

UNACKNOWLEDGED IDENTITIES: BIRACIAL AND BICULTURAL IDENTITY

AUTONOMY

By

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A thesis submitted to the

Graduate School-New Brunswick

Rutgers, The State University of New Jersey

In partial fulfillment of the requirements

For the degree of

Master of Science

Graduate Program in Psychology

Written under the direction of

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And approved by

New Brunswick, New Jersey

October, 2016

ABSTRACT OF THE THESIS

Unacknowledged Identities: Biracial and Bicultural Identity Autonomy

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Because biracial and bicultural populations have multiple identities within one domain, they often experience identity denial, identity questioning, intragroup marginalization, and public regard (hereafter referred to as identity rejection). Though identity denial and marginalization have been linked to poor psychological health, the process through which this occurs is unknown. The present study tested identity autonomy and integration as mediators of the relationship between identity rejection and psychological well-being among biracial ($N = 341$) and bicultural people ($N = 334$). Using path analysis, the results indicated significant mediation through autonomy and integration for intragroup marginalization and public regard, but not identity denial and questioning. While there were significant differences in overall levels of identity rejection and other key variables, there was no significant moderation by sample in path analysis, suggesting that the relationships between these variables were similar for both biracial and bicultural populations. This study contributes a novel understanding of the process of identity rejection and shared experiences between multiple dual identifying populations.

Acknowledgement

I would like to thank my advisor, Diana Sanchez, for all of her help with this thesis. I truly appreciate your encouragement and feedback at every stage of its development. I also want to thank the members of my committee, Shana Cole and David Wilder for their input and assistance. Lastly, I would like to thank my parents, sister, and friends for their steadfast support and cheer throughout this project.

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Introduction

The year 2000 marked the first time that respondents were able to select more than one racial identification in the United States census. Nearly 7 million people, or 2.4% of the population, selected more than one race that year, and the multiracial population has continued to grow (Jones & Smith, 2001). By the next census, the multiracial population had increased by 32% (Jones & Bullock, 2012). Not only is the U.S. increasingly multiracial, but also multicultural. As of 2010, 21% of Americans are estimated to speak a second language at home and 13% of the population was foreign born, a proportion that has been steadily increasing in the last 50 years (Grieco et al., 2012; Ryan, 2013). These data trends make evident that biracial and bicultural populations are fast growing and increasingly prominent groups in the United States.

Though often discussed separately in the psychological literature, biracial and bicultural populations may share many life experiences given their involvement in multiple racial and cultural systems. Dual racial or cultural memberships uniquely present a choice in identity. Though monoracial or monocultural people vary in the importance they give to their racial or cultural identity, they are generally not afforded a choice between different identities within these domains. Meanwhile, biracial and bicultural people may choose among several racial or cultural identity options (Nguyen & Benet-Martinez, 2010; Renn, 2011). For example, an Asian/White biracial individual may choose to identify as Asian, White, both, biracial, or choose no racial identification at all. Moreover, biracial identity is not only a personal choice, but is oftentimes also an institutional one that is placed upon individuals. Rockquemore, Brunsma, & Delgado (2009) describe the difference between racial identity, racial category, and racial identification to illustrate the nuance within biracial identity development. Racial identity

refers to self-identification, while racial category represents the racial choices institutionally available, and racial identification is an outsider's categorization of the self. Similarly, bicultural identity has a dynamic definition, which broadly refers to individuals who have experienced and identify with multiple cultures (Nguyen & Benet-Martinez, 2010). This may include biracial or bi-ethnic people, as well as people who have lived in multiple countries, were raised by people from different countries, or have experienced cross-cultural relationships (Nguyen & Benet-Martinez, 2010). For example, an individual who was born in Mexico but who has lived in the United States and has integrated American culture may be considered bicultural. He/she may self-identify as Mexican, American, Mexican American, or a number of other cultural identities. Membership in several racial or cultural systems allows biracial and bicultural people to choose a personal identity. The variety of possible identifications, as well as cultural and phenotypic ambiguity, often results in others' perceptions that are incongruent with self-identification (Sanchez, Shih, & Wilton, 2014). In other words, biracial and bicultural people may not be able to fully or authentically express their identity due to incorrect categorizations by others (*interpersonal denial*) or to perceived societal characteristics that contribute to an unwelcoming environment for dual identities (*perceived societal denial*).

Interpersonal Denial

Interpersonal denial refers to lived experiences of having an important racial or cultural identity unacknowledged or questioned by others. This may mean being told that you don't look like a member of your racial or cultural group, being told you cannot identify with a particular group (i.e., denial), or being asked "What are you?" (i.e.,

questioning). Past research has described such interpersonal instances that fail to recognize an important social identity as *identity denial* and suggests that these experiences are most common for less prototypical in-group members (Cheryan & Monin, 2005).

Identity denial can be experienced as an identity threat and devaluation of the self that leads to action (Steele, Spencer, & Aronson, 2002). Social identity theory has established the importance of being accepted by members of the in-group, and suggests that being negated an important social identity may result in reassertion (Branscombe, Ellemers, Spears, & Doosje, 1999). For instance, multicultural Asian Americans whose American identity was questioned exerted greater effort in recounting American popular culture items, thereby reasserting their denied identity (Cheryan & Monin, 2005). Similarly, U.S. immigrants responded to identity denial by selecting and consuming more fattening prototypical American food (Guendelman, Cheryan, & Monin, 2011). Among biracial people, identity denial may be experienced through demographic questionnaires that do not allow for multiple identifications. Participants who were forced to make a single racial identification choice responded by later identifying as biracial but noting that they are often regarded by others as monoracial (Townsend, Markus, & Bergsieker, 2009). In one study, over 30% of multicultural Asian Americans reported being misperceived as being from another country and/or a non-native English speaker (Cheryan & Monin, 2005). In a separate study even more biracial participants (93% of the sample) were able to recount an experience of identity denial, with many reporting issues with appearance, speech, or discrimination (Townsend et al., 2009). This work

indicates that identity denial is not an uncommon experience for biracial and bicultural people, and that an identity reassertion response may help mitigate the threat.

Though identity assertion may be an appropriate immediate response, the long-term consequences of identity denial remain understudied. Current evidence indicates that restraining the identification choices of multiracial people is predictive of depressive symptoms and may lower self-esteem and motivation (Sanchez, 2010; Townsend et al., 2009). In addition, for bicultural Latino and Asian Americans, awareness of the perpetual foreigner stereotype (i.e., the stereotype that despite identifying as American one will always be perceived as a foreigner) was predictive of lower sense of belonging, hope, and life satisfaction (Huynh, Devos, & Smalarz, 2011). Relatedly, empirical evidence indicates that biracial participants value accurate perceptions of their race as a form of self-verification, further confirming that identity denial, where identity is not perceived accurately, is a negative experience (Remedios & Chasteen, 2013). Though the evidence is limited, there is a clear association between identity denial experiences and poor psychological outcomes among both biracial and bicultural people.

In addition to identity denial, biracial and bicultural people may experience interpersonal rejection through *intragroup marginalization*. This is an interpersonal rejection of dual identities because others pressure a bicultural or biracial person to conform to the norms of only one group. Given that individuals with membership in multiple groups are less prototypical members of each group, they may receive pressure from peers or family members to perform a certain social script that aligns with one of their identities (Castillo, Cano, Chen, Blucker, & Olds, 2008). For example, bicultural Latino Americans may perceive Spanish language proficiency as an important

prerequisite to being accepted by other Latinos (Sanchez, Chavez, Good, & Wilton, 2012). Similarly, bicultural and biracial people may be pressured to have friends of a certain racial or cultural group or to act like other members of the group (Castillo, Conoley, Brossart, & Quiros, 2007). This marginalization may come from one or both of the racial or cultural groups that one belongs to. In the present study, this is differentiated as majority and minority marginalization. Similarly to identity denial, past work suggests an association between intragroup marginalization and poor psychological outcomes. For example, Latinos who disclosed their inability to speak Spanish to other Latinos reported lower collective self-esteem (Sanchez et al., 2012). Moreover, a general pressure to conform to one group was associated with stress and conflict among ethnic minorities (some of whom were biracial or bicultural; Castillo et al., 2007). Thus, as shown in Figure 1, I hypothesized that identity denial and both majority and minority marginalization would serve as indicators of interpersonal denial with downstream consequences for psychological health.

