The professor didn't want to embarrass Kelly.</p> <p>I feel a little awkward after reading this one. The professor singled a student out, and didn't try to help them. Instead, they turned to the whole class when the first student didn't know the answer.</p>
^a Neutral student teacher interaction.	
Vignette 7: Your psychology 1010 professor, Dr. Tyrell Morris, decides to show a video to the class of an African American client "getting out of hand" in a session. The video showed the client talking back with an attitude. The teacher pauses the video when the client is using his hands to talk and uses this as an example of the client potentially getting violent. "You see this here, his hand is waving in the air because he is angry right here, and the psychologist has to make sure that he is at a safe distance and sitting on the side of the room near the door, how he is. If this client were to get violent with him, the Dr. could exit immediately and try to get out of the situation."	<p>The professor is teaching the class about body language.</p> <p>The professor is using an African American as the negative example, but that could be because it was simply the clearest example of what he was trying to teach. He doesn't say anything negative about the client's race.</p> <p>The words themselves seem harmless. I wouldn't assume the client is "violent" because they are black. I think it is a little stereotypical, but not offensive.</p> <p>Many people talk with their hands but because this client was African American it was assumed that they were getting violent.</p> <p>The professor made sure to point out to the students what was going wrong in the video.</p>
^a Microinsult – pathologizing cultural values/communication styles.	
Vignette 8/16: Your professor in your Math 1050 class, Dr. Anthony Rodriguez, asks the class if someone could explain how they did problem number 56 on the homework aloud to	<p>It wasn't very nice of the professor to interrupt Alex, the class likely understood what she was saying. The professor could have corrected her by paraphrasing what she said instead of saying "what she means is..."</p>

<p>the class. A classmate of yours Alex, who is White, raises her hand then proceeds "First, I like to look at all the information I know and put alike things on one side of the equation, then.." Alex is then interrupted by the professor, addressing the class.. "What she means is, she likes to isolate the variables and combine like terms."</p> <p>^aMicroinsult-Ascription of intelligence.</p>	<p>The professor asks a student to explain how they solved a problem, which Alex does, but the professor interrupts in the middle of her explanation, which is a bit inconsiderate. It is rude of the professor to interrupt and speak for the student, her description was equivalent to his. Not sure race has anything to do with it</p> <p>That could be interpreted as the professor is looking down on Alex because of her gender and the stereotype that she is bad at math because she is female. It is also possible that the professor doesn't realize they cut her off so rudely because they were</p> <p>The professor made the student look bad. The professor clarified to the class what she "meant to say"</p>
<p>Vignette 9/18: Imagine you are in your World History class when your professor Dr. Devon Fullard asks an African American student named Michael a question. He asked "Michael what did you think about the cross cultural differences in Asia in the film that we finished last class?" Michael responds "I was surprised by the cultural differences in those countries."</p> <p>^aRace-related interaction. No microaggression.</p>	<p>I'm not sure... Michael answered the question, so that's good?</p> <p>The professor asks Michael about his thoughts, and Michael responds. There is nothing unusual about their interaction.</p> <p>I do not think there was any "racist" motive</p> <p>There didn't seem to be any negative racial connotations in this interaction.</p> <p>The professor was doing his job. He asked a student a question, not necessarily because he's african american</p> <p>Michael seems to be aware of the cultural differences, and is interested in what the professor has to say.</p>
<p>Vignette 10: As you are entering your history class, your professor, Dr. Jason Miller, is waiting at the door with your most recent essays that you have handed in. As you stand behind Sam, who is African American, the professor hands her, her paper and says "You should be so proud of this writing, you had the best one out of any of your classmates. Don't let them underestimate you, keep up the good work!"</p> <p>^aMicroinsult-Ascription of intelligence</p>	<p>The professor acts like the student defied expectations or something.</p> <p>He was encouraging towards her. i think it was entirely appropriate for him to say that to her because that stereotype is something she faces.</p> <p>Very positive and uplifting feedback was given.</p> <p>That he was positive to her and told her that regardless of what race she is, she should be proud.</p> <p>It was very positive.</p> <p>The professor was surprised that this colored student did as well as they did and assumed that other students thought lesser of this student for their race.</p>
<p>Vignette 12: Your professor of your English 1010 class begins</p>	<p>It seems like the professor was kind of aiming the discussion at Josh because he looked at him</p>

<p>to handout the rubric for the upcoming paper that is due. As Dr. Hart makes his way around room, he starts lecturing about how important it is to do your work ahead of time and not to procrastinate. As he places the rubric on the Josh's desk, who sits in front of you, he continues to explain that anyone can succeed if they put in the work required, while making eye contact with Josh who is White. Once he has passed Josh, he ends the speech about hard work and begins teaching the class for the day.</p> <p>^aMicroinsult-Ascription of Intelligence</p>	<p>the whole time.</p> <p>That he stresses that Josh has potential to do well if he is willing to put in the work. I feel he knows Josh has slacked in previous assignments.</p> <p>His message was clearly directed at Josh.</p> <p>Telling students not to procrastinate is normal, but the extra emphasis on Josh is weird. The teacher probably shouldn't imply that Josh is an extreme procrastinator in front of people. In private it would be okay.</p> <p>The professor singled out a student using eye contact.</p> <p>I think that the teacher is singling out Josh in less noticeable way, encouraging him to work hard and succeed.</p>
<p>Vignette 14: Your history professor, Dr. Bojing Lu, mulls over and over how white southerners felt during the civil rights movement about integration. He prompts the question to the class "How would a white southerner feel about this political cartoon?" A classmate by the name of Mark, who is Latino, a few rows away raises his hand and says "I am probably the only one who is not afraid to answer this question because I am not White, you see they probably felt...." the rest of his statement begins to get overridden with whispers and laughs...the professor continues by interrupting the student..."No, no, no it is not like that, this is 2016! I don't see a race when I look at you or anyone in this class, I just see a room full of students."</p> <p>^aMicroinvalidation – colorblindness.</p>	<p>That made me feel weird, from everyone involved. No one respected the student.</p> <p>Mark didn't need to reference his race. He could've just given his answer. The professor was right in his response.</p> <p>The teacher wanted to make sure that everyone felt equal</p> <p>The student took it like the teacher was being subjective to races but the teacher corrects him.</p> <p>I think the student felt really entitled to have an opinion, which the rest of the class and teacher didn't agree with.</p> <p>Just because the student wasn't white, he can't give a correct answer and the students around him laughed and the professor tries to make the situation better by giving the last statement that everyone in the class is equal, not different by race.</p>

<p>Vignette 15: You walk into your Sociology 1010 class and your professor Dr. Chan Ling begins speaking about cultural values and norms. He prompts to a student named Charles in the front row who is White “What does culture mean to you and do you think your culture is in the majority or minority at this University?”</p> <p>^aRace-based topic. No microaggression present.</p>	<p>Seems normal. The race didn't make a difference. It seems appropriate. I don't think it mattered that Charles was white. The professor is very upfront and picked exactly who he wanted to answer rather than being an open discussion and participation question to all of the class. He also asked a question that could be uncomfortable for some people to answer. Teacher just asking a student on his opinion. There did not seem to be anything negative or positive about the interaction.</p>
<p>Vignette 17: In one of your marketing classes, your professor, Dr. Johnson, is on a unit about advertising, he shows the class different advertisements every day and different ads and commercials, with different aspects of marketing in each one. He only has been showing commercials and ads with White people in them and speaks in terms from a white consumers approach/perspective.</p> <p>^aMicroinvalidation — colorblindness</p>	<p>The professor is not doing his job if he is showing only this biased perspective of marketing. He's failing to make all ethnicities feel included and comfortable. But then again, most ads in the USA are of white people. It could be because of lack of ads with nonwhite people.</p> <p>The professor should show ads and commercials with different races because in reality there are tons of different races surrounding us.</p> <p>He is showing clips with only whites in the videos and talks as if it only pertains to whites.</p> <p>The professor is not doing his job correctly if he is only showing the white side.</p> <p>The professor should probably widen his discussion to include other groups. I don't know if this neglect was intentional or not.</p>

Note. Vignettes numbered 1-9 were included in Block A. Vignettes numbered 10-18 were included in Block B. * = description if microaggression is present or absent.

