Support for the Ecological Framework for Understanding Multiracial Identity using Latent
Profile Analysis

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Abstract

The current study presents a statistical model of the roles of racial identity, racial identification, and racial category under the ecological framework for understanding multiracial identity. The purposes of this study were threefold: (1) to identify distinct profiles of how multiracials understand their racial identity using latent profile analysis; (2) to investigate whether racial identification variables predicted profile membership; and (3) to examine whether profile membership differentiated multiracials across racial category and adjustment outcomes. Using a sample of 269 multiracial adults (77% female, $M_{age} = 23.10$) recruited from a southwestern university in 2018, we identified three profiles of racial identity orientations: *Singular-oriented* (9%; $n = 23$), *Border-oriented* (45%; $n = 120$), and *Protean-oriented* (47%; $n = 126$). The Singular-oriented profile was characterized by the highest level of racial distance, and the lowest levels of multiracial pride, challenges with racial identity, and creating a third space. The Border-oriented profile was characterized by the lowest level of racial distance, and the highest level of multiracial pride. The Protean-oriented profile was characterized by the highest levels of racial conflict, challenges with racial identity, and shifting racial expressions. Several racial identification variables significantly predicted profile membership, including gender, Black racial heritage, and perceived racial ambiguity. Furthermore, the three racial identity profiles predicted variation in racial typology choices, proximity to whiteness, distress, collective efficacy, and sense of belonging. These findings attest to the importance of using person-centered techniques to empirically support the ecological framework for understanding multiracial identity.

Keywords: racial identity, multiracial, ecological framework, latent profile analysis

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Introduction

Racial identity among the multiracial population has received growing attention since the repeal of anti-miscegenation laws and the recognition of multiple racial heritages on the 2000 US Census (Rockquemore et al., 2009). In a highly racialized society such as the United States, racial identity becomes integral to the self-concept of multiracials who are automatically assigned and defined by monoracial categories (Omi & Winant, 1994; Spickard, 1992). *Multiracial* refers to a person whose biological parents are from two or more different racial groups (Root, 1996). Demographically, multiracial Americans represent one of the fastest growing and youngest populations, with a median age of 19 compared to 38 for monoracial groups (Parker et al., 2015). As the number of multiracial adults grows, so do questions about how these individuals fit into our society's understanding of race and racial boundaries. Unlike their monoracial counterparts, mixed race individuals must navigate a rigid racial classification system that contradicts their multiracial status. According to critical multiracial theory (MultiCrit; Harris, 2016), this monoracial paradigm of race leads to the delegitimization and erasure of multiracial identities and experiences. In this study, *multiracial identity* is defined as the negotiation of how one's multiple racial heritages fit into society's monoracial paradigm of understanding race. Moreover, we employ *the ecological framework for understanding multiracial identity* (Renn, 2003; Rockquemore et al., 2009; Root, 2003), which assumes that multiracial identity is fluid and subject to change across time and contexts. Developing a multiracial identity, therefore, is not a linear process with a single, optimal endpoint (Rockquemore et al., 2009). Rather, multiracial identity is contextualized by the dynamic

interactions among racial identity, racial identification, and racial category. *Racial identity* refers to a multiracial person's self-understanding of their racial background; *racial identification* refers to how other people racially perceive and categorize someone who is multiracial; and *racial category* refers to which racial designations are available and claimed by a multiracial person within a particular context, such as on the US Census (Rockquemore et al., 2009).

According to the ecological framework for understanding multiracial identity, mixed race individuals construct their racial identity relative to racial identification, or how others racially identify them (Rockquemore & Brunsma, 2002). Moreover, how a mixed race individual understands their racial identity influences how they interpret and claim racial categories across contexts (Rockquemore et al., 2009).

Despite advancements in multiracial identity theory, there is a dearth of empirical research that examines multiracial identity from a person-centered approach (Chong & Kuo, 2015). Most empirical studies on multiracial identity examine associations between variables for the multiracial population as a whole, such as the link between multiracial pride and psychological adjustment (Cheng & Lee, 2009; Salahuddin & O'Brien, 2011; Yoo et al., 2016). A person-centered approach would allow researchers to quantitatively identify latent subpopulations, or profiles, of multiracials based on their unique pattern of responses to validated measures on multiracial racial identity (Howard & Hoffman, 2017). Grounded in critical multiracial theory (Harris, 2016) and the ecological framework (Renn, 2003; Rockquemore & Brunsma, 2002; Root, 2003), this study extends the literature on multiracial identity by using latent profile analysis to identify distinct profiles of how multiracials understand their multiple racial heritages using six indicators of racial identity (i.e., Racial Distance, Racial Conflict, Challenges with Racial Identity, Shifting Racial Expressions, Creating

a Third Space, and Multiracial Pride). Moreover, we assess how these racial identity profiles relate to other components of multiracial identity theory, including racial identification, racial category, and adjustment (see Figure 1). Overall, this study aims to investigate how key aspects of the ecological framework for understanding multiracial identity fit together empirically. Specifically, we aim to quantitatively substantiate and extend Rockquemore and colleagues' (2009) theoretical model, which characterizes multiracial identity as the unique amalgamation of racial identity, racial identification, and racial category.

Critical Multiracial Theory (MultiCrit)

The emerging literature on multiracial identity highlights the need for theoretical pluralism, or the integration of multiple theoretical perspectives in order to account for the dynamic socio-political construction of race and racial hierarchies (Jackson & Samuels, 2019). This article conceptualizes race and race-related developmental processes according to critical multiracial theory (MultiCrit; Harris, 2016). Critical multiracial theory builds on the foundations of intersectionality (Combahee River Collective, 1977; Crenshaw, 1989), racial formation theory (Omi & Winant, 1994), and critical race theory (CRT; Delgado & Stefancic, 2001) in order to delineate the distinct, systematic racialization of multiracial individuals who live in the United States (Harris, 2016). Central to critical multiracial theory is the belief that social scientists should challenge ahistorical and dominant ideologies that uphold a monoracial paradigm of race, including the endemic effects of racism and monoracism (Harris, 2016). *Racism* is the production and perpetuation of a racial structure through capitalist racial domination projects such as slavery, nationalism, colonialism, imperialism, and neoliberalism (Bonilla-Silva, 2015). A racial structure is a hierarchical classification system that systematically privileges some racial groups at the cost of disenfranchising others (Bonilla-Silva, 2015). The contemporary racial

structure in America can be traced to the invention of racial categories by phrenologists Carolus Linnaeus and Johann Friedrich Blumenbach in the 18th century (Chang, 2015). Racial taxonomies established by these Enlightenment-era scholars were used to justify the social, political, and economic domination of the Caucasian (White) race over Mongolian (Asian American), Malayan (Native Hawaiian and Pacific Islander), Ethiopian (African American/Black), and American (Native American/American Indian) races (Chang, 2015).

A unique manifestation of racism within the current racial structure of the United States is *monoracism*, which refers to the systematic oppression of multiracials through the preservation of discrete monoracial categories (Johnston & Nadal, 2010). Monoracism and the monoracial paradigm of race erase the longstanding history of interracial mixing and multiraciality in the United States (Carter, 2013; Harris, 2016). The existence of multiracials blurs and threatens the rigid monoracial boundaries that characterize our society's understanding of race (Root, 1992). Consequently, multiracials "become one of the most important socio-political signifiers of racial production, presentation, and contestation in American society's racial and social organization" (Williams, 1996, pp. 194). Throughout history, monoracism has dictated which racial categories are available to multiracials in ways that serve to uphold the purity of discrete races and White supremacy (Carter, 2013). Consider, for example, how the classification of races on the US Census have changed over time to reflect White resentment and fears about growing rates of interracial unions and the immigration of racial minority groups. Race and racial identities, therefore, are markers of politicized histories across specific contexts (Omi & Winant, 1994). By acknowledging the social construction and political-economic function of racial categories in the United States, social scientists are able to better understand how multiracials are uniquely

racialized and construct their racial identities under a monoracial paradigm of race (Harris, 2016).

Limitations of Monoracial Racial Identity Models

Most renowned models of racial identity (Cross, 1995; Helms, 1995; Phinney, 1996; Sellers et al., 1997) were standardized on monoracial populations, and often do not adequately capture the distinct racialization of individuals with multiple racial heritages. Specifically, these monocentric models are largely ahistorical and acontextual, and when applied to multiracials, incorrectly define racial identity development as a linear process with a clear end point (Miller, 1992; Thorton, 1996). Racial identity for monoracial groups assumes that an individual's ascribed racial heritage and claimed racial identity are equivalent (e.g., an individual with Asian American parents will racially identify as Asian American). In reality, even multiracials who share identical racial heritages (e.g., individuals with African American/Black and Latinx ancestry) may choose to racially identify in ways that are different from each other (e.g., exclusively African American/Black and exclusively multiracial), or even in ways that are different from themselves across time (Brunsma, 2005; Mihoko Doyle & Kao, 2007).

Monocentric models of racial identity negate how race and racial boundaries change to reflect particular socio-political moments in history (Miller, 1992). For example, consider how the willingness to claim a multiracial identity might have changed after the repeal of anti-miscegenation laws which, prior to 1967, explicitly deemed interracial unions as socially deviant and punishable by law. A more suitable theory of multiracial identity would need to incorporate these contextual perspectives in order to account for nuances in how multiracials understand and construct their racial identity relative to their immediate environments.