Perceived Societal Denial

Rejection of a dual identity may result not only from interpersonal interactions, but also from a perception of the environment as unaccepting of such identities. For example, essentialist views of race and culture as being biologically innate and exclusive categories are widely held in society (Bastian & Haslam, 2006). Essentialist lay theories are detrimental for intergroup outcomes, as the distances between social categories are exaggerated and seem more rigid (Williams & Eberhardt, 2008). Essentialist views encourage distinct separation between groups and may therefore be less accepting of dual identities. Although evidence suggests that biracial people are less likely to endorse

essentialist views of race than monoracial people (Shih, Bonam, Sanchez, & Peck, 2007), both biracial and bicultural people may hold *meta-perceptions of essentialism*. In other words, despite their personal beliefs in race and culture as social constructions, they may believe that others around them have more biologically rooted explanations of these categories. This worldview may lead dual identifiers to perceive society as unaccepting of their identities and may contribute to a sense of societal identity rejection. Though there is a growing body of work examining the effects of essentialism on interpersonal and intergroup relations (see Haslam & Whelan, 2008), this work will be among the first to examine the effects of meta-perceptions of an essentialist society on the mental health outcomes of biracial and bicultural people (see Figure 1).

Perceived societal denial may also result from meta-perceptions of biracial or bicultural people's status in society. Low *public regard* refers to the belief that others have negative attitudes toward one's group (Sellers, Rowley, Chavous, Shelton, & Smith, 1997). To date, most work has examined public regard among monoracial minorities of low status (in the U.S., African Americans). Among this population, lower public regard has been linked to more experiences of racism, which in turn lead to greater psychological distress (Sellers, Caldwell, Schmeelk-Cone, & Zimmerman, 2003). Similarly, research on biracial populations has confirmed that low public regard results from forced choice experiences in which biracial people are unable to express their identity, which has downstream consequences of greater depressive symptoms (Sanchez, 2010). There is a lack of research exploring public regard among bicultural people. Nonetheless, it was expected that low public regard would have similar effects between

the groups. Similarly to meta-perceptions of essentialism, public regard was predicted to reflect an overall societal rejection (see Figure 1).

Identity Autonomy

The components of interpersonal denial and perceived societal denial have been theorized to impede a universal need to belong (Baumeister & Leary, 1995; Cheryan & Monin, 2005). However, the mechanism through which these experiences lead to poor mental health has not been empirically tested. The Identity Autonomy Perspective (IAP; Sanchez et al., 2014) posits that identity denial may thwart a biracial or bicultural individual's autonomy. Identity autonomy is described as the ability to freely choose and express an identity that is recognized by others. According to self-determination theory, feeling control over one's life is a universal need that, when satisfied, leads to a variety of positive psychological outcomes (Ryan & Deci, 2000). Empirical evidence supporting this theory is abundant, and has found strong associations between autonomy and positive psychological health (e.g. Deci & Ryan, 2002). However, there is limited work exploring autonomy within one's identity. Research employing a forced-choice scenario has found that restraining racial identification choices for multiracial participants leads to lower feelings of agency and autonomy (Sanchez, 2010; Townsend et al., 2009). This preliminary evidence supports the IAP's claim that autonomy is a crucial determinant of biracial and bicultural well-being. The present work will explore identity autonomy as a mediator between interpersonal denial and perceived societal denial and poor psychological outcomes such as depressive symptoms and stress (see Figure 1).

Identity Integration

Identity autonomy may promote positive psychological outcomes by increasing identity integration among biracial and bicultural people. The multiple groups to which one belongs can be seen as contradictory or complimentary, influencing whether one feels tension in managing two seemingly opposing demands, or is able to fluidly engage in either (Cheng & Lee, 2009). Highly integrated identities are perceived as being low in distance and conflict. In other words, the racial or cultural groups are seemingly related and share similar values and goals (Cheng & Lee, 2009). High identity integration is predictive of better psychological adjustment (i.e., higher self-esteem, life satisfaction, and happiness, and lower depression, anxiety, and loneliness) among bicultural people (Chen, Benet-Martínez, & Bond, 2008). Similarly, biracial identity integration is associated with positive biracial experiences (Cheng & Lee, 2009). Experiencing a lack of autonomy in how one chooses to identify from interpersonal or societal denial experiences could lead to fragmented, seemingly oppositional identities that thwart integration. Therefore, identity integration will be tested as a mediator between identity autonomy and mental health outcomes.

The Present Research

The present research integrated the discussed factors into a model of identity autonomy that encompasses shared experiences of biracial and bicultural people (see Figure 1). The present work is among the first to combine biracial and bicultural literature and to provide an overarching framework that fits dual identities more broadly. Though biracial people can also be bicultural, this research focused on whether their dual racial identity experiences were similarly experienced for bicultural, monoracial people with regard to their cultural identification. The present operationalization of biracial and

bicultural identity minimized overlap in identity in order to test the model among two separate samples. The proposed model was meant to advance current understanding of dual identity processes by integrating both personal experiences of identity rejection as well as perceptions of society as unaccepting of dual identifiers.

Revised Analysis Plan

The proposed analysis plan was to utilize structural equation modeling (SEM) assuming that key indicators of interpersonal (namely, intragroup marginalization and identity denial) and societal denial (public regard and meta-essentialism) would be confirmed in the measurement model (see Figure 1). As discussed later, the measurement model suggested that these were separate constructs so we reverted to path analyses to test the hypotheses. Thus, the present study included two large samples and used path analysis and path invariance to test the hypotheses. The analyses examined the relationships between the identity rejection predictor variables (identity denial, questioning, marginalization, and public regard) and the key outcome variables (stress and depression), as well as the mediating roles of identity autonomy and identity integration.

The present research addressed three aims. First, identity autonomy was tested as the mediator between denial experiences and psychological health outcomes. Second, identity integration was tested as the mediator between identity autonomy and psychological health outcomes. Third, the research examined differences in the fit of the model between biracial and bicultural people.

In order to address these aims, the following paths/hypotheses were tested:

1. The identity rejection variables would each predict lower psychological adjustment (i.e., higher depressive symptoms and stress).
2. Identity autonomy would mediate the relationship between identity rejection and psychological adjustment.
3. Identity integration would mediate the relationship between identity autonomy and psychological adjustment.
4. The model would fit equally well for biracial and bicultural participants.

Method

Participants

Biracial Sample. Biracial participants were recruited online via Amazon Mechanical Turk, email list serves, and the undergraduate research pool ($N = 478$; see Table 1). The target sample size of 800 (400 biracial, 400 bicultural) was determined based on *a priori* calculations for 25 parameters and root mean square error of approximation (RMSEA) values of past work (Sanchez, 2010). A prescreen measure asked participants to identify their own race as well as the race of their biological parents. Participants were eligible to participate if they spoke English fluently, lived in the United States, were at least 18 years old, and met at least one of the following criteria: 1) selected their own race as “biracial/multiracial;” 2) selected more than one racial option for themselves; 3) selected different racial options for their mother and father; 4) selected “biracial/multiracial” for at least one parent. Based on previous work, Hispanic/Latino was considered a racial category for those in the study who considered Hispanic to be one of their races, despite some societal controversy over the topic (Sanchez, 2010). For the present analysis, participants were only included if they were part-White, were born in

the United States, and at the end of the study confirmed identifying as biracial. These criteria left a final sample size of 341.¹ The average age of this analytical sample was 24.26 years, $SD = 7.46$, and the sample was 68.6% ($n = 234$) female. The sample was 37.5% White-Asian, 28.4% White-Black, 19.9% White-Latino, and 14.1% White-Multiracial, based on reports of parent race.