Appendix B

Sample Qualitative Responses to Vignettes

Vignette Number	Professor Ethnicity	Condition	Vignette
1	W	Covert	As you are entering your history class, your professor, Dr. Jason Miller, is waiting at the door with your most recent essays that you have handed in. As you stand behind Sam, who is African American, the professor hands him, his paper and says "You should be so proud of this writing, you had the best one out of any of your classmates. Don't let them underestimate you, keep up the good work!"
2	M	Covert	You are sitting in the first day of your English 2010 class, the professor, Dr. Diego Lopez, wants everyone to get acquainted and familiar with each other since these are relatively small classes. The introductions begin making their way around the room, the guy sitting next to you, who is Chinese, introduces himself and says "Hi! I'm Mike and I am 19 years old and I am from Salt Lake City". Your professor then proceeds with a smile "Oh really?! That is so interesting Mike! Where were you born?"
3	W	Neutral	Imagine you are in your English Literary Analysis class when your professor Dr. Michael Gulbin asks a Latino student named Jayme a question. He asked "Jayme, how did you feel about the length of the previous exam that tested on cultural differences and perspectives in modern literature?" Jayme responds "I felt the exam was fairly easy but the essay portion was far too long for the time period given".
4	M	Neutral	Imagine you are in your World History class when your professor Dr. DeShawn Davis asks an African American student named Michael a question. He asked "Michael what did you think about the cross-cultural differences in Asia in the film that we finished last class?" Michael responds "I was surprised by the cultural differences in those countries."
5	W	Overt	You are sitting in your U.S. history class and your professor Dr. Nathan Baker begins discussing the Civil Rights Movement. The professor is consistently referring to African Americans as "colored people". A student named Avery, who is African American approaches the professor after class and asks if he could use African American or Black when discussing his racial group. Dr. Baker responds with "Gosh, you people are so sensitive, no one can say anything these days. I am just trying to teach."
6	M	Overt	You are sitting in your biology course and the professor Dr. Abu Abadi is discussing a research method frequently used during lecture. A student named Dakota who is Native American asks the professor if he could elaborate on how this method contributes to an overall benefit in the medical field. The professor responds by saying "Oh, I don't see why you need to know that, your people don't really go into the medical field do they?"

Vignette Number	Professor Ethnicity	Condition	Sample Vignette Responses
1	W	Covert	<p>He's giving positive feedback.</p> <p>The teacher said that she did the best out of all her classmates on the paper.</p> <p>You should be so proud of this writing, you had the best one out of any of your classmates.</p> <p>He was encouraging</p> <p>Weird form of praise. Why would her classmates underestimate her?</p> <p>Well she encouraged the student. We don't know why people were underestimating her</p> <p>Because the professor was proud of her</p> <p>Everything</p> <p>It does not make sense for the professor to say "don't let them underestimate you"</p> <p>It was OK and very easy</p> <p>Why would the student feel underestimated by her peer? She could think that the professor underestimated her until he read her paper.</p>
2	M	Covert	<p>It sounded condescending.</p> <p>The teacher said his response was interesting.</p> <p>He said it was so interesting and proceeded to ask more questions to get to know the student.</p> <p>He was interested and showed he was listening</p> <p>Mike said he was from Salt Lake City already.</p> <p>He assumed he was born in China.</p> <p>Because the professor's reaction was interested</p> <p>Everything</p> <p>They both seem interested and excited</p> <p>I feel like the professor is assuming Mike was born outside of the USA because he is Chinese.</p> <p>The teacher could be really interested in learning about his student.</p>
3	W	Neutral	<p>Perfectly exceptable answer of ones personal experience of the exam.</p> <p>No</p> <p>She was just giving her opinion</p> <p>The professor asked a question and the student gave a basic a</p>

			<p>unreasonable response</p> <p>they were just having a natural conversation</p> <p>Because Jayme didn't feel the essay was of appropriate length</p> <p>He gave the proffesor his response</p> <p>He has confidence in this person</p> <p>They only talked about opinions of the exam</p> <p>It seemed like a fairly simple question and answer with honesty.</p> <p>Its simple</p>
4	M	Neutral	<p>Simpe answer to question well within the subject of the class.</p> <p>No</p> <p>They did not seem mean.</p> <p>They both interacted appropriately and were responsive</p> <p>The professor asked a general question about the cultures in different countries and the student responded respectfully</p> <p>because there was no putting down of anything in the conversation</p> <p>All he did was answer</p> <p>He just asked a question.. He has confidence in asking him this question</p> <p>They had a light hearted conversation about different cultures</p> <p>There was no hostility in the conversation.</p> <p>Its simple and and such</p>
5	W	Overt	<p>His response could be seen on both sides except he should be more sensitive towards her feelings.</p> <p>The student should not have come up because the prof was trying to be respectful but the prof used unkind words back at the student.</p> <p>Use's race aganist him to not answer the question</p> <p>He should treat everyone equally</p> <p>I thoght the teacher was rude</p> <p>He was a horriblw teacher</p> <p>The professor is racist towards the student</p> <p>He/She asked the professor to used African American or Black she wasnt being rude she nust asked you to change the names. No need for the disrespect</p> <p>I can not say he did anything bad, but if the boys wants to be referred like them there should be no problem.</p> <p>The student wasn't negative but the way the teacher handled rhe situation was extremely negative</p>

			Racist
			He said how coloreds are so sensitive
6	M	Overt	<p>It's not his place to call her out about her race, and her race is insignificant to the topic she asked about.</p> <p>There was no reason for the prof to talk like that.</p> <p>He use's Dakota's race or culture as a reason not to give her explanation of something she was very intrested in</p> <p>He's being racist 😏</p> <p>I thought the teacher was rude</p> <p>He wanted to help</p> <p>The professor is racist towards the student.</p> <p>When he responded it was very disrespectful especially towards the student.</p> <p>The teacher is stupid for saying that. He needs to be fired.</p> <p>It wasn't negative on the end of the student but the response the teacher gave the student was negative because it was racist</p> <p>It was kind of racist</p>

Appendix C
Present Study Survey

A Study on the Perception of Race-Related Interactions in College Classrooms

Start of Block: Letter of Information

Q65 Please fully review this Letter of Information document before deciding to proceed with this survey. By pressing "Agree" below, you acknowledge that you have read and understood the information presented in the letter of information. Please download a copy of this document for your records.

End of Block: Letter of Information

Start of Block: SCREEN

S_Age Are you at least 18 years of age?

☐ Yes

☐ No

S_Col Are you currently enrolled in a college or university?

☐ Yes

☐ No

S_IS Are you an international student

☐ Yes

☐ No

End of Block: SCREEN

Start of Block: Quota

Qta Do you identify as White or Non-White?

- ☐ White
- ☐ Non-White
- ☐ Neither

End of Block: Quota

Start of Block: PANAS

PANAS This questionnaire is designed to help us gain a better understanding of the kinds of emotions that you are feeling **right now**. Please indicate a level of these emotions that you are **currently** feeling. Your answers are confidential.

	Very Slightly or Not at All	A Little	Moderately	Quite a Bit	Extremely
Distressed	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Upset	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Attentive	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Irritable	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Alert	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Interested	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Scared	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Excited	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Hostile	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Enthusiastic	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Ashamed	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Guilty	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Inspired	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Nervous	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Proud	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Determined	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Strong	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Active	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Jittery	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Afraid	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

End of Block: PANAS

Start of Block: V_Neg

V_Neg_M You are sitting in your biology course and the professor Dr. Abu Abadi is discussing a research method frequently used during lecture. A student named Dakota who is Native American asks the professor if he could elaborate on how this method contributes to an overall benefit in the medical field. The professor responds by saying "Oh, I don't see why you need to know that, your people don't really go into the medical field do they?"

V_Neg_MP What was the name of the **professor**?

V_Neg_MS What was the name of the **student**?

MC_Ng_M What is the **student's race/ethnicity**?