Past Theories of Multiracial Identity

The discourse around multiraciality in the social sciences has changed dramatically over the past century. Multiracial identity models have moved through a series of four paradigm shifts (Kuhn, 1962) characterized by each era's racial climate. These include the *problem approach* (late Jim Crow era, 1900s to 1960s), the *equivalent approach* (Civil Rights Movement era, 1960s to 1970s), the *variant approach* (Post-Loving v. Virginia era, 1970s to 1990s), and the current *ecological approach* (Post-racial colorblind era, 1990s to present) (Thorton & Wason, 1995; Thorton, 1996; Rockquemore et al., 2009).

Problem approach (1900s-1950s). The problem approach was a manifestation of the socio-legal racial segregation of the late Jim Crow era (Rockquemore et al., 2009). It politically functioned to delineate clear monoracial categories, and to dissuade individuals from racially intermixing for fear of the social and psychological consequences for their families (Thorton, 1996). The theory of the "marginal man" (Park, 1928; Stonequist, 1937) characterizes what is one of the oldest paradigms in the social sciences for understanding multiraciality. White researchers in the early 20th century theorized that it was not possible for mixed race children to integrate the innately clashing cultures of their parents' different monoracial groups (Thorton & Wason, 1995). Consequently, multiracials at the margins of these monoracial groups were assumed to be at greater risk of developing psychopathology (Thorton, 1996). However, much of this literature comes from studying clinical samples, including multiracials recruited from the child welfare system and social service agencies (Thorton & Wason, 1995). The problem approach, consequently, is not an accurate reflection of the psychological impact of having multiple racial heritages for the general multiracial population.

Equivalent approach (1960s-1970s). The equivalent approach was a manifestation of the rising Civil Rights and Black Power Movements (Rockquemore et al., 2009). It politically

functioned to promote these movements' values and goals, including racial equity and the affirmations of Black identity and lives in response to blatant racism and the dehumanization of Black people (Rockquemore et al., 2009). Much of this literature was rooted in this era's lingering beliefs about hypodescent and the one-drop rule; namely, that Black multiracials should be racially categorized and included in the Black community (Rockquemore et al., 2009). Consequently, racial identity development under the equivalent approach was assumed to be identical for multiracial and monoracial groups (Thorton & Wason, 1995). Building on Erikson's (1968) theory of ego identity formation, researchers posited that multiracials and monoracials underwent similar processes of exploration and commitment that led to a stable monoracial identity (Rockquemore et al., 2009). This is exemplified by Cross' (1971) Nigrescence model for developing a positive monoracial Black identity, which was used to explain racial identity development in both monoracial and multiracial Black individuals (Thorton, 1996).

Variant approach (1980s-1990s). The variant approach was a manifestation of the rapidly growing multiracial population following the repeal of anti-miscegenation laws by *Loving v. Virginia* (1967). It politically functioned to challenge problematic assumptions about multiraciality evident in the previous approaches, including the beliefs that racial identity development for multiracials was inherently pathological and identical to monoracial racial identity development (Rockquemore et al., 2009). Unlike other paradigms, the variant approach was led by mixed race scholars who were able to voice the distinct race-related developmental processes that set multiracials apart from monoracial groups (Thorton, 1996). This is exemplified by the anthology *Racially Mixed People in America* (1992) by Maria Root, which features multiracial scholars from a wide range of disciplines who describe the unique racialization and identity choices of mixed race individuals (Rockquemore et al., 2009). Researchers from the

variant approach were interested in how multiracials integrated their multiple racial heritages, and began to theorize models of identity development unique to mixed race individuals. For example, Poston (1990) extended Cross' (1971) Nigrescence model by applying it to biracial identity development among Black/White adolescents. Rather than developing a positive monoracial Black identity, the end stage of Poston's (1990) biracial identity development model was a healthy biracial identity in which Black/White multiracials valued both of their racial heritages. Similarly, Kich (1992) proposed a biracial identity development model for people with Asian American and White ancestry that defined the final stage of development as accepting and asserting an integrated biracial identity.

An Ecological Framework for Understanding Multiracial Identity (2000s-present)

The problem, equivalent, and variant approaches for studying multiracials in the social sciences exemplify how the construction of racial boundaries and the meaning of multiraciality fluctuate across time and contexts. Our knowledge that race is actively constructed to serve social, political, and economic ends has culminated in the ecological framework for understanding multiracial identity (Renn, 2003; Rockquemore et al., 2009; Root, 2003). Arguably, the ecological approach is a manifestation of our current era of post-racial colorblindness, and the delegitimization of race as a tool of social stratification. Its political function is to challenge monoracism, as well as ahistorical understandings of race and racial inequalities. Researchers who employ an ecological approach contend that what distinguishes multiracial from monoracial racial identity development is the process of negotiating the meaning of one's multiple racial heritages in a society defined by distinct monoracial boundaries (Root, 1992; Root, 2003). The goal of studying multiracial identity is to identify contextual factors that influence these meaning-making and identity development processes, with the

knowledge that which racial identity choices are “healthiest” depend on defining characteristics of a multiracial person’s immediate context (Rockquemore, 1999). Therefore, researchers should not privilege one type of racial identity over another (e.g., monoracial or multiracial) because this essentializes arbitrary racial group differences, and ignores how race is socially, politically, and economically constructed (Rockquemore et al., 2009). Moreover, in the effort to build a more cohesive multiracial identity theory using the ecological approach, Rockquemore and colleagues (2009) recommend disentangling three components of multiracial identity: racial identity, racial identification, and racial category. These three components dynamically influence multiracial identity development, and reflect different facets of understanding one’s multiracial status (e.g., public vs. private identification) (Rockquemore et al., 2009). When investigated in tandem, these three components can help researchers construct a more nuanced and holistic understanding of multiracial identity.

Racial identity. *Racial identity* refers to how a multiracial person subjectively understands their multiple racial heritages (Rockquemore et al., 2009). In contrast to monoracial groups, there is no monolithic racial identity choice shared by all mixed race individuals. Even multiracials who share identical racial backgrounds can vary in how they interpret the meaning of their mixed race status, and can consequently construct different racial identities. In order to account for this heterogeneity, current empirical measures of racial identity for multiracials focus on common shared experiences and ways of understanding one’s multiracial status (Cheng & Lee, 2009; Salahuddin & O’Brien, 2011; Yoo et al., 2016). These measures were developed and validated in multiracial samples in order to account for the unique racialization of individuals with multiple racial heritages. In this study, subscales from several of these measures are used as indicators of racial identity for our latent profile analysis. We selected six indicators (Racial

Distance, Racial Conflict, Challenges with Racial Identity, Shifting Racial Expressions, Creating a Third Space, and Multiracial Pride) that reflected how mixed race individuals understand and engage with their multiracial background in order to parcel out the unique associations of racial identity with racial identification, racial category, and adjustment.

One important facet of racial identity is how multiracials perceive the relationships among their multiple racial heritages. Cheng and Lee (2009) argue that racial identity for multiracials is characterized by the amount of distance (*Racial Distance*) and conflict (*Racial Conflict*) a person perceives among their different racial backgrounds. Similarly, other researchers have characterized racial identity for multiracials by a perceived lack of belonging to any racial group (*Challenges with Racial Identity*; Salahuddin & O'Brien, 2011), and shifts in how one's racial identity is expressed across contexts (*Shifting Racial Expressions*; Yoo et al., 2016). Other important facets of racial identity include whether multiracials seek opportunities to affirm their multiracial status (*Creating a Third Space*; Yoo et al., 2016), as well as whether mixed race individuals feel proud to be multiracial (*Multiracial Pride*; Salahuddin & O'Brien, 2011). According to the ecological framework, how a multiracial person interprets and responds to these racial identity indicators will be influenced by racial identification. Moreover, how a multiracial person understands their racial identity according to these indicators will be reflected in the racial categories they claim across specific contexts.

The effects of racial identification on racial identity. *Racial identification* refers to how other people racially perceive and categorize someone who is multiracial (Rockquemore et al., 2009). Rockquemore and Brunsma (2002) contend that the racial identity claimed by a multiracial person depends on whether that identity is validated by others. In other words, multiracials construct their racial identities relative to how other people treat and racially identify

them. From an ecological perspective, factors that can influence this racial identification process may include the multiracial person's racial heritages, age, gender, socioeconomic status, phenotype, and social context (Gaither, 2015; Rockquemore & Brunnsma, 2002; Root, 2003). For example, AhnAllen and colleagues (2006) found that among Asian American/White multiracials, a monoracial appearance predicted perceived racial acceptance and belonging from respective monoracial peers, as well as self-identification with respective monoracial groups. Similarly, Young and colleagues (2017) demonstrated how monoracial Black and White individuals racially categorized Black/White multiracials differently based on phenotypic cues, including racial ambiguity or the ability to racially "pass" as a monoracial group. Regarding how geographic location can contextualize racial identification, Brunnsma (2006) found that Black/White multiracials are differentially categorized by others as either White, Black, or multiracial depending on which region they live in the United States (e.g., East Coast, the South).

The effects of racial identity on racial category. *Racial category* refers to how a multiracial person chooses to identify based on which racial identities are available within a specific context (Rockquemore et al., 2009). Alternatively, racial category may be understood as an expression of racial identity. Rockquemore and Brunnsma (2002) identified four racial typologies that reflect common ways that multiracials respond when asked to define their racial identity, such as on college applications, health forms, and the U.S. Census. These four racial typologies are singular identity, border identity, protean identity, and transcendent identity (Rockquemore & Brunnsma, 2002). Multiracials with a *singular identity* identify exclusively as one monoracial group. Multiracials with a *border identity* identify exclusively as multiracial, biracial, or mixed race. Multiracials with a *protean identity* identify with whichever racial identity they perceive as situationally appropriate within a particular context. Multiracials with a

transcendent identity identify as “human”, or do not subscribe to existing racial categories.