Bicultural Sample. Bicultural participants ($N = 334$) were similarly recruited through Mechanical Turk, email list serves, and the undergraduate subject pool (see Table 1). Participants completed demographic questions before beginning the study and identified their own race, their country of origin, and their parents' country of origin. Based on previous research (e.g., Benet-Martinez, Leu, Lee, & Morris, 2002), participants were eligible to participate if they spoke English fluently, lived in the United States, were at least 18 years old, were monoracial, and met at least one of the following criteria: 1) were born outside of the United States; 2) had at least one parent born outside of the United States. These criteria ensured that sample two differed from sample one in terms of racial makeup. Participants were not included in the analysis if they indicated their race as White or did not confirm identifying as bicultural at the end of the study. The average age was 21.07 years, $SD = 5.36$, and the sample was 69.5% ($n = 232$) female. The sample was 69.2% Asian, 27.5% Latino, and 3.3% Black. The majority of the participants (87.7%) were citizens, and second generation immigrants (65.3%).

In both samples, participants completed surveys online in exchange for either course credit, a small payment of \$0.40 for Mechanical Turk, or on a voluntary basis with no compensation other than the educational benefit of participating in research. Participants were presented with the following measures in the order below.

Measures

Identity Denial Experiences. Participants completed a 10-item measure that examined how often they experienced interpersonal identity denial. The measure was created by the principal investigator but was based on previous identity denial research (Cheryan & Monin, 2005). The items were tailored to each sample. For example, in sample one biracial participants responded to items such as “When you first meet strangers, how often are you misperceived as being of a different race than you identify?” An example item for sample two (bicultural participants) is “When you first meet strangers, how often are you asked if you speak English?” In both studies, participants responded on a scale from 1 (*never*) to 7 (*always*). See Appendix A for wording of this scale and the others discussed below.

With both samples combined, the items were subjected to a maximum likelihood factor analysis with oblimin rotation and Kaiser normalization. Items were removed if they loaded onto multiple factors (loadings $> .4$) or did not load onto any factors (loadings $< .4$; Fabrigar, Wegener, MacCallum, & Strahan, 1999). Two factors were retained, which cumulatively explained 72.3% of the variance. Examination of the corresponding scree plots confirmed this number of factors (Henson & Roberts, 2006). The first factor formed the identity questioning subscale (2 items, e.g., “When you first meet strangers, how often are you asked about your nationality/ about your racial ancestry?”), $r(673) = .74$, $p < .001$. The second factor represents identity denial (4 items, e.g., “When you first meet strangers, how often are you told you are not American/ you are not White?”), $\alpha = .82$.

Intragroup Marginalization. Castillo et al.'s (2007) Intragroup Marginalization Inventory was modified to include 10 items that measured pressure to conform to one racial or cultural group, depending on the sample. Five items addressed pressure from the majority group and five items addressed pressure from the minority group. Participants indicated their agreement with items such as "White people (Americans) tell me that I need to act more like them," on a scale of 1 (*completely disagree*) to 5 (*completely agree*). The scale was adjusted slightly to represent racial or cultural pressure for each sample (see Appendix A). Oblimin factor analyses confirmed a two-factor solution for both samples that consisted of the minority and majority subscales. Both the majority ($\alpha = .80$) and minority ($\alpha = .85$) marginalization items created reliable scales.

Public Regard. Public regard was measured with a modified version of the Collective Self-Esteem Scale (CSE; Luhtanen & Crocker, 1992). This scale assessed how participants believed others view biracial or bicultural people. Participants completed four items such as, "In general, biracial (bicultural) people are considered good by others." Participants responded on a scale of 1 (*completely disagree*) to 7 (*completely agree*). The items were modified for each sample, and were averaged to create a reliable scale ($\alpha = .76$).

Meta-Essentialism. Participants completed nine items that measured racial or cultural essentialism, responding as they thought most Americans would. This captured meta-perceptions of essentialism, or how essentialist the participant perceived society. Participants indicated their perceived societal agreement on a scale of 1 (*most Americans would strongly disagree*) to 7 (*most Americans would strongly agree*). This scale was reworded to address racial essentialism for biracials and cultural essentialism for

biculturals. For the combined samples, the nine items were subjected to a maximum likelihood factor analysis with oblimin rotation and Kaiser normalization. Items that did not load or loaded onto multiple factors were removed, leaving only three items. This limited the degrees of freedom, making the interpretation of the factor analysis unreliable (Fabrigar et al., 1999). Because the items did not indicate appropriate psychometric properties, meta-essentialism was excluded from the analyses.

Identity Autonomy. Participants completed a five-item measure of identity autonomy that reflected freedom in racial or cultural identification (modified from Sanchez, 2010). The scale assessed the extent to which participants felt free to racially or culturally identify as they wished. The items were modified appropriately for each sample. An example item is “I feel that I can racially/culturally identify as I want.” Participants indicated their agreement on a scale of 1 (*strongly disagree*) to 7 (*strongly agree*). Oblimin factor analysis confirmed a one-factor solution for the combined samples (70.7% variance explained). The items formed a reliable scale, $\alpha = .89$.

Identity Integration. Identity integration was measured via Cheng & Lee’s (2009) Multiracial Identity Integration Scale (MIIS) that was reworded for the bicultural sample. The measures consisted of eight items that measured perceived distance and conflict between one’s racial or cultural groups. Biracial participants responded to items such as “I keep everything about my different racial identities separate.” For biculturals, an example item is “I feel like someone moving between different cultural identities.” For both samples, the items were rated on a scale from 1 (*completely disagree*) to 5 (*completely agree*). Similarly to past work, the measure was divided into two subscales, distance and conflict. The conflict subscale had adequate reliability, $\alpha = .83$, but the

distance scale had a low Cronbach's alpha, $\alpha = .58$. Like previous work (Cheng & Lee, 2009), the two subscales were not correlated with each other, $r(672) = -.04$, $p = .252$. Because the distance subscale did not indicate adequate reliability, it is not included in the analyses.

Depressive Symptoms. Participants in both samples completed the 10-item version of the Center for Epidemiological Studies Depression Scale (CES-D; Radloff, 1977). This scale measured the frequency of depressive symptoms in general on a scale of 1 (*rarely or none of the time*) to 4 (*most of the time*). The scale includes symptoms such as "I have trouble keeping my mind on what I am doing." The items were combined to form a reliable scale, $\alpha = .88$. This scale was recoded such that higher scores indicate less depressive symptomatology.

Stress. Participants in both samples completed the Perceived Stress Scale (Cohen, Kamarck, & Mermelstein, 1983), which measured the frequency with which participants experienced stress in general. For example, participants scored items such as, "In general, how often do you feel that you are unable to control the important things in your life," on a scale of 1 (*never*) to 5 (*very often*). The items demonstrated adequate reliability, $\alpha = .87$. This scale was recoded such that higher scores indicate lower levels of perceived stress. Based on the recommendations of the committee, reports of stress were collected to be examined as a potential moderator in the future, but are not included in the analyses reported here.

Results

Preliminary and Descriptive Analyses

First, I ran a series of independent sample *t*-tests to examine mean level differences between the samples on the study variables (see Table 2 and Figure 3). Biracial participants reported more identity denial, and less identity questioning, autonomy, depression and stress than the bicultural sample, all *ts* > 2.70, *ps* < .008. In addition, I examined the zero order correlations between the study variables in both samples (Table 3) and by sample type (Table 4). The correlations supported the first hypothesis as the denial variables were significantly correlated with depressive symptoms and stress.