- ☐ White or European American
 - ☐ Black or African American
 - ☐ American Indian or Alaska Native
 - ☐ Asian or Asian American
 - ☐ Native Hawaiian or Pacific Islander
 - ☐ Latino or Hispanic
 - ☐ Other
-

V_Neg_M1

How would you rate the interaction between the professor and the student?
(Please mark one)

- ☐ 1-Negative
- ☐ 2-Slightly Negative
- ☐ 3-Neutral
- ☐ 4-Slightly Positive
- ☐ 5-Positive
-

V_Neg_M2 Please provide a justification for your answer:

V_Neg_W You are sitting in your U.S. history class and your professor Dr. Nathan Baker begins discussing the Civil Rights Movement. The professor consistently refers to African Americans as "colored people". A student named Avery, who is African American approaches the professor after class and asks if he could use African American or Black when discussing his racial group. Dr. Baker responds with "Gosh, you people are so sensitive, no one can say anything these days. I am just trying to teach."

V_Neg_WP What was the name of the **professor**?

V_Neg_WS What was the name of the **student**?

MC_Ng_W What is the **student's race/ethnicity?**

- ☐ White or European American
 - ☐ Black or African American
 - ☐ American Indian or Alaska Native
 - ☐ Asian or Asian American
 - ☐ Native Hawaiian or Pacific Islander
 - ☐ Latino or Hispanic
 - ☐ Other
-

V_Neg_W1

How would you rate the interaction between the professor and the student?
(Please mark one)

- ☐ 1- Negative
 - ☐ 2- Slightly Negative
 - ☐ 3- Neutral
 - ☐ 4- Slightly Positive
 - ☐ 5- Positive
-

V_Neg_W2 Please provide a justification for your answer:

End of Block: V_Neg

Start of Block: V_Neu

V_Neu_W Imagine you are in your World History class when your professor Dr. DeShawn Davis asks an African American student named Michael a question. Dr. Davis asked Michael: “What did you think about the cross-cultural differences in Asia in the film that we finished last class?” Michael responds, “I was surprised by the cultural differences in those countries.”

V_Neu_WP What was the name of the **professor**?

V_Neu_WS What was the name of the **student**?

MC_N_W What is the **student's race/ethnicity**?

- ☐ White or European American
- ☐ Black or African American
- ☐ American Indian or Alaska Native
- ☐ Asian or Asian American
- ☐ Native Hawaiian or Pacific Islander
- ☐ Latino or Hispanic
- ☐ Other

V_Neu_W1 How would you rate the interaction between the professor and the student?
(Please mark one)

- ☐ 1- Negative
- ☐ 2- Slightly Negativd
- ☐ 3- Neutral
- ☐ 4- Slightly Positive
- ☐ 5- Positive
-

V_Neu_W2 Please provide a justification for your answer:

V_Neu_M Imagine you are in your English Literary Analysis class when your professor Dr. Michael Gulbin asks a Latino student named Jayme a question. He asked “Jayme, how did you feel about the length of the previous exam that tested on cultural differences and perspectives in modern literature?” Jayme responds “I felt the exam was fairly easy but the essay portion was far too long for the time period given”.

V_Neu_MP What was the name of the **professor**?

V_Neu_MS What was the name of the **student**?

MC_N_M What is the **student's race/ethnicity?**

- ☐ White or European American
 - ☐ Black or African American
 - ☐ American Indian or Alaska Native
 - ☐ Asian or Asian American
 - ☐ Native Hawaiian or Pacific Islander
 - ☐ Latino or Hispanic
 - ☐ Other
-

V_Neu_M1 How would you rate the interaction between the professor and the student?
(Please mark one)

- ☐ 1- Negative
 - ☐ 2- Slightly Negative
 - ☐ 3- Neutral
 - ☐ 4- Slightly Positive
 - ☐ 5- Positive
-

V_Neu_M2 Please provide a justification for your answer:

End of Block: V_Neu

Start of Block: V_Pos

V_Pos_M

You are sitting in the first day of your English 2010 class, the professor, Dr. Diego López, wants everyone to get acquainted and familiar with each other since these are relatively small classes. The introductions begin making their way around the room, the guy sitting next to you, who is Chinese, introduces himself and says “Hi! I’m Mike and I am 19 years old and I am from Salt Lake City”. Your professor then proceeds with a smile “Oh really?! That is so interesting Mike! Where were you born?”

V_Pos_MP What was the name of the **professor**?

V_Pos_MS What was the name of the **student**?

MC_P_M What is the **student's race/ethnicity**?

- ☐ White or European American
 - ☐ Black or African American
 - ☐ American Indian or Alaska Native
 - ☐ Asian or Asian American
 - ☐ Native Hawaiian or Pacific Islander
 - ☐ Latino or Hispanic
 - ☐ Other
-

V_Pos_M1

How would you rate the interaction between the professor and the student?
(Please mark one)

- ☐ 1- Negative
- ☐ 2- Slightly Negative
- ☐ 3- Neutral
- ☐ 4- Slightly Positive
- ☐ 5- Positive

V_Pos_M2 Please provide a justification for your answer:

V_Pos_W As you are entering your history class, your professor, Dr. Jason Miller, is waiting at the door returning your most recent essays, graded. As you stand behind Sam, who is African American, the professor hands him, his paper and says “You should be so proud of this writing, you had the best one out of any of your classmates. Don’t let them underestimate you, keep up the good work!”

V_POS_WP What was the name of the **professor**?

V-Pos_WS What was the name of the **student**?

MC_P_W What is the **student's race/ethnicity?**

- ☐ White or European American
 - ☐ Black or African American
 - ☐ American Indian or Alaska Native
 - ☐ Asian or Asian American
 - ☐ Native Hawaiian or Pacific Islander
 - ☐ Latino or Hispanic
 - ☐ Other
-

V_Pos_W1

How would you rate the interaction between the professor and the student?
(Please mark one)

- ☐ 1- Negative
 - ☐ 2- Slightly Negative
 - ☐ 3- Neutral
 - ☐ 4- Slightly Positive
 - ☐ 5- Positive
-

V_Pos_W2 Please provide a justification for your answer:

End of Block: V_Pos

Start of Block: PANAS 2

PPANAS This questionnaire is designed to help us gain a better understanding of the kinds of emotions that you are feeling **right now**. Please indicate a level of these emotions that you are **currently** feeling. Your answers are confidential.

	Very Slightly or Not at All	A Little	Moderately	Quite a Bit	Extremely
Distressed	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Upset	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Attentive	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Irritable	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Alert	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Interested	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Scared	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Excited	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Hostile	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Enthusiastic	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Ashamed	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Guilty	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Inspired	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Nervous	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Proud	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Determined	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Strong	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Active	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Jittery	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Afraid	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

End of Block: PANAS 2

Start of Block: REMS

[illegible]

Someone
clenched
his/her
purse or
wallet upon
seeing me
because of
my race.

☐ ☐ ☐ ☐ ☐ ☐

Someone
avoided eye
contact
with me
because of
my race.

☐ ☐ ☐ ☐ ☐ ☐

Someone
assumed I
would not
be
intelligent
because of
my race.

☐ ☐ ☐ ☐ ☐ ☐

Someone
acted
surprised at
my
scholastic
or
professional
success
because of
my race.

☐ ☐ ☐ ☐ ☐ ☐

Someone
assumed
that I would
not be
educated
because of
my race.

☐ ☐ ☐ ☐ ☐ ☐

Someone
told me
that I was
'articulate'

☐ ☐ ☐ ☐ ☐ ☐

after
she/he
assumed I
wouldn't
be.

Someone
assumed
that I would
have a
lower
education
because of
my race.

Someone
assumed
that I held a
lower-
paying job
because of
my race.

Someone
assumed
that I was
poor
because of
my race.

Someone
assumed
that I spoke
another
language
other than
English.

Someone
asked me to
teach them
words in my
'native
language'.

Someone
assumed
that I ate



foods
associated
with my
race/cultur
e every day.

Someone
told me
that all
people in
my racial
group look
alike.

Someone
assumed
that I speak
similar
languages
to other
people in
my race.