Similarly, Choi-Misailidis (2004) identified three racial identity orientations which overlap with Rockquemore and Brunsma’s (2002) racial typologies: *singular identity* (i.e., identifying with only one monoracial group), *integrated identity* (i.e., identifying as multiracial, and/or with multiple monoracial groups), and *marginal identity* (i.e., not identifying with any racial groups). According to Choi-Misailidis (2004), these “dominant” identity orientations describe which racial identity choice (e.g., monoracial, multiracial) a multiracial person claims the most often across time and contexts.

The effects of racial identity on adjustment. Researchers have long been interested in how multiracial racial identity is related to psychological and social adjustment (Root, 1996). Racial identity measures that reflect the challenge of integrating multiple racial heritages have been linked to poorer adjustment outcomes, including decreased social connectedness (Salahuddin & O’Brien, 2011) and increased negative affect (Jackson et al., 2012; Yoo et al., 2016). Cheng and Lee (2009) found that multiracials reported greater psychological adjustment when they perceived lower racial distance and conflict between their racial backgrounds, including higher self-esteem (Cheng & Lee, 2009) and decreased negative affect (Jackson et al., 2012). Moreover, mixed race individuals who found opportunities to affirm their multiracial identity and who felt proud to be multiracial also reported healthier psychological adjustment (Salahuddin & O’Brien, 2011; Yoo et al., 2016). Overall, empirical studies tend to suggest that multiracials who acknowledge their multiple racial heritages report greater psychological adjustment (Binning et al., 2009; Lusk et al., 2010). Specifically, Binning and colleagues (2009) reported higher levels of self-esteem and social engagement among multiracials who identified as multiracial rather than monoracial. Moreover, Lusk and colleagues (2010) found that

multiracials who claimed a multiracial identity reported less depression and higher self-esteem than multiracials who claimed a monoracial identity or rejected racial classifications altogether (Lusk et al., 2010). However, it is important to note that what may differentiate these findings is not the racial identity choices themselves (e.g., monoracial vs. multiracial), but rather, the stress of negotiating the meaning of one's multiracial background in a monoracist society.

A Person-Centered Approach to Studying Multiracial Identity

The majority of empirical literature on multiracial identity is grounded in a variable-centered approach. In other words, most quantitative studies investigate the association between variables (e.g., multiracial discrimination and depression) for the multiracial population as a whole (Howard & Hoffman, 2018). However, employing a person-centered approach may help researchers uncover nuances in how subgroups of multiracials differentially construct their racial identity. A person-centered approach allows researchers to identify subpopulations of multiracials based on their shared pattern of responses to variables (Howard & Hoffman, 2018). To our knowledge, there has been only one published study on multiracials that employs a person-centered approach. Chong and Kuo (2015) identified racial identity profiles among Asian American/White multiracial adults using cluster analysis. Based on participants' responses to the Multiracial-Heritage Awareness and Personal Affiliation Scale (M-HAPAS; Choi-Misailidis, 2004), the authors found three unique multiracial groups: Asian-White Integrated, Asian Dominant, and White Dominant (Chong & Kuo, 2015). Asian-White Integrated individuals identified equally with their Asian and White racial heritages, whereas Asian Dominant and White Dominant individuals more strongly identified with their Asian or White racial heritages, respectively (Chong & Kuo, 2015). Moreover, Chong and Kuo (2015) found that these groups differed across measures of cultural socialization and internalized oppression. Specifically,

multiracials in the Asian-White Integrated group reported higher levels of Asian cultural socialization than both the Asian Dominant and White Dominant groups. In addition, the White Dominant group reported the highest internalized oppression, and the Asian-White Integrated group reported the lowest internalized oppression (Chong & Kuo, 2015). The Chong and Kuo (2015) study exemplifies how person-centered analyses can provide rich information on how mixed race individuals differentially construct and understand their racial identity.

The Present Study

The present study is a response to the call for researchers to test models from multiracial identity theory using innovative empirical techniques (Rockquemore et al., 2009). We extend the contributions of Chong and Kuo (2015) by exploring racial identity profiles among multiracials across diverse racial heritages (e.g., Black/Asian American, Native/Latinx). Moreover, we employ a different person-centered approach: latent profile analysis. Rooted in the ecological framework for understanding multiracial identity (Renn, 2003; Rockquemore & Brunsma, 2002; Root, 2003), the purpose of this study is to investigate how multiracial identity is dynamically influenced by racial identity, racial identification, and racial category (see Figure 1). We are guided by the following research questions:

Research Question 1: Are there quantitatively distinct profiles of how multiracials understand their racial identity?

Research Question 2: Does racial identification predict membership in these racial identity profiles?

Research Question 3: How do these racial identity profiles predict racial category and adjustment distal outcomes, even after controlling for racial identification?

In order to address Research Question 1, latent profile analysis was used to identify distinct patterns, or profiles, of how mixed race individuals understand their racial identity based on six indicators (Racial Distance, Racial Conflict, Challenges with Racial Identity, Shifting Racial Expressions, Creating a Third Space, and Multiracial Pride). Next, in order to address Research Question 2, analyses of variance and chi-square tests were used to examine whether racial identification predicted membership in these racial identity profiles. Specifically, we investigated whether profile membership was predicted by demographic characteristics (Age, Gender, Racial Heritage, White Multiracial, Multiple Minority Multiracial, First Generation Multiracial, and 2+ Generation Multiracial), phenotype (Perceived Racial Ambiguity, White Passing Phenotype), and context (Childhood Neighborhood Composition). Finally, in order to address Research Question 3, analyses of covariance and chi-square tests were used to examine whether these racial identity profiles predicted racial category and adjustment outcomes, even after controlling for racial identification. In terms of racial category, we assessed the relationship between racial identity profile membership and Primary Racial Typology, Frequencies of Racial Typologies, Form Race, Internalized Monoracism, and Proximity to Whiteness. In terms of adjustment, we assessed the relationship between racial identity profile membership and adjustment outcomes reflecting mental health (Distress) and perceived belonging or exclusion (Sense of Belonging, Collective Efficacy, Multiracial Discrimination). Given that latent profile analysis is an exploratory technique, we do not propose any specific a priori hypotheses about the number of profiles, their predictors, or their distal outcomes. Rather, we hypothesize generally that these profiles of how multiracials understand their racial identity will reflect the unique connections in the existing literature of racial identity to racial identification, racial category, and adjustment for mixed race individuals.

Method

Participants

A sample of 269 multiracial college students from a Southwestern public university completed an online survey. Participants ranged in age from 18 to 63 years old, with a mean age of 23.10 ($SD = 7.14$). The sample was predominantly female (77%) and born in the United States (94.4%). After researchers coded for all possible racial heritage combinations claimed by participants on a modified US Census measure, the most common self-reported multiracial groups were Asian American and White (28.1%), Latinx and White (25.5%), and African American/Black and White (18.4%), African American/Black and Latinx (6.1%), and African American/Black and Asian American (6.1%). Most participants were White multiracial (81.8%) and first-generation multiracial (66.9%), meaning that their biological parents were from different monoracial groups (e.g., a monoracial Asian American father and monoracial White mother). Regarding socioeconomic status, 2.6% of participants identified as poor, 10.4% as working class, 20.1% as lower middle class, 43.5% as middle class, 22.7% as upper middle class, and 0.7% as affluent. There was a roughly normal distribution of participants across years in college (22.7% first year, 24.2% second year, 20.1% third year, 18.6% fourth year, and 14.5% five or more years).

Procedure

The Institutional Review Board of a Southwestern public university approved study procedures and measures in August 2018. Participants were recruited from an internet bulletin board on the university's student portal accessed by all registered students, as well as from university-affiliated multiracial student organizations. Electronic announcements were distributed that contained a brief description of the study and directed interested participants to

an informed consent form before proceeding to the Qualtrics survey. Participation was limited to persons at least 18 years of age with biological parents from two or more different racial groups. Individuals who completed the survey earned a \$10 Amazon eGiftcard as compensation for participating in the study. A total of 369 multiracial college students completed the survey. However, 269 valid responses remained in our final sample after removing participants who failed at least one of seven validity questions (e.g., “Select ‘strongly agree’ for this item”), as well as participants who did not answer any of the six latent profile indicator variables used for this study.

Measures

Latent profile indicators.

Racial conflict. The four-item subscale of the Multiracial Identity Integration measure (MII; Cheng & Lee, 2009) measured feelings of tension among one’s different racial heritages (e.g., “I feel torn between my different racial identities”). Items were rated on a five-point scale ranging from 1 (*completely disagree*) to 5 (*completely agree*), with higher scores representing greater racial conflict among their multiple racial groups. Racial Conflict was found to positively correlate with distress symptoms and negative affect (Jackson et al., 2012), demonstrating evidence of criterion-related validity. Moreover, Racial Conflict displayed adequate to good internal reliability (.70 to .81) when used with previous multiracial samples (Cheng & Lee, 2009; Jackson et al., 2012). The alpha in the current study was .80, indicating good internal reliability.

Racial distance. The four-item subscale of the Multiracial Identity Integration measure (MII; Cheng & Lee, 2009) assessed the degree to which participants perceived their different racial heritages as separate (e.g., “In any given context, I am best described by a single racial identity”). Participants responded based on a five-point scale ranging from 1 (*completely*

disagree) to 5 (*completely agree*), with higher scores representing greater racial distance among their multiple racial groups. Racial Distance has demonstrated evidence of criterion-related validity, as it negatively correlated with multiracial pride (Cheng & Lee, 2009). Internal reliability in previous published studies ranged from .65 to .80 (Cheng & Lee, 2009; Jackson et al., 2012). The alpha in the current study was .61.