Measurement Model

I conducted a confirmatory factor analysis (i.e., measurement model test) to test the fit between the indicators and the latent variables with MPlus 6 software (Muthén & Muthén, 1998-2010). I expected identity denial, identity questioning, majority marginalization, and minority marginalization to be indicators of interpersonal denial, and depressive symptoms and stress to be indicators of psychological well-being (see Figure 2). Fit was examined through the chi-squared test of model fit, RMSEA, comparative fit index (CFI), and standardized root mean square residual (SRMR). Guidelines to assess adequate model fit recommend null chi-squared values, $RMSEA \leq .08$, CFI values $\geq .95$, and $SRMR < .08$ (Hu & Bentler, 1999; Kline, 2011). The unrestrained model, which allows the factor loadings to vary between samples, did not indicate good fit, $\chi^2 (20, N = 662) = 111.63, p < .001$, $RMSEA = 0.12$, 90% confidence interval (CI) = 0.10, 0.14, $CFI = 0.92$, $SRMR = 0.07$. The restrained model, which restrains the factor loadings to be equal across both samples also demonstrated inadequate fit, $\chi^2 (22, N = 662) = 112.12, p < .001$, $RMSEA = 0.11$, 90% CI = 0.09, 0.13,

CFI = 0.92, SRMR = 0.07. Additionally, the residual variance of stress and depressive symptoms were correlated, which violated the identification rules, and made the measurement model unidentified (Kline, 2011).

Path Analysis

Because the hypothesized measurement models for SEM did not indicate a good fit, I conducted a nested path analysis with no latent variables to test the remaining hypotheses (see Figure 4). The unrestrained model, where all parameters were free to vary between groups, indicated good fit, $\chi^2 (20, N = 662) = 53.45, p = .0001$, RMSEA = 0.07, 90% CI = 0.05, 0.09, CFI = 0.97, SRMR = .05. In the restrained model, the path coefficients were restrained to be equal across both samples, though the correlations between the exogenous variables were free to vary. This model indicated similar fit, $\chi^2 (35, N = 662) = 84.22, p < .001$, RMSEA = 0.07, 90% CI = 0.05, 0.08, CFI = 0.95, SRMR = .06. A chi squared difference test indicated significant moderation by the sample, such that the path coefficients were not the same in both samples, $\chi^2_{\text{diff}} (15, N = 662) = 30.77, p = .009$. Based on the modification indices, one path was released in the restrained model (the path from majority marginalization to identity autonomy). This model indicated improved fit, $\chi^2 (34, N = 662) = 72.78, p = .0001$, RMSEA = 0.06, 90% CI = 0.04, 0.08, CFI = 0.96, SRMR = .05, and did not differ significantly from the unrestrained model, $\chi^2_{\text{diff}} (14, N = 662) = 19.33, p = .15$ (see Figure 4).

For both samples, higher minority marginalization and lower public regard predicted decreased autonomy. More minority marginalization and lower public regard also directly predicted more identity conflict. Higher autonomy predicted lower conflict, and lower conflict predicted fewer depressive symptoms and lower stress. Identity denial

and identity questioning were not significant predictors of autonomy or conflict. For the biracial sample, higher majority marginalization predicted lower autonomy while majority marginalization was not a significant predictor of identity autonomy for bicultural individuals.

Mediation was conducted using 2000 bootstrap resamples to examine whether identity autonomy and identity integration (operationalized here as conflict) mediated the relationship between the identity rejection variables (identity denial, identity questioning, majority and minority marginalization, and public regard) and stress and depressive symptoms (see Figure 5). Analyses of the bootstrapped estimate of the 95% confidence intervals of the indirect effects revealed that serial mediation through autonomy and conflict to depressive symptomatology was significant from minority marginalization, $b = -0.01$, 95% CI = -0.01, -0.004, and public regard $b = 0.01$, 95% CI = 0.01, 0.02, but not from identity denial, $b = -0.003$, 95% CI = -0.01, 0.001, or identity questioning, $b = 0.001$, 95% CI = -0.001, 0.004. The serial mediation through autonomy and conflict to stress was significant from minority marginalization, $b = -0.01$, 95% CI = -0.01, -0.003, and public regard, $b = 0.01$, 95% CI = 0.004, 0.02, but not from identity denial, $b = -0.003$, 95% CI = -0.01, 0.001, or identity questioning, $b = 0.001$, 95% CI = -0.002, 0.003.

For the biracial sample, mediation from majority marginalization through autonomy and conflict to depressive symptoms was significant, $b = -0.01$, 95% CI = -0.02, -0.003. Similarly, this mediation was also significant for stress, $b = -0.01$, 95% CI = -0.02, -0.002. For the bicultural sample, mediation from majority marginalization through autonomy and conflict to depressive symptoms, $b = 0.003$, 95% CI = -0.004, 0.01, and stress, $b = 0.003$, 95% CI = -0.004, 0.01 was not significant.

Discussion

The aims of the present study were to test identity autonomy and identity integration as mediators of the relationship between identity rejection and psychological well-being for biracial and bicultural people. The study compared the fit of the model among both biracial and bicultural samples to identify shared dual identity processes. This study presents the first test of these mediators and a novel integration of the current biracial and bicultural literatures. At the mean levels, the biracial and bicultural individuals experienced similar levels of majority and minority marginalization, public regard, and integration. There were no differences between samples in how often they were excluded by their majority (Whites or Americans) and minority group members, how they perceived society valued biracial or bicultural people, and how integrated they perceived their two identities to be. However, the biracial sample reported greater identity denial (i.e., being told how they should racially identify), lower identity questioning (i.e., being asked “where are you from?”), lower identity autonomy, and less depressive symptoms and stress than the bicultural sample.

Though this is the first study to directly compare biracial and bicultural samples, the results are consistent with past work suggesting that biracial people are often well-adjusted (Shih & Sanchez, 2005), despite experiencing frequent identity denial (Sanchez, 2010; Townsend et al., 2009). Common conceptualizations of race as a biological construct reduce the perceived overlap between different racial groups, creating frequent forced choice scenarios for biracial people where they must choose only one race to identify with, or be told which they should select (Kang, Plaks & Remedios, 2015; Sanchez et al., 2014). On the other hand, society accepts cultures as less distinct, so

bicultural people may experience less denial through forced choice. Because they are stereotyped as being perpetual foreigners, they may experience greater identity questioning in order to verify cultural background (Huynh et al., 2011).

As expected in hypothesis 1, greater identity denial, identity questioning, marginalization, and lower public regard were associated with more stress and depressive symptoms. Replicating past work, each rejection variable was associated with poorer well-being. Consistent with hypotheses 2 and 3, identity autonomy and integration mediated the relationship from minority marginalization and public regard to depressive symptoms and stress. Feeling marginalized by minority group members, and perceiving that society has low valuation of biracial or bicultural people predicted a lower sense of autonomy, which in turn predicted higher perceived conflict between one's two identities, and finally led to higher depressive symptoms and stress. For the biracial sample, this mediation model was also significant from majority marginalization, meaning that being excluded by Whites similarly lead to decreased autonomy, decreased identity integration, and increased depressive symptoms and stress. The effects of minority marginalization are consistent with past work suggesting that intragroup marginalization is used to exclude members who do not follow the group norms in order to maintain group distinctiveness, and may lead to stress and lower life satisfaction for those marginalized (Castillo et al., 2007; Ojeda, Navarro, Meza, & Arbona, 2012; Thompson, Lightfoot, Castillo, & Hurst, 2010).

Identity autonomy and integration did not mediate the association from identity denial and questioning to well-being. This unexpected result may be due to the inclusion of intragroup marginalization as a separate path (originally theorized as a latent

construct). Prior research suggests that identity denial predicts stress and re-assertion of identity through thwarted feelings of belonging (Cheryan & Monin, 2005). The marginalization variables may have captured belongingness threat, and by including them simultaneously in the model, they may have obscured the effects of identity denial and questioning. A wide body of literature has documented the effects of social identity threats on belonging, indicating that across domains, identity threats lead to reduced feelings of belonging (Ellemers et al., 2002; Major & O'Brien, 2005). Similarly, identity denial is posited to influence feelings of belonging which may have been accounted for in the model through the marginalization variables. Moreover, the limited psychological effects of identity denial and questioning may be due to the wording of the items, which specified denial received from strangers. Past work has found that social exclusion from close others is more threatening than exclusion from strangers (Nezlek, Wesselmann, Wheeler, & Williams, 2012; Uskul & Over, 2014), suggesting that identity denial from strangers may similarly be less impactful than denial from close others.