I was told
that I
should not
complain
about race.

Someone
told me
that she or
he was
colorblind.

I was told
that I
complain
about race
too much.

Someone
told me
they 'don't
see color'.



Someone
told me
they do not
see race.

☐ ☐ ☐ ☐ ☐ ☐

Someone
told me
that people
should not
think about
race
anymore.

☐ ☐ ☐ ☐ ☐ ☐

I observed
people of
my race
portrayed
positively
on
television.

☐ ☐ ☐ ☐ ☐ ☐

I observed
people of
my race
portrayed
positively in
magazines.

☐ ☐ ☐ ☐ ☐ ☐

I read
popular
books or
magazines
in which a
majority of
contributio
ns featured
people
from my
racial
group.

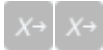
☐ ☐ ☐ ☐ ☐ ☐

I observed
people of
my race
portrayed
positively in
movies.

☐ ☐ ☐ ☐ ☐ ☐

End of Block: REMS

Start of Block: WEMS



WEMS Think about your experiences with race. Please read each item and think of how many times you have WITNESSED this event in the PAST SIX MONTHS.

[illegible]

sitting next
to someone
else in a
public space
because of
their race.

...someone
clenched
his/her purse
or wallet
upon seeing
someone
else because
of their race.

...someone
avoided eye
contact with
someone
else because
of their race.

...someone
assumed
someone
else would
not be
intelligent
because of
their race.

...someone
acted
surprised at
someone
else's
scholastic or
professional
success
because of
their race.

...someone
assumed
that
someone

○ ○ ○ ○ ○ ○

○ ○ ○ ○ ○ ○

○ ○ ○ ○ ○ ○

○ ○ ○ ○ ○ ○

○ ○ ○ ○ ○ ○

else would
not be
educated
because of
their race.

...someone
told
someone
else that
they were
'articulate'
after she/he
assumed
they
wouldn't be.

...someone
assumed
that
someone
else would
have a lower
education
because of
their race.

...someone
assumed
that
someone
else held a
lower-paying
job because
of their race.

...someone
assumed
that
someone
else was
poor
because of
their race.

...someone
assumed



that
someone
else spoke
another
language
other than
English.

...someone
asked
someone
else to teach
them words
in their
'native
language'.

...someone
assumed
that
someone
else ate
foods
associated
with their
race/culture
every day.

...someone told someone else that all people in their racial group look alike.

...someone
assumed
that
someone
else would
speak similar
languages to
other people
in their race.

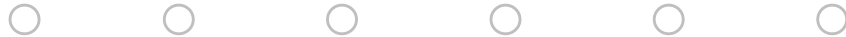
...someone
told
someone
else that
they should
not complain
about race.



...someone
told
someone
else that she
or he was
colorblind.



...someone
told
someone
else that
they
complain
about race
too much.



...someone
telling
someone
else they
'don't see
color'.



...someone
told
someone
else they do
not see race.



...someone
told
someone
else that
people
should not
think about
race
anymore.



...observed
people of
other race's
being
portrayed
positively on
television.



...observed
people of my
race
portrayed
positively in
magazines.



...read
popular
books or
magazines in
which a
majority of
contributions
featured
people from
other racial
groups.



...observed
people of
other race's
portrayed
positively in
movies.



End of Block: WEMS

Start of Block: CoBRAS

[illegible]

Everyone who works hard, no matter what race they are, has an equal chance to become rich.

☐ ☐ ☐ ☐ ☐ ☐

White people are more to blame for racial discrimination than racial and ethnic minorities.

☐ ☐ ☐ ☐ ☐ ☐

Social policies, such as affirmative action, discriminate unfairly against white people.

☐ ☐ ☐ ☐ ☐ ☐

White people in the U.S. are discriminated against because of the color of their skin.

☐ ☐ ☐ ☐ ☐ ☐

English should be the only official language in the U.S.

☐ ☐ ☐ ☐ ☐ ☐

Due to racial discrimination, programs such as affirmative action are necessary to

☐ ☐ ☐ ☐ ☐ ☐

U.S.						
It is important for public schools to teach about the history and contributions of racial and ethnic minorities.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
It is important for political leaders to talk about racism to help work through or solve society's problems.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Racism may have been a problem in the past, it is not an important problem today.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Start of Block: MEIM

MEIMR Please indicate the degree to which the following statements describe you.

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
I have spent time trying to find out more about my ethnic group, such as its history, traditions, and customs.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I have a strong sense of belonging to my own ethnic group.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I understand pretty well what my ethnic group membership means to me.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I have often done things that will help me understand my ethnic background better.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I have often talked to other people in order to learn more about my ethnic group.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Start of Block: SEE

[illegible]

I get impatient
when
communicating
with people from
other racial or
ethnic
backgrounds,
regardless of
how well they
speak English

☐☐☐☐☐☐

I can relate to
the frustration
that some people
feel about having
fewer
opportunities
due to their
racial or ethnic
backgrounds.

☐☐☐☐☐☐

I am aware of
institutional
barriers (e.g.,
restricted
opportunities for
job promotion)
that discriminate
against racial or
ethnic groups
other than my
own.

☐☐☐☐☐☐

I don't
understand why
people of
different racial or
ethnic
backgrounds
enjoy wearing
traditional
clothing.

☐☐☐☐☐☐

I seek
opportunities to
speak with
individuals of

☐☐☐☐☐☐

advantage of.

I get disturbed
when other
people
experience
misfortunes due
to their racial or
ethnic
backgrounds.

☐ ☐ ☐ ☐ ☐ ☐

I rarely think
about the impact
of a racist or
ethnic joke on
the feelings of
people who are
targeted.

☐ ☐ ☐ ☐ ☐ ☐

I am not likely to
participate in
events that
promote equal
rights for people
of all racial and
ethnic
backgrounds.

☐ ☐ ☐ ☐ ☐ ☐

I express my
concern about
discrimination to
people from
other racial or
ethnic groups.

☐ ☐ ☐ ☐ ☐ ☐

It is easy for me
to understand
what it would
feel like to be a
person of
another racial or
ethnic
background
other than my
own.

☐ ☐ ☐ ☐ ☐ ☐

I can see how other racial or ethnic groups are systematically oppressed in our society.

☐ ☐ ☐ ☐ ☐ ☐

I don't care if people make racist statements against other racial or ethnic groups.

☐ ☐ ☐ ☐ ☐ ☐

When I see people who come from a different racial or ethnic background succeed in the public arena, I share their pride.

☐ ☐ ☐ ☐ ☐ ☐

When other people struggle with racial or ethnic oppression, I share their frustration.

☐ ☐ ☐ ☐ ☐ ☐

I recognize that the media often portrays people based on racial or ethnic stereotypes.

☐ ☐ ☐ ☐ ☐ ☐

I am aware of how society differentially treats racial or ethnic groups other than my own.

☐ ☐ ☐ ☐ ☐ ☐

I share the anger
of people who
are victims of
hate crimes (e.g.,
intentional
violence because
of race or
ethnicity).

☐☐☐☐☐☐

I do not
understand why
people want to
keep their
indigenous racial
or ethnic cultural
traditions instead
of trying to fit
into the
mainstream.

☐☐☐☐☐☐

It is difficult for
me to put myself
in the shoes of
someone who is
racially and/or
ethnically
different from
me.

☐☐☐☐☐☐

I feel
uncomfortable
when I am
around a
significant
number of
people who are
racially/ethnically
different than
me.

☐☐☐☐☐☐

When I hear
people make
racist jokes, I tell
them I am
offended even
though they are
not referring to

☐☐☐☐☐☐

Start of Block: ASK-G

[illegible]

[illegible]

cultural groups.

I am able to take the perspective of a person from a culture other than my own.

☐ ☐ ☐ ☐ ☐ ☐

I am able to adjust my communication style when communicating with someone from a culture other than my own.

☐ ☐ ☐ ☐ ☐ ☐

I have attended ceremonies/celebrations (e.g., holiday celebrations, weddings, funerals, birthdays) from cultures different than my own.