Challenges with racial identity. The five-item subscale of the Multiracial Challenges and Resilience Scale (MRCS; Salahuddin & O'Brien, 2011) measured how often participants felt they lacked of a sense of identity or belonging with one or more of their multiple racial groups (e.g., "I feel as if I do not belong to any racial group"). Participants responded on a six-point Likert scale ranging from 0 (*never happened to me*) to 6 (*happened to me more than 10 times*), with higher scores indicating more often experiencing challenges with one's racial identity. Higher scores on Challenges with Racial Identity were found to negatively correlate with social connectedness, demonstrating evidence of criterion-related validity (Salahuddin & O'Brien, 2011). Salahuddin & O'Brien (2011) reported that the subscale's reliability was .68. The alpha in the current study was .79, indicating good internal reliability.

Shifting racial expressions. The five-item subscale of the Multiracial Experiences Measure (MEM; Yoo et al., 2016) assessed how often racial identity is expressed differently across social and environmental contexts (e.g., "I change how I describe my racial identity in different settings"). Participants responded using a five-point Likert scale ranging from 1 (*almost never*) to 5 (*almost always*). In support of criterion-related validity, Shifting Racial Expressions was positively correlated with negative affect (Yoo et al., 2016). Yoo et al. (2016) reported the subscale's reliability was .87. The alpha in the current study was .87, indicating excellent internal reliability.

Creating a third space. The five-item subscale of the Multiracial Experiences Measure (MEM; Yoo et al., 2016) measured how often participants formed or sought spaces that affirmed or supported their multiracial identity (e.g., “I create my own space with other multiracial people”). Participants responded using a five-point Likert scale ranging from 1 (*almost never*) to 5 (*almost always*). Creating a Third Space has demonstrated evidence of criterion-related validity, as it negatively correlated with racial distance (Yoo et al., 2016). Yoo et al. (2016) reported the subscale’s reliability was .81. The alpha in the current study was .75, indicating good internal reliability.

Multiracial pride. The five-item subscale of the Multiracial Challenges and Resilience Scale (MRCS; Salahuddin & O'Brien, 2011) measured whether participants felt proud to be multiracial (e.g., “I love being multiracial”). Participants responded on a six-point Likert scale ranging from 0 (*strongly disagree*) to 6 (*strongly agree*), with higher scores representing greater multiracial pride. Higher scores on Multiracial Pride were found to positively correlate with self-esteem, demonstrating evidence of criterion-related validity (Salahuddin & O’Brien, 2011). Salahuddin & O’Brien (2011) reported that the subscale’s reliability was .80. The alpha in the current study was .55.

Racial identification predictors of racial identity profile membership.

Demographics. Participants were asked to report demographic characteristics, including age, gender, socioeconomic status, and the racial heritages of their parents.

Racial heritage. The racial heritages of participants’ biological parents were reported using a modified Census measure that allowed participants to choose one or more of the following racial groups for each parent: African American/Black, Asian American/Asian, Pacific Islander, White, Hispanic/Latina(o), Native American/American Indian, and Middle

Eastern/North African (MENA). Seven monoracial heritage variables that reflected the racial heritage of the participant (i.e., Black Heritage, Asian Heritage, Pacific Islander Heritage, White Heritage, Latinx Heritage, Native Heritage, and MENA Heritage) were created based whether participants' biological mothers and/or fathers belonged to each monoracial category. For example, participants who reported that their biological mothers were "African American/Black" and "Pacific Islander" were coded as "1" (e.g., "Yes, I am African American/Black"; "Yes, I am Pacific Islander") for the Black Heritage and Pacific Islander Heritage variables, respectively.

Multiracial status. Multiracial status variables were coded based the racial heritages of participants' biological parents. Specifically, participants were White Multiracial (coded as "1") if they indicated that either their biological mother or biological father had White racial heritage. Participants were Multiple Minority Multiracial (coded as "2") if they indicated that neither their biological mother nor biological father had White racial heritage.

Multiracial generation. Multiracial generation variables were coded based on the racial heritages of participants' biological parents. Specifically, participants were First Generation Multiracial (coded as "1") if they indicated that both their biological mother and biological father were monoracial. Participants were 2+ Generation Multiracial (coded as "2") if they indicated that either their biological mother or biological father was multiracial.

Context.

Childhood neighborhood racial composition. The racial composition of participants' childhood neighborhoods was measured by the question, "What was the racial composition of the neighborhood you lived in growing up?" Participants were able to select one of the following choices: "predominantly White", "predominantly African American/Black", "predominantly

Hispanic/Latinx”, “predominantly Asian American”, “predominantly people who were mixed race/multiracial”, or “racially diverse”.

Phenotype.

White passing phenotype. White Passing Phenotype was measured using the question, “Others think my physical appearance (skin color, hair, eye color, etc.) most resembles...” Participants could select one of the following options: “my biological mother’s racial group(s)”, “my biological father’s racial group(s)”, “a mix of my racial backgrounds”, “neither of my racial backgrounds”, “someone who is racially ambiguous”, or “I don’t know”. Participants had a White Passing Phenotype (coded as “1”) if they selected “my biological mother’s racial group(s)” or “my biological father’s racial group(s)” *and* the corresponding biological parent was identified by the participant as monoracial White.

Perceived racial ambiguity. The 5-item subscale of the Multiracial Experiences Measure (MEM; Yoo et al., 2016) measured how often participants are questioned about their ambiguous racial appearance or features (e.g., “I get asked ‘What are you?’”). Participants responded using a 5-point Likert scale ranging from 1 (*almost never*) to 5 (*almost always*). In support of convergent validity, Perceived Racial Ambiguity was positively correlated with multiracial discrimination (Yoo et al., 2016). Yoo et al. (2016) reported the subscale’s reliability was .84. The alpha in the current study was .91, indicating excellent internal reliability.

Racial category distal outcomes of racial identity profiles.

Primary racial typology. Primary Racial Typology was measured using the question, “What is your preferred racial identity?” Participants were able to choose one of the following typologies adapted from Rockquemore & Brunsma (2002): “I identify with a single race (e.g., exclusively Asian or exclusively White)” (*singular identity*); “I identify as multiracial, biracial,

or mixed race” (*border identity*); “My racial identity changes depending on the situation (e.g., sometimes Asian, sometimes biracial)” (*protean identity*); “I do not identify with a racial group or groups (e.g., I identify as human)” (*transcendent identity*); or “I identify with ethnic/racial groups that I don’t share heritages with (e.g., a person with Asian and White heritage choosing to identify as Hispanic)”.

Frequencies of each racial typology. Participants reported how often they identified with each racial typology based on the question, “How frequently do you identify in the following ways?”. Participants were able to indicate the percent of the time they spent identifying with each of the following options: “I identify with a single race (e.g., exclusively Asian or exclusively White)”; “I identify as multiracial, biracial, or mixed race”; “I do not identify with a racial group or groups (e.g., I identify as human)”; “I identify with ethnic/racial groups that I don’t share heritages with (e.g., a person with Asian and White heritage choosing to identify as Hispanic)”, or “I identify with a society given identity (e.g., an identity that society, friends, family, or someone else gave me)”. The sum of percentages needed to equal 100 percent.

Form race. Participants reported which race they typically checked when filling out forms (e.g., U.S. Census) if they were forced to pick one race. Participants were able to select one of the following options: “African American/Black”, “Asian American/Asian”, “Native Hawaiian or Pacific Islander”, “White”, “Hispanic/Latinx”, “Native American/American Indian”, “Middle Eastern/North African”, or “Not listed, please specify”.

Internalized monoracism. Responses to the Form Race question were examined to assess whether participants identified as “White”, a minority monoracial group (i.e., “African American/Black”, “Asian American/Asian”, “Native Hawaiian or Pacific Islander”, “Hispanic/Latinx”, “Native American/American Indian”, or “Middle Eastern/North African”), or

something “not listed”. Researchers coded open-ended responses to “Not listed, please specify”, and all answers indicated the participant was rejecting monoracial categories and identified as multiracial. Participants who identified as being monoracial White or a member of a minority monoracial group were coded as having Internalized Monoracism (coded as “1”).

Proximity to whiteness. Among White Multiracial participants, responses to the Form Race question were examined to assess whether participants identified as “White”, or as a minority monoracial group (i.e., “African American/Black”, “Asian American/Asian”, “Native Hawaiian or Pacific Islander”, “Hispanic/Latinx”, “Native American/American Indian”, or “Middle Eastern/North African”). Participants who identified as monoracial White were coded as endorsing Proximity to Whiteness (coded as “1”).

Adjustment distal outcomes of racial identity profiles.

Distress. The six-item Kessler 6 (K6; Kessler et al., 2003) measured how often participants felt psychological distress over the past 30 days. Participants responded to a five-point scale ranging from 1 (*none of the time*) to 5 (*all of the time*), with higher scores representing greater psychological distress. The alpha in the current study was .87, indicating excellent internal reliability.

Collective efficacy. The five-item measure was adapted from Sampson and colleagues (1997) to assess perceptions of support from different social networks in the face of racial discrimination. Participants were asked how likely someone from each social network (i.e., family, friends, coworkers, classmates or instructors, and on-campus organization members) would intervene if someone experienced racial discrimination, with responses ranging from 1 (*very unlikely*) to 5 (*very likely*), with higher scores responding greater collective efficacy against racial discrimination. The alpha in the current study was .74, indicating good internal reliability.