In partial support of hypothesis 4, the relationships between most of the variables were similar between both groups with one single exception. The relationship between majority marginalization and psychological well-being differed by sample. The association between majority marginalization and stress and depression was mediated by autonomy and integration in the biracial sample, but not in the bicultural sample. For biracial individuals, feelings of rejection from Whites were linked to diminished well-being through lower feelings of identity autonomy and greater feelings of identity conflict. For bicultural populations, feelings of rejection from Americans were insufficient to affect identity autonomy and conflict. This may be due to important

differences in identification with American identity and culture among bicultural Americans. For example, qualitative work suggests that bicultural people associate specific physical (e.g., white skin and blonde hair), behavioral (e.g., patriotic), and value (e.g., principled) characteristics with being American (Park-Taylor et al., 2008). The degree to which bicultural people identify themselves with these “true American” traits can vary (Park-Taylor et al., 2008; Rodriguez, Schwartz, & Whitbourne, 2010; Schwartz et al., 2012; Tsai, Mortensen, Wong, & Hess, 2002). However, for biracial individuals, one of their parents was White and thus, likely a good portion of their extended family. As suggested by multiracial identity development models (e.g., Poston, 1990; Renn, 2008) identification with the majority group is likely, and thus, rejection may have had a stronger connection to well-being among biracial individuals for this reason. In addition, previous work on intragroup marginalization among bicultural people has focused on this as a form of acculturative stress, highlighting the importance of exclusion from the minority group as a bicultural person acculturates to the majority group (Cano, Castillo, Castro, de Dios, & Roncancio, 2014). Consistent with this work, the present results suggest that for bicultural people, marginalization from the minority group may be more central than marginalization from the majority group.

The present study advanced biracial and bicultural identity theory by providing an integrated model for members of two racial and cultural groups. The model identified significant predictors of psychological well-being, and partial mediators of these relationships. A significant contribution of the present study is the inclusion of identity autonomy and identity integration as the mediators between rejection and mental health outcomes. The studies tested a novel theoretical model among two populations, bridging

the literatures for the first time and providing unique insight into dual identity processes. Across identity dimensions, public regard and minority marginalization affected autonomy and integration, leading to differences in psychological well-being.

Despite the strengths of this study, the results are limited by aspects of the design. Though some of the mediational models were significant, the lack of experimental manipulation limits the causal conclusions that can be drawn. Moreover, the hypothesized model with latent variables did not indicate good fit, and presented measurement problems perhaps because it had too few indicators (i.e., Heywood case; Dillon, Kumar, & Mulani, 1987; Kolenikov & Bollen, 2012) or even more likely, because these factors were related but not indicative of a singular concept such as interpersonal rejection. As alluded to earlier, identity denial may well cause greater feelings of marginalization and decreased public regard, which in turn lead to lower autonomy, and increased conflict, depressive symptoms, and stress (see Figure 6). This alternative model indicated adequate fit when all the parameters were free to vary between samples, $\chi^2(34, N = 662) = 129.74, p < .001$, RMSEA = 0.09, 90% CI = 0.08, 0.11, CFI = 0.94, SRMR = .07. The restrained model had poorer fit, $\chi^2(51, N = 662) = 168.87, p < .001$, RMSEA = 0.08, 90% CI = 0.07, 0.10, CFI = 0.92, SRMR = .08, and the chi squared difference test indicated significant moderation by sample, $\chi^2_{\text{diff}}(17, N = 662) = 39.13, p = .002$. As suggested by the modification indices, the paths from majority marginalization to identity autonomy and to conflict were released in the restrained model, which improved the fit $\chi^2(49, N = 662) = 151.29, p < .001$, RMSEA = 0.08, 90% CI = 0.07, 0.09, CFI = 0.93, SRMR = .07, and no longer indicated significant moderation, $\chi^2_{\text{diff}}(15, N = 662) = 21.55, p = .12$. However, a comparison of the Akaike Information Criteria scores suggests that

the original model fits the data better than this alternative (original model AIC = 15870.38, alternative model AIC = 15918.89), supporting the retention of the original model.

The results of the alternative model suggest that identity denial may lead to the intragroup marginalization that is associated with lower autonomy, increased conflict, and greater depression and stress. Given that the hypothesized measurement model was not supported by the data, this alternative model may better represent the relationship between these variables by including directional paths rather than creating a latent variable. The alternative model is consistent with previous research suggesting that denial affects feelings of belonging (Cheryan & Monin, 2005).

Future Directions

Given the exploratory nature of the analyses and unexpected challenges with the measurement model and variables (e.g., meta-essentialism was removed), this study requires replication for confirmation. Future tests of this model may focus on sources of identity denial (e.g., close others or strangers, majority or minority group members), and how these effects may be buffered, including the role of social support. Social support has a history of mitigating negative identity effects for minority groups (Cohen & Wills, 1985). For example, Black college students who had low social support demonstrated greater physiological reactivity to perceived racism (Clark, 2006). Support may similarly alleviate the negative effects of denial, given that the support network is not the source of the identity denial experiences. Lastly, future work will employ experimental methodologies in order to better understand the causal effect of identity rejection on outcomes. For example, ongoing studies in the laboratory are recruiting biracial and

bicultural participants for experimental studies of identity denial which will inform the causal links proposed here.

Conclusions

The present study provides important contributions to the literature by combining two biracial and bicultural theories, thereby allowing for the exploration of dual identity processes that are shared across identity domains. These findings provide evidence for identity autonomy and identity integration as the mechanisms that may promote biracial and bicultural well-being, and are thwarted in the face of identity rejection. The increasing diversification of the United States, including sharp rises in the biracial and bicultural populations underscores the importance and timeliness of this work

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Footnotes

¹Because bicultural participants were part American (high status group) and minority (low status group), we matched the biracial participant group so that it too had a high status group (White) and low status group (minority). This was particularly important because these groups were specifically targeted in questions regarding intragroup marginalization.

Table 1. Recruitment sources by sample.

	Mechanical Turk	Email List Serves	Rutgers Research Pool
Bicultural	36	240	58
Biracial	41	282	18
Total	77	522	76

Table 2. Independent samples *t*-tests between biracial and bicultural samples

Variable	Biracial	Bicultural	<i>t</i>
	<i>M (SD)</i>	<i>M (SD)</i>	
Identity denial	2.31 (1.25)	1.89 (1.35)	4.27***
Identity questioning	3.92 (1.66)	4.65 (1.67)	-5.90***
Identity autonomy	4.91 (1.43)	5.34 (1.33)	-4.13***
Depressive symptoms	3.05 (0.60)	2.92 (0.65)	2.71**
Stress	3.31 (0.74)	3.02 (0.77)	5.28***

Note. Depressive symptoms and stress have been recoded such that higher scores indicate less depression and stress. Possible range scores were from 1 to 7 for identity denial, questioning, and autonomy, 1-4 for depressive symptoms, and 1-5 for stress.

* $p < .05$; ** $p < .01$; *** $p < .001$.