☐ ☐ ☐ ☐ ☐ ☐

I have taken the time to learn about ways of being that are different from my own (e.g., religious traditions, coming-of-age ceremonies, medicinal approaches).

☐ ☐ ☐ ☐ ☐ ☐

[illegible]

ASKG Rate how much you agree or disagree with the statements below using the following scale:

[illegible]

[illegible]

I regularly attend social action events (e.g., protests, town hall meetings) in my community.

☐

☐

☐

☐

☐

☐

I engage in advocacy work that advances the wellbeing of marginalized populations (e.g., homeless people, low income children).

☐

☐

☐

☐

☐

☐

I confront racist comments in public settings made by strangers.

☐

☐

☐

☐

☐

☐

My cultural heritage has shaped who I am.

☐

☐

☐

☐

☐

☐



[illegible]

End of Block: ASK-G

Start of Block: General Demographics

Gen. Demo.

Directions: Please answer each of the following questions below. Write your answers in the blank spaces provided below or select the correct response when responses are provided for you.

Age Age:

Gender Gender

☐ Cisgender Woman☐ Cisgender Man☐ Transgender Woman☐ Transgender Man☐ Other

Class Class Standing:

☐ First Year☐ Sophomore☐ Junior☐ Senior☐ Fifth Year +

GPA Cumulative GPA

Years Years Attended at Your Current University

Race Race:	You May Select More Than One
White/Caucasian	<input type="checkbox"/>
African American/Black	<input type="checkbox"/>
Hispanic or Latino	<input type="checkbox"/>
American Indian/Alaska Native	<input type="checkbox"/>
Asian/Asian American	<input type="checkbox"/>
Native Hawaiian/Pacific Islander	<input type="checkbox"/>
Other (please specify)	<input type="checkbox"/>

Race2.0 Please select the race(s) that you identify with

- ☐ White/Caucasian
- ☐ African American/Black
- ☐ Hispanic or Latino
- ☐ American Indian/Alaska Native
- ☐ Asian/Asian American
- ☐ Native Hawaiian/Pacific Islander
- ☐ Other (please specify) _____

End of Block: General Demographics

Start of Block: Debrief

Debrief The purpose of this study was to determine the impact of different race-related interactions on your mood. You were randomly assigned to one of three conditions where the interaction between a professor and student were depicted as neutral, negative, or positive. These conditions were not disclosed to you to avoid influencing your response. Now that you have been made aware of the full purpose of the study, please indicate below whether you would like your data to be used by the researchers or not. Remember, there is no penalty for withdrawing your data. If you do decide to provide your data to the researchers, it will be impossible to change your mind afterwards.

If you have any concerns about these procedures, please feel free to contact the Principal Investigator or the Graduate Student Researcher: Melanie Domenech Rodríguez (Principal Investigator): melanie.domenech@usu.edu Lester Papa (Graduate Student Researcher): lester.papa@aggiemail.usu.edu

- ☐ Yes, the researchers have my permission to use my data in this study.
- ☐ No, please withdraw my data. I understand that my data will be destroyed and no there will be no penalty for withdrawing.

End of Block: Debrief

CURRICULUM VITAE

LESTHER A. PAPA

University of California, San Francisco
 Zuckerberg San Francisco General Hospital
 Department of Psychiatry
 Division of Infant, Child, and Adolescent Psychiatry
 Child Trauma Research Program
 1001 Potrero Avenue, Building 20, Suite 2100
 San Francisco, CA 94110
 Email: lesther.papa@ucsf.edu Phone: 510-998-9707

EDUCATION

- | | | |
|--------------|--|------|
| Ph.D. | Combined Clinical/Counseling/School Psychology
Utah State University, Logan, UT (<i>APA Accredited</i>)
<u>Dissertation:</u> <i>Impacts of racial microaggressions on White American and ethnic minority students in the college classroom.</i>
<u>Advisor:</u> Melanie M. Domenech Rodríguez, Ph.D. | 2020 |
| Ed.S. | School Psychology
Utah State University, Logan, UT (<i>NCSP Approved</i>)
<u>Thesis:</u> <i>The impact of teaching and academic self-efficacy on student engagement and academic outcome.</i>
<u>Advisor:</u> Melanie M. Domenech Rodríguez, Ph.D. | 2019 |
| M.A. | Psychology – Teaching of Psychology Emphasis
Northern Arizona University, Flagstaff, AZ | 2012 |
| B.A. | Psychology
University of Hawaii-Mānoa, Honolulu, HI
<i>Honor: With Distinction</i> | 2010 |

ACADEMIC APPOINTMENTS

- | | |
|--|-----------|
| Postdoctoral Fellow
<i>Child Trauma Research Program</i>
Tipping Point Community Mental Health Initiative
Caliber Beta Academy, Richmond, CA | 2019-2021 |
|--|-----------|

Duties include: Providing trauma-informed mental health services for school age children and their families; Consultation with administrators and teachers; Participation in social-emotional learning/mental health team meetings and individualized education program meetings.

Clinical Psychology Intern

Multicultural Clinical Training Program (APA-Accredited)

UCSF-Zuckerberg San Francisco General Hospital, San Francisco, CA

2018 -
2019

Duties include: Research clinician for Child Trauma Research Program (CTRP), an early childhood research program of Child-Parent Psychotherapy with children 0-6 with significant trauma; Conducting preadoption/foster care psychological evaluations for the Early Childhood Developmental Clinic; Outpatient services and comprehensive evaluations for Child and Adolescent Services, and a dialectical behavior therapy informed skills group with adolescents.

CLINICAL

EXPERIENCE

Graduate Clinical Assistant

Developmental and Behavioral Health Clinic

Center for Persons with Disabilities, Logan, UT

Summer 2016 -
Summer 2017

Responsibilities: Case management, psychodiagnostic test administration, scoring and interpreting tests, report writing, reviewing results with clients, presenting results at staff meetings, and peer supervision with practicum student.

Hours: 178 direct, 883 indirect

Supervisor: Marty Toohill, Ph.D.

School Psychology Intern

Pioneer and Oakwood Elementary School

Preston School District (201), Preston, ID

Fall 2016 -
Spring 2017

Responsibilities: Classroom observations; cognitive test administration; psychological reports for special education qualification (RTI and PSW); individual education plan (IEP) meetings; instructional consultation; behavioral consultation & intervention; social skills group; participation in multidisciplinary team (MDT) meetings.

Hours: 205.25 direct, 395.75 indirect

Site Supervisor: Janell Royle, Ed.S.

University Supervisor: Donna Gilbertson, Ph.D.

School Psychology Practicum Student

Pioneer and Oakwood Elementary School

Preston School District (201), Preston, ID

Fall 2015 -

Spring 2016

Responsibilities: Classroom observations; cognitive test administration; psychological reports for special education qualification (RTI and PSW); individual education plan (IEP) meetings; instructional consultation; behavioral consultation & intervention; social skills group

Hours: 92.50 direct, 175.5 indirect

Site Supervisor: Janell Royle, Ed.S.

University Supervisor: Brittaini Howard, Ph.D., Donna Gilbertson, Ph.D.

Mental Health Manager

Bear River Head Start Counseling Office

Bear River Head Start (BRHS), Logan, UT

Summer 2015-

Spring 2016

Responsibilities: Individual, family, and couple therapy with families served by BRHS. Parent management training; Classroom observations; behavioral interventions.

Hours: 135 direct, 546 indirect

Clinical Supervisor: Melanie Domenech Rodríguez, Ph.D.

Graduate Student Therapist

Counseling and Psychological Services (CAPS)

Utah State University, Logan, UT

Fall 2014 –

Spring 2015

Responsibilities: Individual therapy with college students. Community outreach targeted towards diversity and multicultural issues. Facilitating support group for multicultural students and a process group for men.

Supervisors:

Fall: Eri Bentley, Ph.D.; Amy Kleiner, Ph.D.

Spring: John Dehlin, M.S.; Eri Bentley, Ph.D.; David Bush, Ph.D.