Sense of belonging. The three-item Sense of Belonging Scale (SBS; Bollen & Hoyle, 1990) measured participant's sense of belonging to their university campus community. Participants responded to a six-point scale ranging from 1 (*strongly disagree*) to 6 (*strongly agree*), with higher scores representing greater sense of belonging. The alpha in the current study was .94, indicating excellent internal reliability.

Multiracial discrimination. Four out of the five items for the Multiracial Discrimination subscale from the Multiracial Challenges and Resilience Scale (MRCS; Salahuddin & O'Brien, 2011) measured how often participants are the target of discrimination because of their multiracial background (e.g., "I was the victim of discrimination because I am multiracial"). The item "A person outside of my family made a hurtful statement about one of the racial group(s) with whom I identify" was excluded from the Qualtrics survey due to researcher error. Participants responded on a 6-point Likert scale ranging from 0 (*never happened to me*) to 5 (*happened to me more than 10 times*), with higher scores representing greater challenges with racial identity. Higher scores on Multiracial Discrimination were found to positively correlate with depression and negatively correlate with social connectedness, demonstrating evidence of criterion-related validity (Salahuddin & O'Brien, 2011). Salahuddin & O'Brien (2011) reported that the reliability for the full subscale was .79. The alpha in the current study was .76, indicating good internal reliability despite the inclusion of only four out of the five items in the subscale.

Analysis Plan

Latent profile analysis (LPA) was conducted using *Mplus Version 8.1* in order to identify distinct patterns, or profiles, of how individuals with multiple racial heritages understand their racial identity based on six continuous indicators. Missing data were handled using the maximum likelihood robust (MLR) estimator in *Mplus*. LPA is a model-based alternative to traditional

cluster analysis that probabilistically identifies latent categorical variables (i.e., profiles) that underlie observed data from continuous indicators (Asparouhov & Muthén, 2013). In order to test our research questions (see Figure 1), we first determined the most appropriate latent profile structure for the six racial identity indicators using statistical fit indices and theoretical justification. Next, we examined whether racial identification (i.e., demographic, context, and phenotype variables) predicted membership in these racial identity profiles. Finally, we examined whether these racial identity profiles predicted distal outcomes related to racial category and adjustment.

To address Research Question 1, a series of models were specified (i.e., 2-5 profile solutions) and compared using the six indicators of racial identity (i.e., Racial Conflict, Racial Distance, Challenges with Racial Identity, Shifting Racial Expressions, Creating a Third Space, and Multiracial Pride). The standardized output was examined for ease of interpretability because the indicators were based on different response scales. In order to determine the appropriate number of profiles, we evaluated model fit using the Akaike Information Criterion (AIC), Bayesian Information Criterion (BIC), and Lo-Mendell-Rubin Test (LMRT). Lower information criteria values and a significant *p*-value for the modified likelihood ratio test indicated greater model fit (Lo et al., 2001; Nylund et al., 2007). Moreover, we evaluated classification accuracy using entropy, with values greater than or equal to .80 indicating a clear delineation of profiles (Nylund et al., 2007). After determining the optimal number of latent profiles, mean-level differences on the six racial identity indicators were assessed in order to interpret and name each profile. Most likely profile membership was saved as a categorical variable for subsequent analyses. To address Research Question 2, we examined differences in racial identification variables (i.e., demographics, context, and phenotype) across the racial

identity profiles using one-way analyses of variance for continuous predictors, and chi-square tests for categorical predictors. To address Research Question 3, we examined whether racial identity profile membership predicted distal outcomes related to racial category and adjustment. After controlling for the racial identification predictors listed previously, we compared distal outcomes across racial identity profiles using analyses of covariance for continuous outcomes, and chi-square tests for categorical outcomes. Post hoc multiple comparisons were conducted whenever there were significant differences among profiles.

Results

Racial Identity Profiles

Model fit indices of the different profile solutions are presented in Table 1. The 3-profile solution was chosen as the final model based on optimal fit indices and interpretability. Although the AIC and BIC values continued to decrease across the 4- and 5-profile solutions, entropy was highest for the 3-profile solution and decreased for the 4- and 5-profile solutions. Moreover, the LMRT comparing the 3-profile solution to the 4-profile solution was not significant ($p = .19$). Standardized means of the racial identity indicators across the three profiles are shown in Table 2 and Figure 2. Moreover, Table 2 presents analysis of variance results of mean differences on the six indicators of racial identity by profile membership.

The first profile was characterized by the highest level of Racial Distance and the lowest levels of Challenges with Racial Identity, Creating a Third Space, and Multiracial Pride. This profile was named *Singular-oriented* (9%; $n = 23$) because it captured individuals whose multiracial identity was least salient, and who perceived their multiple racial heritages as separate but not in conflict with one another. The second profile was characterized by the highest level of Multiracial Pride, the lowest level of Racial Distance, and a moderate level of

Challenges with Racial Identity. This profile was named *Border-oriented* (45%; $n = 120$) because it captured individuals whose multiracial identity was salient, and who perceived their multiple racial heritages as proximate and compatible. The third profile was characterized by the highest levels of Racial Conflict, Challenges with Racial Identity, and Shifting Racial Expressions; as well as by moderate levels of Racial Distance and Creating a Third Space. This profile was named *Protean-oriented* (47%; $n = 126$) because it captured individuals whose multiracial identity was salient, and who perceived their multiple racial heritages as proximate but in conflict with one another.

Racial Identification Predictors of Racial Identity Profile Membership

Table 3 presents the effects of racial identification variables (e.g., demographic characteristics, context, and phenotype) on racial identity profile membership. Relative to the Singular-oriented profile (54.2%), those in the Protean-oriented profile were more likely to be female (82.5%). Moreover, the likelihood of having Black racial heritage was highest among the Protean-oriented profile (40.5%) in comparison to Border-oriented (24.2%) and Singular-oriented (8.7%) profiles. Finally, multiracials from the Singular-oriented profile were the least likely to be perceived by others as having a racially ambiguous phenotype ($M = 2.74$) compared to individuals from the Border-oriented ($M = 3.46$) and Protean-oriented ($M = 3.51$) profiles. In terms of other racial identification predictors, racial identity profile membership was not significantly predicted by age, class, non-Black racial heritages, multiracial status, or multiracial generation.

Racial Category and Adjustment Outcomes of Racial Identity Profiles

Across racial identity profiles, there were significant differences in racial category and adjustment outcomes, controlling for the effects of the racial identification predictors listed

above (see Table 4). Regarding primary racial typologies, results revealed that individuals in the Singular-oriented profile were significantly more likely to report “monoracial” as their primary racial typology (52.2%) compared to those in the Border-oriented (14.4%) and Protean-oriented (10.4%) profiles. In contrast, individuals from the Border-oriented profile were the most likely to report “multiracial” as their primary racial typology (78.8%) relative to those from the Singular-oriented (17.4%) and Protean-oriented (63.2%) profiles. Moreover, individuals from the Border-oriented profile were the least likely to report their primary racial typology as being “context-dependent” (5.1%) in comparison to those from the Singular-oriented (21.7%) and Protean-oriented (23.2%) profiles. There were no significant differences across the three profiles for the “unshared” and “no race” primary racial typologies.

Regarding the frequency of each racial typology, results revealed that Singular-oriented individuals more frequently identified as monoracial (50.50%) compared to Border-oriented individuals (15.71%). Conversely, Border-oriented individuals more frequently identified as multiracial (76.07%) compared to Singular-oriented individuals (36%). Consistent with the results for primary racial typologies, there were no significant differences across the three profiles in the frequencies of the unshared and no race racial typologies.

Regarding proximity to whiteness, White multiracials from the Singular-oriented profile were more likely to identify as monoracial White when forced to choose one race (36.8%) compared to White multiracials from the Protean-oriented profile (12.6%).

Regarding psychological adjustment and perceived exclusion/belonging, results revealed that individuals from the Border-oriented profile reported less distress ($M = 2.18$), higher collective efficacy across multiple support networks in the face of racial discrimination ($M = 3.68$), and a higher sense of belonging to their university community ($M = 4.88$) compared to

individuals from the Protean-oriented profile ($M_{Distress} = 2.67$; $M_{CollectiveEfficacy} = 3.41$; $M_{SenseOfBelonging} = 4.37$). In terms of other racial category and adjustment distal outcomes, these racial identity profiles did not significantly differ based on form race, internalized monoracism, and multiracial discrimination.

Discussion

The primary aim of this study was to elucidate the unique roles of racial identity, racial identification, and racial category under the ecological framework for understanding multiracial identity. Specifically, we used latent profile analysis to identify three distinct profiles of racial identity for multiracials: *Singular-oriented*, *Border-oriented*, and *Protean-oriented*. Consistent with our hypotheses, membership in these racial identity profiles was predicted by racial identification factors, including gender, Black racial heritage, and perceived racial ambiguity. Moreover, findings supported our hypotheses that even after controlling for racial identification, racial identity profiles would predict outcomes related to racial category and adjustment, including racial typology choices, proximity to whiteness, distress, collective efficacy, and sense of belonging. In support of the ecological framework (Renn, 2003; Rockquemore et al., 2009; Root, 2003) and critical multiracial theory (Harris, 2016), these results underscore the inadequacy of examining multiracial identity under the monoracial paradigm of understanding race.