Table 3. Correlations between study variables for combined biracial and bicultural samples

	1	2	3	4	5	6	7	8
1. Identity denial	--							
2. Identity questioning	.28***	--						
3. Majority marginalization	.52***	.25***	--					
4. Minority marginalization	.41***	.23***	.39***	--				
5. Public regard	-.26***	-.13**	-.24***	-.30***	--			
6. Identity autonomy	-.24***	-.08*	-.21***	-.30***	.32***	--		
7. Integration conflict	.23***	.10**	.24***	.35***	-.30***	-.40***	--	
8. Stress	-.07	-.11**	-.15***	-.16***	.27***	.18***	-.23***	--
9. Depressive symptomatology	-.12**	-.09*	-.19***	-.18***	.32***	.24***	-.33***	.78***

* $p < .05$; ** $p < .01$; *** $p < .001$.

Table 4. Correlations between study variables separated by sample

	1	2	3	4	5	6	7	8	9
1. Identity denial	--	.33***	.51***	.40***	-.26***	-.17***	.21***	-.17**	-.20***
2. Identity questioning	.33***	--	.28***	.35***	-.16***	-.14***	.15**	-.08	-.12*
3. Majority marginalization	.53***	.28***	--	.41***	-.17**	-.06	.12*	-.15**	-.15**
4. Minority marginalization	.41***	.15**	.37***	--	-.27***	-.26***	.28***	-.19**	-.24***
5. Public regard	-.31***	-.08	-.32***	-.37***	--	.27***	-.26***	.24***	.30***
6. Identity autonomy	-.28***	-.06	-.35***	-.33***	.37***	--	-.41***	.19***	.26***
7. Integration conflict	.24***	.09	.33***	.42***	-.33***	-.38***	--	-.19***	-.31***
8. Stress	-.07	-.06	-.20***	-.19***	.28***	.24***	-.30***	--	.77***
9. Depressive symptomatology	-.11*	-.04	-.26***	-.17***	.33***	.26***	-.35***	.78***	--

Note. Correlations above the diagonal were calculated among the bicultural sample, and those below the diagonal among the biracial sample.

* $p < .05$; ** $p < .01$; *** $p < .001$.

Figure 1. Hypothesized model.

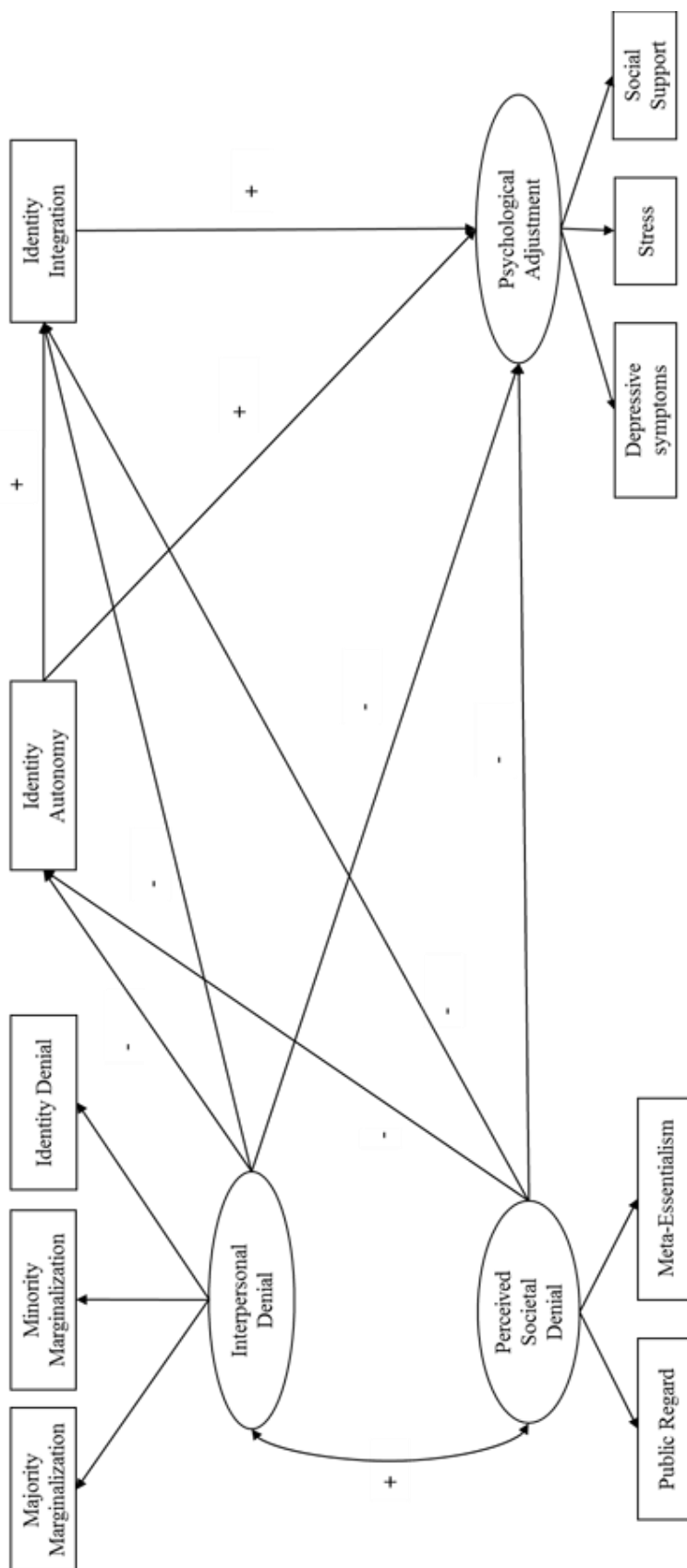


Figure 2. Hypothesized measurement model.