Hours: 131 direct, 207.5 indirect

Graduate Student Therapist

Utah State University Psychology Community Clinic
Utah State University, Logan, UT

Summer 2013
– Spring 2014

Responsibilities: Worked with children and families to address behavioral issues and individual therapy with adolescents and adults. Conducted evaluations for learning disabilities for adolescents and adults.

Supervisors: Gretchen Gimpel Peacock, Ph.D.; Jenna Glover, Ph.D.
Susan L. Crowley, Ph.D., ABPP

Hours: 108 direct, 174 indirect

RESEARCH

EXPERIENCE

Research Member

Culture and Mental Health Lab

Supervisor: Melanie M. Domenech Rodríguez, Ph.D.
Utah State University, Logan, UT

Fall 2012 –
Present

Research focused on examining the impacts of microaggressions. Provided presentations and webinars about the impacts of microaggressions, multicultural competence, and culturally competent supervision. Created community presentation for schools to teach civility.

Research Fellow

The Prevention Science Laboratory

Supervisor: Ginger Lockhart, Ph.D.
Utah State University, Logan, UT

Fall 2013 –
Spring 2015

Research focused on multimethod-multitrait mediation analyses in prevention research.

Research Member

2012 - 2013

School-wide Multicultural Competency

Supervisor: Donna Gilbertson, Ph.D.

Utah State University, Logan, UT

Dissemination focused on increasing multicultural competency in the schools using a multi-tiered problem-solving framework (response to intervention).

2009-2010

Research Assistant*Weight Issues Group*

Supervisor: Rebecca Wilson, M.A.

University of Hawaii-Mānoa, Honolulu, HI

Research topics included dietary restriction, ego depletion, and body image.

GRANT SUPPORT*Funded***National Institutes of Health, National Institute on Drug Abuse (2013-2015)**

Research Supplement to Promote Diversity in Health-Related Research (PA-12-149).

US\$74,994. Parent grant to Ginger Lockhart, Ph.D., "Multimethod Mediation Analysis in Prevention Research." (MMAPR; #1R01DA034770 – 01)

*Unfunded***National Institutes of Health, National Institute on Drug Abuse (PA-14-148; Aug. 13, 2015)**

Ruth L. Kirschstein National Research Service Award Individual Predoctoral Fellowship to Promote Diversity in Health-Related Research (Parent F31-Diversity; PA-14-148). US \$62,273. "A Multitrait-Multimethod Approach for Examining the Relationship between Parenting and Youth Substance Use." (1F31DA041835– 01)

PUBLICATIONSPeer Reviewed

Patterson, C. A., **Papa, L.A.**, Reveles, A.K., & Domenech Rodríguez, M. M. (2018).

Undergraduate student change in cultural competence: Impact of a multicultural psychology course. *Scholarship of Teaching and Learning in Psychology*, 4, 81-92. doi: 10.1037/stl0000108

Papa, L. A., Litson, K., Lockhart, G., Chassin, L. & Geiser, C. (2015). Analyzing statistical mediation with multiple informants: A new approach with an application in clinical psychology. *Frontiers in Psychology*, 6:1674. doi: 10.3389/fpsyg.2015.01674

Non-Peer Reviewed

Domenech Rodríguez, M. M., Bates, S. C., & **Papa, L.** (2013). Teaching psychology to a diverse audience: An ethical imperative in the 21st century. *Psychology Teacher Network*, 23. Retrieved online: <http://www.apa.org/ed/precollege/ptn/2013/09/teaching-diverse.aspx>

PRESENTATIONS

Papa, L. A., Alvarez, M.C., Rosario Colón, J. & Domenech Rodríguez, M. M. (2018, October). *Examining informant discrepancy among Puerto Rican mothers and fathers on child outcomes*. Poster presented at the biennial conference of the National Latina/o Psychological Association, La Jolla, CA.

Reveles, A., **Papa, L.,** Patterson, C., & Domenech Rodríguez, M. (2016, October). *Undergraduate multicultural competence: Impact of a multicultural psychology course*. Poster presented at the 2016 biennial conference of the National Latino Psychological Association, Orlando, FL.

Papa, L.A., Murphy, E., & Domenech Rodríguez, M. (2016, July). *Perceptions of race-related interactions in the classroom*. Poster presented at the 4th Biennial American Psychological Association Division 45 Society for the Study of Culture, Ethnicity, and Race Research Conference, Palo-Alto, CA. ***Poster award winner.**

Papa, L. A., Domenech Rodríguez, M. M., & Bice, J. A. (2015, August). *Academic and teaching self-efficacy impacts on engagement and academic outcome*. Poster presented at the 123rd annual meeting of the American Psychological Association, Toronto, ON, Canada.

Patterson, C., & **Papa, L.,** (2015, April). *Increasing knowledge and detection of racial and ethnic microaggressions*. Workshop presented at the annual conference of the Rocky Mountain Psychological Association, Boise, ID.

Papa, L. A., Domenech Rodríguez, M. M., & Bates, S. C. (2014, August). *Academic and teaching self-efficacy on academic outcome*. Poster presented at the 122nd annual meeting of the American Psychological Association, Washington, D.C.

Litson, K., **Papa, L.,** Geiser, C., Lockhart, G., & Eid., M. (2014, July). *Mediation analysis using mulitmethod designs with structurally different and*

interchangeable methods: An application in personality psychology. Paper presented at the 79th International Meeting of the Psychometric Society, Madison, WI.

Patterson, C. & **Papa, L.** (2014, June). *Graduate students of color: Intersectionality of race, ethnicity, and gender*. Interactive discussion presented at the 2014 APA Division 45 Research Conference, Eugene, OR.

Papa, L. A., Litson, K., Geiser, C., & Lockhart, G. (2014, May). *A proposed model for mediation analysis with structurally different raters*. Poster presented at the 22nd annual meeting of the Society for Prevention Research, Washington, D.C.

Domenech Rodríguez, M. M., Reveles, A., Jones, D., & **Papa, L.** (2014, April). *Cultural competence shifts in the undergraduate classroom: Evaluating growth in a Multicultural Psychology course*. Paper presented at the annual conference of the Rocky Mountain Psychological Association. Salt Lake City, UT.

Papa, L. A., Domenech Rodríguez, M. M., & Bates, S. C. (2013, August). *The impact of teaching and academic self-efficacy on student engagement and academic outcome*. Poster presented at the 121st annual meeting of the American Psychological Association, Honolulu, HI.

Gilbertson, D., Barrett, C., Adams, L., **Papa, L.**, & Patterson, C. (2013, June). *Schoolwide cultural competence*. Workshop presented at the 1st annual Utah Multi-Tiered System of Supports conference. Davis Conference Center, Layton, UT.

Papa, L. A. (2011, November) *Neuroanatomical correlates of neglect dyslexia*. Poster presented at the Graduate Student Poster Presentation: Advanced Cognitive and Behavioral Neuroscience. Northern Arizona University, Flagstaff, AZ. ***Awarded Best Poster**

TRAINING MANUALS

Ong, C. W., **Papa, L. A.**, Reveles, A. K., Smith, B. M., & Domenech Rodríguez, M. M. (2018). *Safe Passages for U: Participant's Manual*. Logan, UT: Utah State University. Retrieved from: <https://osf.io/d5bz7/>

Ong, C. W., **Papa, L. A.**, Reveles, A. K., Smith, B. M., & Domenech Rodríguez, M. M. (2018). *Safe Passages for U: Trainer's Manual*. Logan, UT: Utah State University. Retrieved from: <https://osf.io/9mcdx/>

Domenech Rodríguez, M. M., **Papa, L. A.**, Reveles, A. K., & Corralejo, S. M. (2017). *Teaching tolerance: Civility (middle school)*. Utah State University: Logan, UT.

Domenech Rodríguez, M. M., **Papa, L. A.**, Reveles, A. K., & Corralejo, S. M. (2016).

Teaching tolerance: Civility (elementary). Utah State University: Logan, UT.

WEBINARS

Papa, L., Patterson, C.A., & Reveles, A. (2019, May). *Microaggressions*. Psi Chi, The International Honor Society in Psychology.

Patterson, C., **Papa, L.**, & Reveles, A. (2015, August 22). *Culturally Competent Supervision*. Utah Psychological Association.