Profiles of Racial Identity for Multiracials

The first question this study sought to answer was whether there are quantitatively distinct profiles of how multiracials understand their racial identity. We found that three profiles adequately captured the heterogeneity in multiracial participants' responses to the six racial identity indicators of Racial Distance, Racial Conflict, Challenges with Racial Identity, Shifting

Racial Expressions, Creating a Third Space, and Multiracial Pride. These three racial identity profiles were differentiated as *Singular-oriented*, *Border-oriented*, and *Protean-oriented*. The emerging pattern of racial identity *orientations* based on responses to these six indicators is consistent with Choi-Misailidis' (2004) theory that mixed race individuals understand their racial identity in terms of both dominance and fluidity. Moreover, our inclusion of validated measures which captured multiple facets of racial identity clarifies that what differentiates multiracials across these orientations is how they understand and ascribe meaning to their multiple racial heritages. Evidently, these profiles demonstrate how multiracial identity involves the complex process of negotiating one's multiracial status in a society defined by discrete, monoracial categories.

Singular-oriented. Multiracials with a Singular-oriented racial identity (making up 9% of the sample) are the most likely to view their multiple racial heritages as separate from each other, and the least likely to feel proud about their multiracial status or to perceive it as salient. In addition, they are the least likely to experience challenges with their racial identity, such as exclusion from a racial group or the need to prove their racial identity to others (Salahuddin & O'Brien, 2011). Multiracials with Singular-oriented racial identities are less likely to report tension among their multiple racial heritages compared to individuals in the Protean-oriented profile. Moreover, they are also less likely than Protean-oriented multiracials to perceive their racial identity as fluid across contexts. Altogether, this profile is consistent with previous research by Choi-Misailidis (2004) and Rockquemore and Brunsma (2002), which suggests that a common way multiracials understand their racial identity is by identifying primarily with only one monoracial group.

Border-oriented. Mixed race individuals with a Border-oriented racial identity (45%) are the most likely to perceive their multiple racial heritages as integrated, and to feel pride about their multiracial background. In comparison to those with a Singular-oriented racial identity, Border-oriented multiracials are more likely to seek opportunities to affirm and engage with their multiracial status. However, they are also more likely than Singular-oriented multiracials to report challenges with their racial identity, such as feeling alienated because of their mixed race background (Salahuddin & O'Brien, 2011). It may be the case that multiracials in the Border-oriented profile are more likely to encounter racial identity invalidation because of their tendency to claim a multiracial, rather than monoracial, racial identity (Franco & O'Brien, 2017). Still, in comparison to multiracials with a Protean-oriented racial identity, Border-oriented multiracials report experiencing less challenges with their racial identity, and they are less likely to change how they racially identify across contexts or to view tension among their multiple racial heritages. On the whole, this profile is consistent with the extant literature on multiracials with “border” (Rockquemore & Brunsma, 2002) or “integrated” (Choi-Misailidis, 2004) identity typologies, both of which describe multiracials who understand their racial identity as a synthesis of their multiple racial heritages.

Protean-oriented. Finally, multiracials with a Protean-oriented racial identity (47%) are the most likely to change how they racially identify across time and contexts. Moreover, they perceive the greatest tension among their multiple racial heritages, and report the most challenges with their racial identity. In comparison to Singular-oriented individuals, they are less likely to view their multiple racial backgrounds as separate from each other. They are also more likely than Singular-oriented multiracials to perceive their multiracial identity as salient to their sense of self, and as a source of pride. However, in comparison to Border-oriented multiracials,

these individuals report less pride in their multiracial background and more distance among their multiple racial heritages. Interestingly, the Protean-oriented racial identity profile seems to be a combination of the “protean” (Rockquemore & Brunσμα, 2002) and “marginal” (Choi-Misailidis, 2004) identity typologies characterized by previous studies. Specifically, Protean-oriented individuals understand their racial identity as contextually bound (Rockquemore & Brunσμα, 2002), but also report the most alienation from other racial groups (Choi-Misailidis, 2004). It may be the case that Protean-oriented multiracials change how they racially identify across contexts depending on whether their racial identity is validated by others, especially monoracial groups who may discredit their multiracial status (Choi-Misailidis, 2004; Franco & Franco, 2016; Franco & O’Brien, 2017).

Overall, the emergence of these three racial identity profiles replicates the findings of Chong and Kuo (2015), the first and only other study to examine multiracial identity from a person-centered approach, using a more racially diverse sample of multiracials. In their study of Asian-American/White biracials, Chong and Kuo (2015) used cluster analysis to identify three racial identity groups: Asian-White Integrated, Asian Dominant, and White Dominant. The results of our latent profile analysis identified similar racial identity groups, with some notable differences. First, the emergence of a Singular-oriented profile in our analyses concurs with Chong and Kuo’s (2015) finding that Asian-American/White biracials may understand their racial identity in terms of only one monoracial group (i.e., Asian-Dominant and White-Dominant). However, we were unable to identify racial identity profiles that distinguished between multiracials who claimed a White monoracial identity versus a minority monoracial identity. This may partially be due to the fact that our sample size was not large enough to detect differences across the diverse multiracial groups included in our sample (e.g., Asian

American/Black/White, Black/Latinx). Second, our Border-oriented profile parallels the third and final group, Asian-White Integrated, identified by Chong and Kuo (2015). Similar to Asian-White Integrated biracials, individuals with a Border-oriented racial identity are more likely to integrate their multiple racial heritages and to identify as multiracial. Third, and finally, we identified a new racial identity profile, Protean-oriented, which did not emerge from the cluster analysis conducted by Chong and Kuo (2015). However, the existence of a Protean-oriented racial identity profile is substantiated by numerous cross-sectional studies on multiracial racial typologies (Choi-Misailidis, 2004; Rockquemore & Brunsma, 2002).

Racial Identification Predictors of Membership in Racial Identity Profiles

The second question this study sought to answer was whether racial identification factors, including demographic characteristics, context, and phenotype, would predict membership in these racial identity profiles. We found that profile membership was not significantly differentiated by age, class, White multiracial status, multiracial generation, childhood neighborhood racial composition, or White passing phenotype. However, we did find that profile membership was significantly predicted by gender, Black racial heritage, and perceived racial ambiguity. Regarding gender, the current study found that women were more likely to be members of the Protean-oriented (83%) than Singular-oriented (52%) profile. Respectively, the Singular-oriented profile was made up of more men (44%) than the Protean-oriented (14%) profile. These gender differences in racial identity profile membership are consistent with studies which suggest that women are more likely than men to identify as multiracial (Gillem & Thompson, 2004; Harris & Sim, 2002; Root, 2004; Song, 2010). Although the underlying explanations remain unclear, extant literature demonstrates that gender may mediate multiracial experiences. For instance, Song (2010) found that whereas women associated being multiracial

with more positive than negative experiences, men were more likely to associate being multiracial with racial discrimination. Moreover, both Gillem and Thompson (2004) and Root (2004) postulate that women may be more likely to identify as multiracial because they tend to be more mindful about how they are racialized in comparison to multiracial men. These results exemplify the importance of investigating how multiracial identity intersects with other social identities and their corresponding structures of oppression (Harris, 2016).

In addition to gender, this study also found that membership in these racial identity profiles was significantly predicted by Black racial heritage. Specifically, Black multiracials were more likely to be in the Protean-oriented profile (41%) than the Border-oriented (24%) and Singular-oriented (9%) profiles. Interestingly, this is in contrast to multiracials from all other racial heritage groups (e.g., Latinx, Asian American), who were evenly dispersed across the three racial identity profiles. However, this finding is unsurprising given the unique history of African Americans in the United States. The question of which racial categories to assign to African Americans has been under near-constant negotiation since the nineteenth century (Schor, 2017). In contrast to other racial groups, individuals with Black ancestry must reconcile how the legacy of hypodescent, or the “one-drop rule”, characterizes the racial formation of their group. The lingering effects of hypodescent may explain our finding that Black multiracials were more likely to claim a racial identity profile characterized by the highest levels of racial conflict and challenges with racial identity. Considering that Ho and colleagues (2017) found that Black/White multiracials tended to be racially categorized as only Black by their monoracial counterparts, it is possible that Black multiracials may feel that their mixed race status is negated by members of their monoracial groups. In support of this claim, there is evidence that when Black multiracials encounter racial identity invalidation from their monoracial Black peers, they

are more likely to report racial homelessness and challenges with their racial identity (Franco & Franco, 2016). Hypodescent and the history of Black racial formation may also play a role in the tendency of Protean-oriented individuals to shift how they express their racial identity across contexts. Given that racial labels for Black individuals have changed repeatedly over the past century (Schor, 2017), it may be the case that multiracials with Black racial heritage negotiate racial boundaries differently than other multiracial groups. Specifically, Black multiracials may be more likely to recognize that racial categories fluctuate over time, and consequently, they may embrace this fluidity through their racial identity choices. Both of these findings attest to the importance of contextualizing the racial identities and experiences of Black multiracials in history. This challenge to ahistoricism, one of the key tenets of critical multiracial theory (Harris, 2016), demonstrates how Black multiracials enact agency and resist the monoracial paradigm of understanding race.

In relation to phenotype, the current study found that multiracials who were the least racially ambiguous were more likely to be in the Singular-oriented profile than the Border-oriented or Protean-oriented profiles. That is, multiracials who reported being able to “pass” as a monoracial group were also more likely to claim a monoracial racial identity. These findings support the notion that the racial identity choices of multiracials are shaped by how others perceive their phenotype (Gaither, 2015; Rockquemore & Brunson, 2002; Root, 2003). In particular, it may be easier for multiracials who are not racially ambiguous to claim a monoracial identity because their physical appearance is congruent with how society understands discrete, monoracial categories (Harris, 2016). In this case, multiracials who pass as a monoracial group may be less likely to have their racial identity questioned by others. Research corroborates this conclusion, as AhnAllen and colleagues (2006) found that among Japanese-American/White

biracials, a monoracial physical appearance predicted whether participants identified as a monoracial group. Moreover, in support of the idea that phenotype serves as a gateway for acceptance into different monoracial groups, exclusion from Japanese-American or White monoracial peers was the strongest predictor of Japanese-American/White biracials not identifying as a monoracial group (AhnAllen et al., 2006).