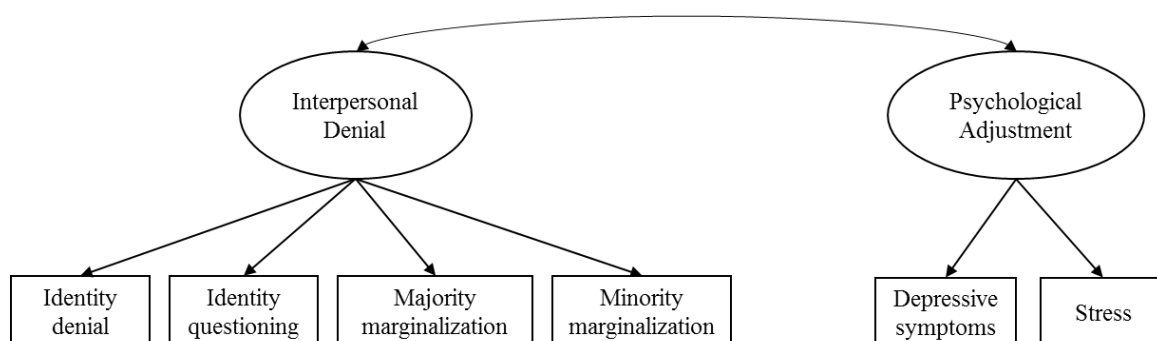
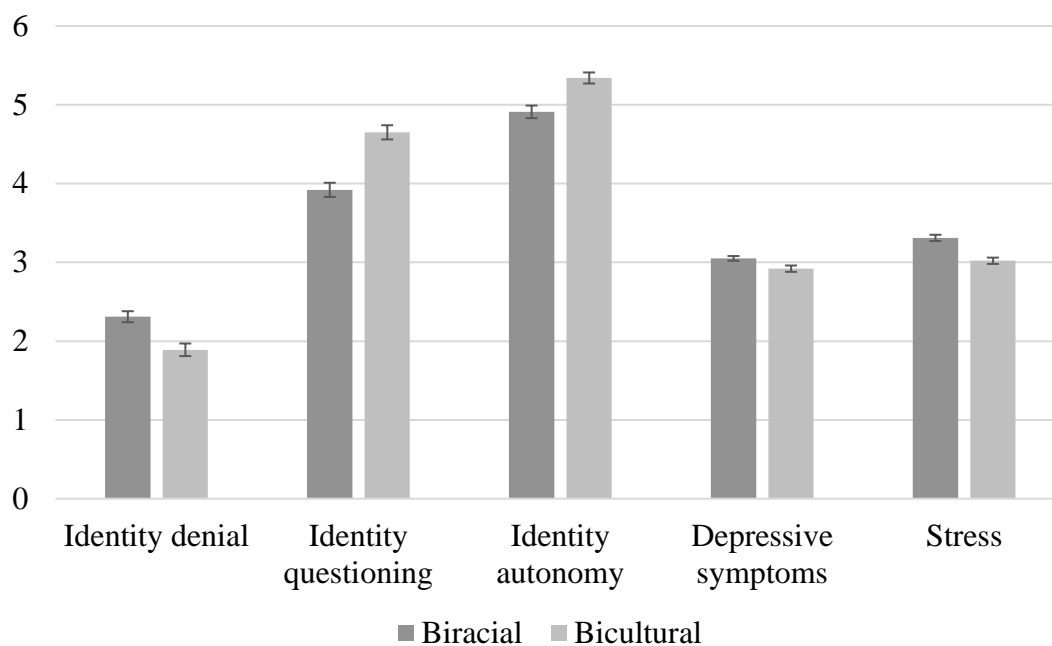
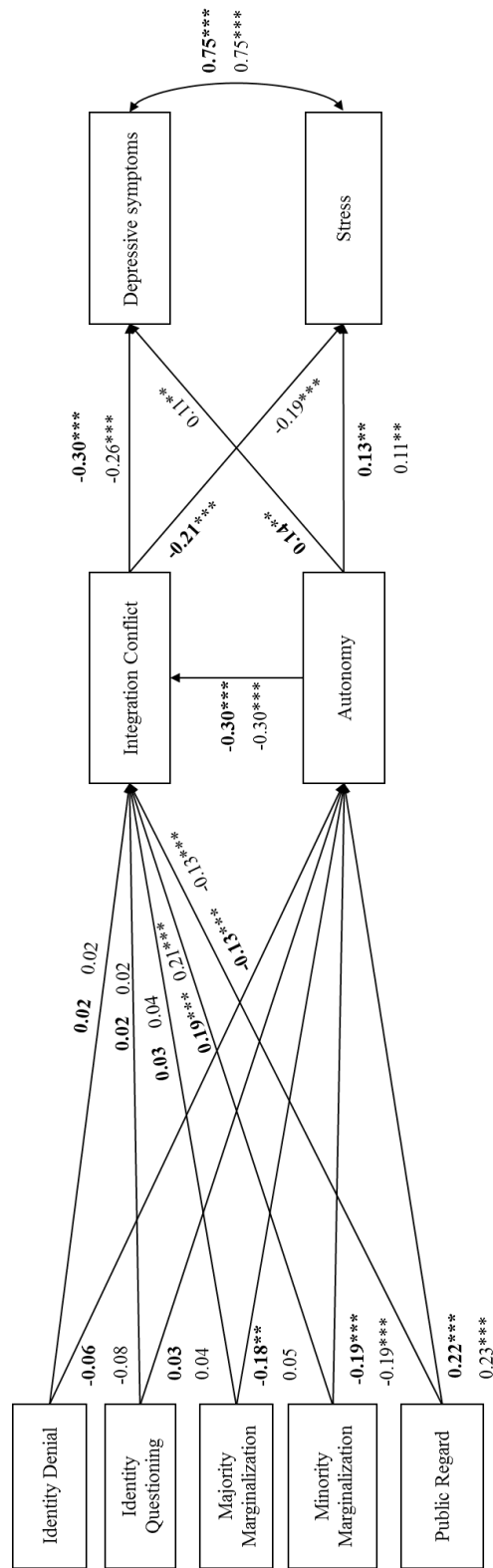


Figure 3. Independent samples *t*-tests between biracial and bicultural samples.



Note. Depressive symptoms and stress have been recoded such that higher scores indicate less depression and stress.

Figure 4. Modified restrained path model.



Note. Bolded coefficients represent biracial sample. Depressive symptoms and stress have been recoded such that higher scores indicate less depression and stress.

* $p < .05$; ** $p < .01$; *** $p < .001$.

Correlations between exogenous variables for biracial sample.

	Identity denial	Identity questioning	Majority marginalization	Minority marginalization
Identity denial				
Identity questioning	.33***			
Majority marginalization	.53***	.28***		
Minority marginalization	.41***	.15**	.36***	
Public regard	-.30***	-.08	-.31***	-.35***

Correlations between exogenous variables for bicultural sample.

	Identity denial	Identity questioning	Majority marginalization	Minority marginalization
Identity denial				
Identity questioning	.34***			
Majority marginalization	.51***	.28***		
Minority marginalization	.41***	.34**	.40***	
Public regard	-.25***	-.16**	-.17**	-.24***

Figure 5. Significant mediation paths.

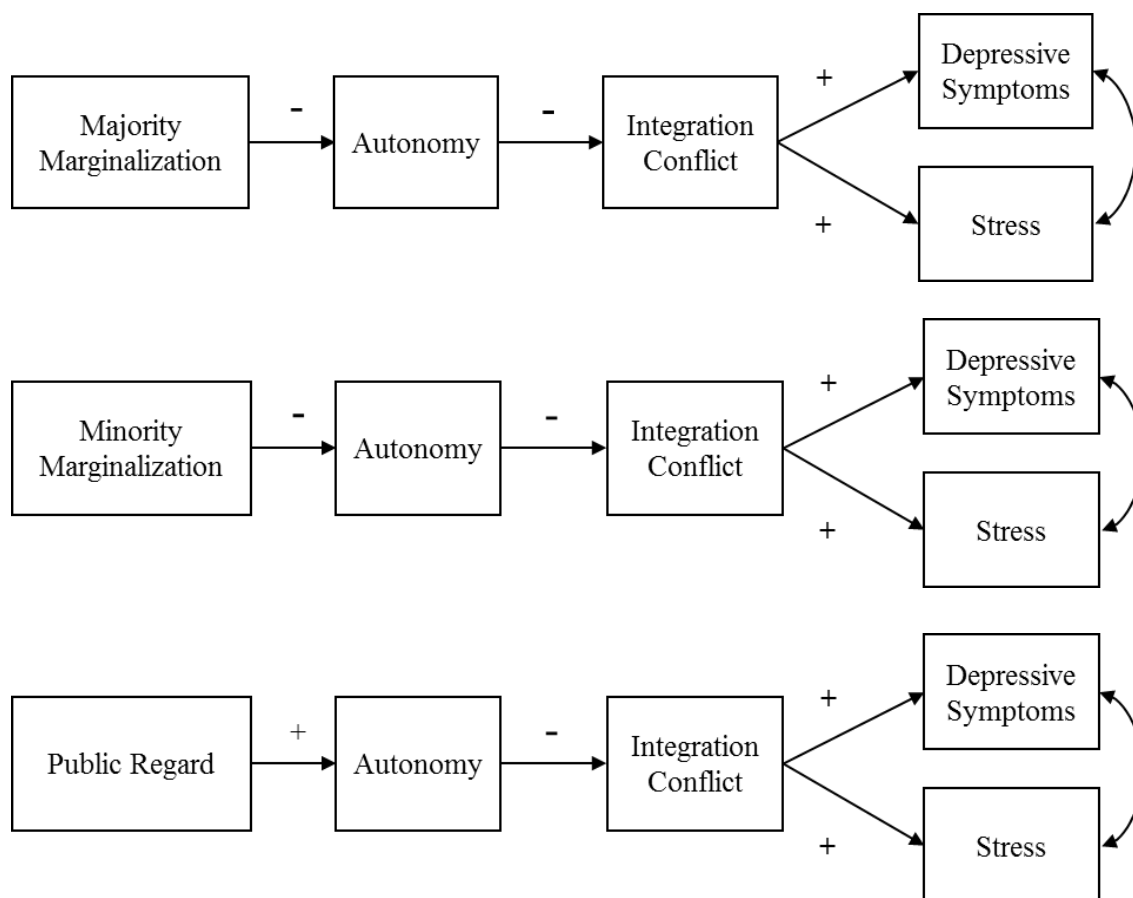
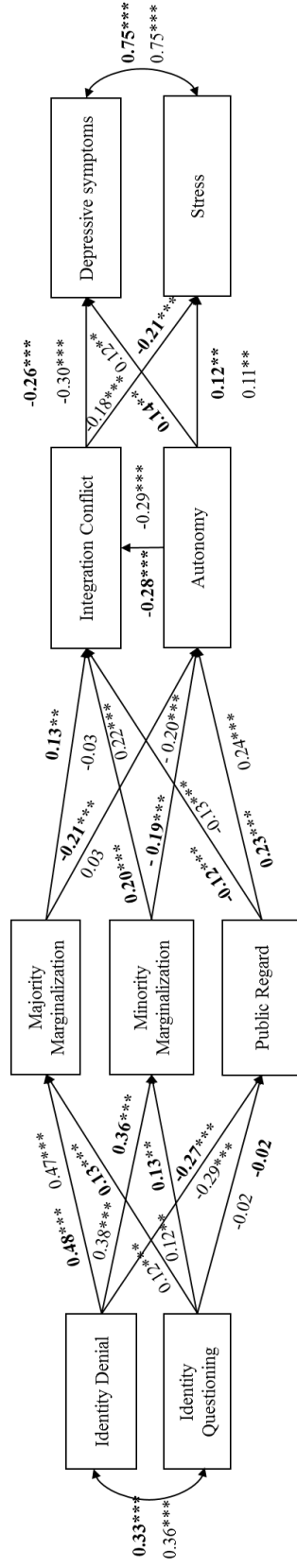