Patterson, C. & **Papa, L.** (2015, June 13). *Understanding the impact of microaggressions in different psychological settings*. Utah Psychological Association.

Papa, L. & Breitenbach, A. (2014, March, 26; April, 2). *Tests and measures*. Psi Chi-APA Presentation for Students.

Papa, L. & Lee, C. (2014, June, 5). *Would you like to know more about statistics?*. Psi Chi-APA Presentation for Students.

MENTORSHIP

Mentor

Undergraduate Apprenticeship
Utah State University, Logan, UT

Spring 2013 –
Spring 2018

Mentored nine undergraduate research assistants. Duties include online survey construction using data collection program (Qualtrics), recruitment of participants, launching pilot of study measures, and the use of a statistical program (SPSS) to evaluate psychometric properties of measures.

TEACHING

EXPERIENCE

Graduate Instructor

Utah State University, Logan, UT

Multicultural Psychology (Psy 4240)

2017 - 2018

Scientific Thinking and Methods in Psychology (Psy 3500)

Summer 2013

Graduate Teaching Assistant

2010-2013

Utah State University, Logan, UT

Scientific Thinking and Methods in Psychology (Psy 3500)

Fall 2012, Spring 2013

Fall 2012, Spring 2013

Introduction to Psychology (Psy 1010)

Northern Arizona University, Flagstaff, AZ	
<i>Research Methods in Psychology (Psy 302W)</i>	Fall 2011, Spring 2012
<i>Social Psychology (Psy 250)</i>	Spring 2011
<i>Introduction to Statistics in Psychology (Psy 230)</i>	Spring 2011
<i>Cognitive and Behavioral Neuroscience (online; Psy 255)</i>	Spring 2011
<i>Social Psychology (online; Psy 250)</i>	Summer 2011
<i>Research Methods in Psychology (Psy 302W)</i>	Fall 2010

Personal Psychology Tutor 2011-2012
 Northern Arizona University, Flagstaff, AZ

Part-Time Faculty Spring 2012
 Coconino Community College, Flagstaff, AZ
Introduction to Psychology (Psy 101)

Undergraduate Teaching Assistant Spring 2012
 University of Hawaii – Mānoa, Honolulu, HI
Introduction to Psychology (Psy 100)

GUEST LECTURES

Advanced Assessment Seminar Spring 2020
 UCSF/ZSFG, San Francisco, CA
 Instructors: Austin Yang, PsyD
 Nancy Compton, Ph.D.

-An Introduction to Autism Spectrum Disorder and Assessment

Multicultural Psychology (Psy 4240) Spring 2018
 Utah State University, Logan, UT
 Instructor: Melissa Tehee, Ph.D.
-Racial and Ethnic Microaggressions

Psychological Statistics (Psy 3010) Fall 2017
 Utah State University, Logan, UT
 Instructor: Kaylee Litson, BS
-Two-way ANOVA

Legal and Ethical Issues in the Schools (Psy 6440) Fall 2017
 Utah State University, Logan, UT
 Instructor: Donna Gilbertson, Ph.D.
- Multicultural Competence Considerations in Schools

Orientation to Psychology as a Career and Profession (Psy 2010) Utah State University, Logan, UT Instructor: Carrie Madden, M.A. <i>-A Primer to Multicultural Competence</i>	Fall 2017 - Spring 2018; Fall 2014 - Spring 2016
Cross Culture Talk (IELI 1230) Utah State University, Logan, UT Instructor: Taira Nieves, MSLT <i>-Polynesia and the Pacific Islands</i>	Fall 2017
Cultural and Linguistic Diversity and Disability (SPED 7400) Utah State University, Logan, UT Instructor: Lillian Durán, Ph. D <i>-Cultural Adaptations</i>	Fall 2015
Race, Culture, Class, and Gender Issues in Health (HEP 5000) Utah State University, Logan, UT Instructor: Maya Miyairi, Ph.D. <i>-Microaggressions</i>	Spring 2015
Psychological Statistics (Psy 3010) Utah State University, Logan, UT Instructor: Renee Galliher, Ph.D. <i>-Two-way ANOVA</i>	Fall 2014
Objective Assessment of Personality and Affect (Psy 6320) Utah State University, Logan, UT Instructor: Jenna Glover, Ph.D. <i>-Structured Intake</i>	Spring 2014
Multicultural Psychology (Psy 4240) Utah State University, Logan, UT Instructor: Melanie M. Domenech Rodríguez, Ph.D. <i>-Cultural Identity Development</i> <i>-Multicultural Competence</i>	Fall 2013
Scientific Thinking and Methods in Psychology (Psy 3500) Utah State University, Logan, UT Instructor: Ginger Lockhart, Ph.D. <i>-Generalizing Results</i>	Spring 2013
Introduction to Psychology (Psy 1010) Utah State University, Logan, UT Instructor: Jennifer Grewe, Ph.D. <i>-Memory</i>	Spring 2013

*-Motivation***Introduction to Psychology (Psy 1010)**

Fall 2012

Utah State University, Logan, UT

Instructor: Jennifer Grewe, Ph.D.

*-Biological Bases of Behavior**-Prejudice**-Psychological Disorders**-Psychological Treatments***Social Psychology (Psy 250)**

Spring 2012

Northern Arizona University, Flagstaff, AZ

Instructor: Daniel Wiedler, Ph.D.

*-Prejudice***Social Psychology (Psy 250)**

Spring 2011

Northern Arizona University, Flagstaff, AZ

Instructor: Michael Rader, Ph.D.

*-Prejudice***AWARDS****Utah State University Diversity Award**

2018

Title IX/Affirmative Action

Utah State University, Logan UT

Dedication Award

2017

Utah State University Student Association

Utah State University, Logan UT

Fredrick Q. Lawson Fellowship (\$5000)

2017

Emma Eccles Jones College of Education and Human Services

Utah State University, Logan, UT

Fredrick Q. Lawson Fellowship (\$3000)

2016

Emma Eccles Jones College of Education and Human Services

Utah State University, Logan, UT

Graduate Student Travel Award (\$300)

2015

Office of Research and Graduate Studies

Utah State University, Logan, UT

Graduate Student Travel Scholarship (\$500)	2014
Division 45 Research Conference University of Oregon, Eugene, OR	
Graduate Student Travel Award (\$300)	2013
Office of Research and Graduate Studies Utah State University, Logan, UT	
Nominated Outstanding Teaching Assistant	2012
Graduate College Northern Arizona University, Flagstaff, AZ	
Fulbright-Hays Award	2010
Advanced Filipino Abroad Program (AFAP) University of Hawaii-Mānoa, Honolulu, HI	
Dean's List	2008 - 2010
University of Hawaii-Mānoa, Honolulu, HI	

PROFESSIONAL DEVELOPMENT

MEMBERSHIPS

Asian American Psychological Association	2017-Present
Utah Psychological Association – Student	2015-2016
Society of Prevention Research – Student	2014-2015
Rocky Mountain Psychological Association – Student	2014-2016
Utah Association of School Psychologists – Student	2014-2017
American Psychological Association - Student Affiliate (APAGS) Division 2 (Teaching of Psychology) Division 12 Section 6 (Clinical Psychology of Ethnic Minorities) Division 45 (Ethnic Minority Issues)	2012-present
Psi Chi International Honor Society in Psychology	2009 (lifetime)
Psi Chi Executive Officer	2009-2010

TRAININGS/WORKSHOPS

Utah Association of School Psychologists Ethics Workshop	2014
Utah Department of Education Salt Lake City, UT	
NIDA Diversity Supplements Workshop	2014

Office of Diversity and Health Disparities, National Institute of Drug Abuse
Rockville, MD

ACT Boot Camp 2014
Trainers: Steven Hayes, Ph.D., Kirk Strosahl, Ph. D., Kelly Wilson, Ph.D.
Eldorado Convention Center
Reno, NV

Allies on Campus 2014
Facilitator Training
Utah State University
Logan, UT

Allies on Campus 2013
Ally Training
Utah State University
Logan, UT

Creating Community in Diverse School Environments 2013
StirFry Seminars & Consulting
Facilitator: Lee Mun Wah, M.S., M.A.
Utah State University
Logan, UT

SPECIALIZED TRAINING

Child Parent Psychotherapy Learning Collaborative - 1 September 9-11,
Child Trauma Research Program (CTRP) 2018
Instructors: Chandra Ghosh Ippen, Ph.D., Mindy Kronenberg,
Ph.D.
Alameda First Five Building
Alameda, CA

This three-day intensive training focuses on the basics of Child-Parent Psychotherapy (CPP), an evidence based dyadic therapy for children under the age of 6. The three days focused on the therapy components and the use of fidelity forms. Supervision group was provided for attendees while CTRP trainees received supervision in their respective training programs. This training was repeated for post-doctoral trainees at CTRP.