Racial Category Outcomes of Racial Identity Profile Membership

The next question this study sought to answer was whether membership in these racial identity profiles would predict racial category outcomes, even after controlling for racial identification factors. Although profile membership did not significantly predict which race participants selected on forms or their levels of internalized monoracism, we did find that multiracials across these three racial identity profiles differed based on their primary racial typology, frequencies of each racial typology, and proximity to whiteness. Most notably, our finding that profiles were characterized by racial identity orientations and that these orientations differentiated among racial typology choices supports Choi-Misailidis' (2004) status model of multiracial identity dominance and fluidity. Choi-Misailidis' (2004) theory that multiracials have a "dominant" identity status is confirmed by our finding that racial identity orientation profiles predicted which racial typology a multiracial person endorsed the most. For instance, individuals in the Singular-oriented profile were the most likely to endorse "monoracial" as their primary racial typology (52%). Moreover, Border-oriented individuals were the most likely to endorse "multiracial" as their primary racial typology (79%).

In addition to identity dominance, Choi-Misailidis (2004) posits that multiracial identity is characterized by fluidity, meaning that mixed race individuals may endorse different identities across time and contexts. This is consistent with our finding that even though multiracials in each

profile endorsed a primary racial typology, they also reported identifying with other racial typologies. For example, in support of identity dominance, individuals from the Border-oriented profile were the most likely to endorse “multiracial” as their primary racial typology, and reported that they claimed a multiracial identity 76% of the time. However, in support of identity fluidity, Border-oriented individuals also reported to have claimed a monoracial identity 16% of the time, and to have rejected racial categories altogether 7% of the time. Similarly, although individuals from the Singular-oriented profile identified as monoracial 50% of the time, in other contexts they also reported to have claimed a multiracial identity (36%) or no race at all (14%).

This study also found that membership in these racial identity profiles predicted proximity to whiteness among multiracials with White racial heritage. When forced to choose only one monoracial group to identify with, White multiracials with a Singular-oriented racial identity were more likely to identify as monoracial White (37%) than those with a Protean-oriented racial identity (13%). It is interesting to note that the Singular-oriented profile is characterized by multiracials with the least physical racial ambiguity. Those in the Singular-oriented profile, by virtue of their ability to be perceived as monoracial, may be more likely to claim an unquestioned White racial identity. In support of this claim, Rockquemore and Arend (2002) found in their interviews with Black/White multiracials that an important indicator of whether someone identified singularly as White was whether that identification was validated by others. Although reports of multiracials identifying as exclusively White are not unprecedented, they are often uncommon because not all multiracials have access to White identity and its privileges (Rockquemore & Brunsma, 2002). Our finding that most multiracials who claimed a monoracial White identity were also the least racially ambiguous underscores the role of racial identification, namely phenotype, in the racial identity choices of multiracials.

Adjustment Outcomes of Racial Identity Profile Membership

The final question this study sought to answer was whether, after controlling for racial identification factors, profile membership would predict adjustment outcomes such as psychological well-being and sense of belonging and exclusion. Although profile membership did not significantly predict multiracial discrimination, we did find that it differentiated multiracials based on distress, collective efficacy, and sense of belonging. In relation to distress symptoms, multiracials from the Singular-oriented profile did not report more distress than those in the Border-oriented or Protean-oriented profiles. This finding is inconsistent with previous work indicating that multiracials with a singular identity reported lower self-esteem and higher levels of depression than multiracials with claimed a border identity or protean identity (Lusk et al., 2010). This discrepancy indicates that the relationship between racial identity choices and psychosocial adjustment for multiracials may not be as clear-cut as previous studies have suggested. In particular, our findings contradict the claim that people with multiple racial heritages report the healthiest adjustment outcomes when they identify as multiracial (Binning et al., 2009; Cheng & Lee, 2009; Lusk et al., 2010). For instance, we found that individuals with a Protean-oriented racial identity reported more distress than those with a Border-oriented racial identity. It is noteworthy that although individuals from both profiles reported claiming a multiracial identity roughly 75% of the time, those with a Protean-oriented racial identity still reported more distress. Considering that the Protean-oriented profile is characterized by the highest levels of racial conflict and that Jackson and colleagues (2012) determined low racial conflict drove the relationship between high multiracial identity integration and lower distress and negative affect, it may be the case that racial conflict is what mediates the association between racial identity choices and adjustment. Rather than the racial typologies themselves

(e.g., monoracial vs. multiracial), our findings suggest that what matters for adjustment is whether multiracials perceive tension among their multiple racial heritages. In other words, the link between racial identity and adjustment may be attributed to the stress of reconciling one's multiracality in a society defined by the monoracial paradigm of understanding race. Sanchez and colleagues (2009) corroborate this claim by demonstrating how unstable private regard about one's multiracial status underlies the association between protean identity and lower psychological well-being.

We also found significant racial identity profile differences in collective efficacy against racial discrimination. Individuals in the Protean-oriented profile were less likely than Border-oriented multiracials to believe that a member of one of their social support networks (e.g., family, friends) would intervene if they had experienced racial discrimination. Given that relative to those with a Border-oriented racial identity, Protean-oriented multiracials reported significantly lower multiracial pride and higher levels of racial conflict and challenges with their racial identity, it is not surprising that these individuals also reported lower collective efficacy. It makes sense that multiracials who are struggling the most to come to terms with their racial identity are also the ones who have the least access to social support. Miville (2005) underscores the importance of social support networks for multiracials who encounter racial discrimination, as these networks can help multiracials feel less alienated. In fact, Giamo and colleagues (2012) found that identifying as multiracial was protective against racial discrimination insofar as people felt included and represented in the multiracial community.

Individuals in the Protean-oriented profile also reported a lower sense of belonging to their university community in comparison to multiracials in the Border-oriented profile. This is consistent with prior work suggesting that mixed race college students' perceived inclusion in

their racial communities is related to their sense of belonging to their overall university community (Renn, 2003). Moreover, Chaudhari (2016) found that multiracials felt less connected to their university community after they had experienced racial discrimination. Relative to Border-oriented multiracials, those with a Protean-oriented racial identity reported less collective efficacy against racial discrimination, and more perceived exclusion from one or more racial groups. Overall, these findings suggest that this group's challenges with racial identity are connected to a lower sense of belonging to their university community.

Limitations and Future Research

This study makes a valuable contribution to research on multiracial identity by specifying a statistical model that connects racial identity to racial identification, racial category, and adjustment. Nevertheless, several limitations should be considered when interpreting our results. First, there are concerns about whether our findings are generalizable to the multiracial population at large. We collected data from students at a large, public southwestern university, and our sample predominately included multiracials who were female and had White racial ancestry. Future studies should strive to collect samples that are nationally representative in order to account for the diversity within the multiracial population. In particular, more research should be conducted to understand the experiences of multiracials who are non-White, men, transgender, LGBQA+, and second-generation (or more) multiracial.

Moreover, the associations found among racial identification, racial identity, racial category, and adjustment are all correlational because we conducted our analyses on cross-sectional data. Longitudinal data is needed to estimate the casual effects of racial identification on racial identity, and racial identity on racial category and adjustment. Moreover, we recommend that researchers investigate how these three components of multiracial identity are

dynamically linked, such as presence of bidirectional relationships. For example, is it possible that racial identity can also affect racial identification variables? Moreover, how do adjustment variables affect racial identity? Future studies must employ quantitative and qualitative methods to answer these questions, and to extend our understanding of the unique amalgamation of racial identification, identity and category.

Another limitation concerns the reliabilities of two out of six racial identity latent profile indicators, Racial Distance and Multiracial Pride. First, Cronbach's alpha for Racial Distance in our study was relatively low (.61). This might be attributed to the fact that half of the items in the subscale were negatively-worded to represent endorsing a multiracial identity. This assumes that identifying as multiracial is the opposite of perceiving one's multiracial racial heritages as separate, which may not always be the case, as evidenced by the subscale's low inter-item correlations. Cronbach's alpha in previous studies for Racial Distance has ranged from .65 (Jackson et al., 2012) to .80 (Cheng & Lee, 2009). In terms of Multiracial Pride, Cronbach's alpha in our study (.55) was much lower than that found by Salahuddin and O'Brien in the original validation study (.88). Again, poor reliability may be due to the weak inter-item correlations we found for the subscale. Specifically, the item "Being multiracial makes me feel more attractive to romantic partners" had low correlations with all other subscale items. It may be possible that this item is simply not a representative indicator of Multiracial Pride. In order to confirm the use of these two measures is appropriate and reliable, future studies should investigate their psychometric properties across different samples.

Finally, our conclusions about racial identification are limited by the use of only self-report measures. What underscores racial identification is not how multiracials perceive themselves, but rather how other people perceive people who are multiracial. It would be more

accurate to analyze data on racial identification variables, such as phenotype, from multiple reporters.

Conclusion

This study represents an important contribution to the multiracial identity literature as it was the first to use latent profile analysis to identify distinct profiles of how multiracials understand their racial identity. Our results attest to the advantages of employing a person-centered approach in the examination of multiracial identity. Moreover, our study provides novel insight on how to bridge multiple theories from the ecological framework, including the literature on common multiracial experiences (Cheng & Lee, 2009; Salahuddin & O'Brien, 2011; Yoo et al., 2016), racial typologies (Chong & Kuo, 2015; Choi-Misailidis, 2004; Rockquemore & Brunsma, 2002), and the associations among racial identity, racial identification, and racial category (Rockquemore et al., 2009). Ultimately, these results suggest the need to conceptualize multiracial identity as the negotiation of how one's multiple racial heritages fit into society's monoracial paradigm of understanding race. Only from this perspective will researchers be best equipped to understand the complex process by which multiracials construct their racial identities across time and contexts.