Figure 6. Alternative modified restrained path model.



Note. Bolded coefficients represent biracial sample. Depressive symptoms and stress have been recoded such that higher scores indicate less depression and stress.

* $p < .05$; ** $p < .01$; *** $p < .001$.

Appendix A

Identity Denial ExperiencesBicultural*Identity Denial:*

When you first meet strangers, how often are you told:

1. You are not American.
2. You cannot identify as American.
3. You should culturally identify differently.
4. You should identify with one cultural identity over another.

Identity Questioning:

When you first meet strangers, how often are you asked:

1. About your nationality
2. Where you are from.

Items not retained in analysis:

When you first meet strangers, how often are you asked:

1. If you speak English.
2. Your citizenship status

When you first meet strangers, how often are you misperceived as being:

1. Not an English speaker.
2. From another country.

Biracial*Identity Denial:*

When you first meet strangers, how often are you told:

1. You should racially identify differently.
2. You should identify with one racial identity over another.
3. You are not White.*
4. You cannot identify as White.*

*Only presented to participants who indicated they have White ancestry.

Identity Questioning:

When you first meet strangers, how often are you asked:

1. About your racial ancestry.
2. About your racial appearance

Items not retained in analysis:

When you first meet strangers, how often are you asked:

1. What race you are.
2. About your racial identity.

When you first meet strangers, how often are you misperceived as being:

1. Of a different race than you identify.
2. Monoracial.

Intragroup Marginalization (Modified Castillo, Conoley, Brossart, & Quiros, 2007)

From majority group:

1. White people/Americans tell me that I am not really White/American because I don't look/sound White/American.
2. White people/Americans tell me that I need to act more like them.
3. White people/Americans tell me that I have too many minority/non-American friends.

4. White people/Americans tell me that I am not really White/American because I do not act White/American.

5. White people/Americans criticize me because I don't sound/speak English like them.

From minority group:

Bicultural (blanks are filled in with participants' minority country):

1. People from _____ tell me that I am not really a member of the group because I don't look like them.

2. People from _____ tell me that I need to act more like them.

3. People from _____ tell me that I have too many American friends.

4. People from _____ tell me that I am not really part of the group because I don't act like them.

5. People from _____ criticize me because I don't speak like them.

Biracial (blanks are filled in with participants' minority racial group):

1. _____ people tell me that I am not really a member of the group because I don't look like them.

2. _____ people tell me that I need to act more like them.

3. _____ people tell me that I have too many friends who are not _____.

4. _____ people tell me that I am not really part of the group because I don't act like them.

5. _____ people criticize me because I don't speak like them.

Public Regard (Modified Luhtanen & Crocker, 1992)

1. Overall, biracial/bicultural people are considered good by others.

2. Most people consider biracial/bicultural people, on average, to be more ineffective than other racial/ cultural groups.
3. In general, others respect biracial/bicultural people.
4. In general, others think biracial/bicultural people are unworthy.

Meta-Essentialism (PI-created)

Indicate how you think MOST AMERICANS would respond to the following items. (No et al., 2008)(No et al., 2008)

1. Culture/race is a central aspect of a person's personality, it defines who you are.
2. A person's culture/race makes them who they are.
3. What a person is like (e.g. his or her abilities, traits, interests) is deeply ingrained in his or her culture/race.
4. Although a person can adapt, it is hard if not impossible to change a person's culture/race.
5. A person's culture/race is something very basic about them and it can't be changed much.
6. Cultures/races are just arbitrary categories and can be changed if necessary.
7. People who belong to different cultures/races are distinct from one another.
8. It's possible to be a full member of more than one culture/race.
9. Two separate cultures/races likely have very little in common.

Identity Autonomy (Modified Sanchez, 2010)

1. I feel that I have a say in how I racially/culturally identify.
2. I feel that I can racially/culturally identify as I want.
3. I don't feel pressured to racially/culturally identify a certain way.

4. I feel that I decide how I want to racially/culturally identify.
5. I feel free to racially/culturally identify how I want.

Biracial/Bicultural Identity Integration Scale (Modified Cheng & Lee, 2009)

Distance

1. My racial/cultural identity is best described by a blend of all the racial/cultural groups to which I belong.
2. I keep everything about my different racial/cultural identities separate.
3. I am a person with a multiracial/multicultural identity.
4. In any given context, I am best described by a single racial/cultural identity.

Conflict

5. I am conflicted between my different racial/cultural identities.
6. I feel like someone moving between the different racial/cultural identities.
7. I feel torn between my different racial/cultural identities.
8. I do not feel any tension between my different racial/cultural identities.

Center for Epidemiologic Studies Short Depression Scale (CES-D 10; Radloff, 1977)

In general, how often do you experience the following:

1. I am bothered by things that usually don't bother me.
2. I have trouble keeping my mind on what I am doing.
3. I feel depressed.
4. I feel that everything I do is an effort.
5. I feel hopeful about the future.
6. I feel fearful.
7. My sleep is restless.

8. I am happy.
9. I feel lonely.
10. I cannot not "get going."

Perceived Stress Scale (Cohen, Kamarck, & Mermelstein, 1983)

In general, how often do you/ are you:

1. Feel upset because of something that happened unexpectedly.
2. Feel that you are unable to control the important things in your life.
3. Feel nervous and "stressed".
4. Feel confident about your ability to handle your personal problems.
5. Feel that things were going your way.
6. Find that you cannot cope with all the things that you have to do.
7. Able to control irritations in your life.
8. Feel that you are on top of things.
9. Feel angered because of things that were outside of your control.
10. Feel difficulties are piling up so high that you cannot overcome them.

Perceived Social Support Scale (Zimet, Dahlem, Zimet, & Farley, 1988)

1. There is a special person who is around when I am in need.
2. There is a special person with whom I can share my joys and sorrows.
3. My family really tries to help me.
4. I get the emotional help and support I need from my family.
5. I have a special person who is a real source of comfort to me.
6. My friends really try to help me.
7. I can count on my friends when things go wrong.

8. I can talk about my problems with my family.
9. I have friends with whom I can share my joys and sorrows.
10. There is a special person in my life who cares about my feelings.
11. My family is willing to help me make decisions.
12. I can talk about my problems with my friends.