Child Parent Psychotherapy Learning Collaborative - 2 March 25-26,
Child Trauma Research Program (CTRP) 2018
Instructors: Chandra Ghosh Ippen, Ph.D., Griselda Bucio-Oliver,

LMFT, Vilma Reyes, PsyD
 The California Endowment Oakland Regional Office
 Oakland, CA

This two-day intensive training focuses on case-presentations of Child-Parent Psychotherapy (CPP), an evidence based dyadic therapy for children under the age of 6. The two days focused on case presentation from clinicians using CPP. Feedback was provided by the instructors and other CTRP staff including CPP co-founder, Alicia Lieberman, Ph.D.

Child Parent Psychotherapy Learning Collaborative - 1

September 24-
26, 2018

Child Trauma Research Program (CTRP)
 Instructors: Griselda Bucio-Oliver, LMFT, Vilma Reyes, PsyD
 Alameda First Five Building
 Alameda, CA

This three-day intensive training focuses on the basics of Child-Parent Psychotherapy (CPP), an evidence based dyadic therapy for children under the age of 6. The three days focused on the therapy components and the use of fidelity forms. Supervision group was provided for attendees while CTRP trainees received supervision in their respective training programs.

Parent Management Training – Oregon Model (PMTO)

2015-2016

PMTO Blended Classroom
 Instructors: Melanie Domenech Rodríguez, PhD, Ana Baumann, PhD
 Utah State University
 Logan, UT

The PMTO class was a yearlong training in the use of PMTO. Students from five different campuses were all joined via video conferencing. Over the year students learned the theoretical underpinnings of PMTO as well as its application. As such, students engaged conducting their own PMTO groups. Each group was filmed and feedback via fidelity of implementation (FIMP) from certified PMTO mentors and other students was provided. At the conclusion of the class, each student received a certificate for completion of the yearlong training.

COMMUNITY OUTREACH AND INVOLVEMENT

ORGANIZATIONAL INVOLVEMENT

How to Be an Anti-Racist Focus Group

2017 – 2018

Access & Diversity Center

Utah State University, Logan, UT

Following a presentation by writer and professor, Ibram X Kendi, the How to Be an Anti-Racist Focus Group is a bi-weekly meeting that combines the efforts of students, faculty, and staff around campus to brainstorm and provide action to promote the inclusion of all marginalized groups on campus.

Polynesian Student Union

2013 – 2018

Access & Diversity Center

Utah State University, Logan, UT

The Polynesian Student Union is a club geared towards celebrating the culture of the Pacific islands. Club members engage in cultural dances in preparation for a luau that showcases dances from different Pacific islands.

Diversity Cabinet

2016 – 2017

Polynesian Student Union Representative

Utah State University, Logan, UT

The diversity cabinet's purpose is "to enhance the diversity on campus and deepen the Aggie experience for all." The diversity cabinet is a multidisciplinary team that is chaired by the Utah State University Student Association (USUSA) Organizations and Diversity Vice President. The cabinet is comprised of different council members of USUSA (3) and representatives from each of the Access & Diversity clubs (8), international student clubs (7), and other campus representatives (5).

Katipunan Filipino Club

2008 – 2010

University of Hawaii-Mānoa, Honolulu, HI

The Katipunan club is an ethnic club for students of Filipino descent. Club activities are targeted towards cultural awareness of Filipinos in Hawaii and heritage learning. Club members also took Filipino (Tagalog) language classes concurrently.

Timpuyog Ilocano Club

2008

University of Hawaii-Mānoa, Honolulu, HI

The Timpuyog club is an ethnic club for students of Filipino descent that originate from the Ilocos region of the Philippines. Club activities are targeted towards cultural awareness of Ilocanos in Hawaii and heritage learning. Club members also took Ilocano language classes concurrently.

COMMUNITY LECTURES AND PRESENTATIONS

Papa, L. A. (2020, January). *A primer to cooperative parenting*. Presentation for parents at Caliber Beta Academy, Richmond, CA.

Papa, L. A. (2017, November). *What is culture?*. Presentation for third graders at Thomas Edison Charter School, North Logan, UT.

Papa, L. A. (2017, April). *How I learned about race and ethnicity*. Presentation for Mountain Crest High School “Diversity Discovery” class at Utah State University, Logan, UT.

Papa, L., & Jones, N. (2016, March). *Empathy and self-compassion*. Workshop presentation for the 2016 mental health awareness week at Utah State University, Logan, UT.

Papa, L. A. (2016, January). *Family avoidance of services*. In-service training presentation for staff of Bear River Head Start, Logan, UT.

Papa, L. A. & Reveles, A. K. (2015, November). *Work-family balance*. In-service training presentation for staff of Bear River Head Start, Logan, UT.

Papa, L. A. & Reveles, A. K. (2015, September). *Empowering parents*. In-service training presentation for staff of Bear River Head Start, Logan, UT.

Papa, L. A. & Reveles, A. K. (2015, May). *Self-care and burnout prevention*. In-service training presentation for the day care providers at Bear River Head Start, Logan, UT.

Papa, L. A., & Haggan, L. S. (2015, April). *Stress management and mindfulness*. Workshop presentation for “Mental is No Joke” mental health awareness week at Utah State University, Logan, UT.

Papa, L. A. & Haggan, L. S. (2015, March). *Stress Management/Mindfulness*. Workshop presented the 2nd annual La Conferencia, Salt Lake City, UT.

Papa, L. A. (2015, February). *Behavioral management training*. In-service training presentation for staff of Bear River Head Start, Logan, UT.

Papa, L. A. (2014, July). *Mabuhay: An introduction to Filipino language*. Presentation

for the Gray Matters study, Logan, UT.

Adams, L., Campbell, J., Kemple-Reeves, A., Leatham, L., McPherson, K., Miner, M., **Papa, L.**, & Patterson, C. (2014, May). *Diversity in leadership*. Presentation for the Hugh O'Brian Youth Leadership Seminar, Aspen Grove, UT.

Papa, L. A. (2014, April). *A multicultural competence primer*. Presentation for Morgan High School honors psychology students, Utah State University, Logan, UT.

Miner, M., **Papa, L.**, & Sanders, C. (2014, March). *Multicultural competence*. Presentation for InTech High School leadership students, InTech Collegiate High School, Logan, UT.

Papa, L. A. (2013, April). *A Multicultural competence primer*. Presentation for Morgan High School honors psychology students, Utah State University, Logan, UT.

RECRUITMENT

Each year, the Emma Eccles Jones College of Education and Human Services provides opportunities to recruit future graduate students. As a graduate student recruiter, you are able to share your experiences with interested undergraduate students and provide information about the college's eight departments as well as the many schools and clinics on campus.

The California Forum for Diversity in Graduate Education

Recruitment for the Emma Eccles Jones College of Education and Human Services
November 07, 2015

University of California, Santa Barbara
Santa Barbara, CA

The California Forum for Diversity in Graduate Education

Recruitment for the Emma Eccles Jones College of Education and Human Services
November 08, 2014

University of California, San Diego
La Jolla, CA

The California Forum for Diversity in Graduate Education

Recruitment for the Emma Eccles Jones College of Education and Human Services
October 26, 2013

Saint Mary's College
Moraga, CA

LANGUAGES

Filipino (Tagalog): Intermediate/Conversational