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Figure 1. The proposed latent profile model for understanding multiracial identity, including racial identity indicators, racial identification predictors, and racial category and adjustment distal outcomes.

Table 1

Statistics for Latent Profile Analysis Decision Criteria by Number of Profiles Extracted

Profile Solution	AIC	sBIC	Entropy	LMRT (<i>p</i>)	Probability
Two profile solution	3929.089	3937.146	.740	<.01	.50 .51
Three profile solution	3873.930	3884.956	.785	.04	.09 .45 .47
Four profile solution	3821.187	3835.181	.752	.19	.30 .45 .07 .17
Five profile solution	3787.680	3804.642	.741	.11	.29 .08 .12 .17 .33

Note. Statistics for the optimal solution are shaded; AIC = Akaike Information Criterion; sBIC = Sample size-adjusted Bayesian Information Criterion; LMRT = Lo-Mendell-Rubin Test.

Table 2
Mean-Level Differences across Profiles on Racial Identity Indicators

Indicator	Singular-oriented	Border-oriented	Protean-oriented	<i>F</i> Statistic	
				<i>F</i>	<i>p</i>
<i>n</i> (%)	23 (9%)	120 (45%)	126 (47%)		
Racial Conflict	2.59 _a	3.05 _a	5.14 _b	$F(2, 241) = 170.01$	< .01
Racial Distance	5.13 _a	2.71 _b	3.14 _c	$F(2, 241) = 59.11$	< .01
Challenges with Racial Identity	2.21 _a	2.80 _b	4.96 _c	$F(2, 237) = 176.91$	< .01
Shifting Racial Expressions	2.03 _a	2.46 _a	3.58 _b	$F(2, 241) = 47.89$	< .01
Creating a Third Space	1.80 _a	2.79 _b	2.62 _b	$F(2, 241) = 9.84$	< .01
Multiracial Pride	3.67 _a	5.58 _b	4.68 _c	$F(2, 237) = 50.54$	< .01

Note. Means reflect standardized values. Means that do not share a subscript within a row are significantly different from one another.

Figure 2. ($N = 269$). Latent profile means on racial identity indicators for the 3-profile solution. Means reflect standardized values. RC = Racial Conflict; RD = Racial Distance; CRI = Challenges with Racial Identity; SRE = Shifting Racial Expressions; CTS = Creating a Third Space; MP = Multiracial Pride. Means that do not share a subscript within a row are significantly different from one another.

Table 3
Racial Identification Predictors of Profile Membership across Racial Identity Profiles

Variable	Overall	Singular-oriented	Border-oriented	Protean-oriented	Statistic	
	<i>M (SD)</i> or %	<i>M (SD)</i> or %	<i>M (SD)</i> or %	<i>M (SD)</i> or %	<i>F</i> or χ^2	<i>p</i>
<i>Demographics</i>						
Age ¹	23.10 (7.14)	25.65 (10.71)	23.35 (6.98)	22.40 (6.41)	$F(2, 266) = 2.16$	.12
Gender ²					$\chi^2(8) = \mathbf{23.37}$	< .01
Female	77	52.2 _a	75.8 _{a,b}	82.5 _b		
Male	19.3	43.5 _a	20.8 _{a,b}	13.5 _b		
Class					$\chi^2(10) = 4.74$	.91
Poor	2.6	4.3	4.2	0.8		
Working Class	10.4	13	10.8	9.5		
Lower Middle Class	20.1	13	19.2	22.2		
Middle Class	43.5	43.5	44.2	42.9		
Upper Middle Class	22.7	26.1	20.8	23.8		
Affluent	0.7	0	0.8	0.8		
White Heritage	73.2	78.3	70.8	74.6	$\chi^2(2) = 0.77$	.68
Black Heritage	30.5	8.7 _a	24.2 _a	40.5 _b	$\chi^2(2) = \mathbf{13.35}$	< .01
Latinx Heritage	39	34.8	39.2	39.7	$\chi^2(2) = 0.20$	.91
Asian Heritage	40.1	34.8	44.2	37.3	$\chi^2(2) = 1.51$	.47
NHPI Heritage	3.7	4.3	5.8	1.6	$\chi^2(2) = 3.12$	.21
American Indian Heritage	12.3	17.4	10	13.5	$\chi^2(2) = 1.31$	.52
MENA Heritage	5.6	8.7	7.5	3.2	$\chi^2(2) = 2.65$	.27
Multiracial Status					$\chi^2(2) = 0.01$	.99
White Multiracial	81.8	82.6	81.7	81.7		
Multiple Minority Multiracial	18.2	1.5	8.2	8.6		
Multiracial Generation					$\chi^2(2) = 0.57$	.75
First Generation Multiracial	66.9	73.9	66.7	65.9		
2+ Generation Multiracial	33.1	26.1	33.3	34.1		
<i>Context</i>						
Childhood Racial Composition					$\chi^2(12) = 9.88$	.63
White	65.1	78.3	61.7	65.9		
Black/African American	2.2	0	1.7	3.2		
Latinx	13.4	0.4	6.7	6.3		
Asian American	2.2	4.3	0.8	3.2		
American Indian	0.7	0	0.4	0.4		
Mixed Race	2.2	0	0.7	1.5		
Racially Diverse	14.1	13	18.3	10.3		
<i>Phenotype</i>						
White Passing Phenotype	2.89 (1.39)	3.50 (1.40)	2.73 (1.38)	2.90 (1.38)	$F(2, 133) = 1.75$	.18
Perceived Racial Ambiguity	3.42 (1.15)	2.74 (1.29) _a	3.46 (1.05) _b	3.51 (1.18) _b	$F(2, 241) = \mathbf{1.30}$	< .05

Note. Means or percentages that do not share a subscript within a row are significantly different from one another. ¹For continuous variables, the analysis of variance is used. ²For categorical variables, the chi-square test is used. Significant statistics are bolded.

Table 4

Racial Category and Adjustment Outcomes across Racial Identity Profiles, Controlling for Racial Identification Predictors

Variable	Overall	Singular-oriented	Border-oriented	Protean-oriented	<i>F</i> statistic	
	<i>M</i> (<i>SD</i>) or %	<i>M</i> (<i>SD</i>) or %	<i>M</i> (<i>SD</i>) or %	<i>M</i> (<i>SD</i>) or %	<i>F</i>	<i>p</i>
<i>Racial Category</i>						
Typology ¹					$\chi^2(8) = 53.06$	< .01
Monoracial	15.8	52.2 _a	14.4 _b	10.4 _b		
Multiracial	66.2	17.4 _a	78.8 _b	63.2 _c		
Unshared	0.4	0 _a	0.8 _a	0 _a		
Context	15	21.7 _a	5.1 _b	23.2 _a		
No Race	2.6	8.7 _a	0.8 _a	3.2 _a		
Frequency Monoracial ²	22.82 (28.25)	50.50 (34.25) _a	15.71 (24.02) _b	23.24 (26.90) _{a, b}	<i>F</i>(2, 115) = 5.05	< .01
Frequency Multiracial	70.19 (30.21)	36.00 (30.65) _a	76.07 (28.20) _b	72.53 (27.05) _{a, b}	<i>F</i>(2, 115) = 4.43	< .05
Frequency Unshared	0.99 (3.99)	0 (0)	1.57 (5.18)	.66 (2.93)	<i>F</i> (2, 115) = 1.20	.31
Frequency No Race	6.00 (16.78)	13.50 (31.27)	6.66 (16.21)	3.58 (11.57)	<i>F</i> (2, 115) = 0.68	.51
Form Race					$\chi^2(14) = 22.81$	.06
White	13.4	30.4	13.3	10.3		
Black/African American	21.2	0.4	8.9	11.9		
Latinx	28.3	21.7	29.2	28.6		
Asian American	21.6	30.4	23.3	18.3		
NHPI	0.7	4.3	0.8	0		
American Indian	4.8	8.7	4.2	4.8		
MENA	0.4	0	0.8	0		
Not listed	9.7	0	8.3	12.7		
Internalized Monoracism	90.3	100	91.7	87.3	$\chi^2(2) = 4.03$	.13
Proximity to Whiteness	16.4	36.8 _a	16.3 _{a, b}	12.6 _b	$\chi^2(2) = 6.88$	< .05
<i>Psychological Adjustment</i>						
Distress	2.41 (.88)	2.24 (.87) _{a, b}	2.18 (.73) _a	2.67 (.96) _b	<i>F</i>(2, 110) = 4.72	< .05
<i>Perceived Exclusion/Belonging</i>						
Collective Efficacy	3.51 (.56)	3.29 (.79) _{a, b}	3.68 (.52) _a	3.41 (.49) _b	<i>F</i>(2, 111) = 4.18	< .05
Sense of Belonging	4.54 (1.22)	3.86 (1.67) _{a, b}	4.88 (.99) _a	4.37 (1.20) _b	<i>F</i>(2, 109) = 3.69	< .05
Multiracial Discrimination	2.31 (1.11)	1.91 (1.41)	2.23 (1.11)	2.48 (1.02)	<i>F</i> (2, 113) = 1.96	.15

Note. Means or percentages that do not share a subscript within a row are significantly different from one another. ¹For categorical variables, the chi-square test is used. ²For continuous variables, the analysis of covariance is used. Significant statistics are bolded.