

Identity Denied: Comparing American or White Identity Denial and Psychological Health Outcomes Among Bicultural and Biracial People

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Abstract

Because bicultural and biracial people have two identities within one social domain (culture or race), their identification is often challenged by others. Although it is established that identity denial is associated with poor psychological health, the processes through which this occurs are less understood. Across two high-powered studies, we tested identity autonomy, the perceived compatibility of identities, and social belonging as mediators of the relationship between identity denial and well-being among bicultural and biracial individuals. Bicultural and biracial participants who experienced challenges to their American or White identities felt less freedom in choosing an identity and perceived their identities as less compatible, which was ultimately associated with greater reports of depressive symptoms and stress. Study 2 replicated these results and measured social belonging, which also accounted for significant variance in well-being. The results suggest the processes were similar across populations, highlighting important implications for the generalizability to other dual-identity populations.

Keywords

bicultural, biracial, identity denial, autonomy, identity integration

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People define their identity largely through the groups to which they belong (Tajfel & Turner, 1986). Despite a large body of existing theoretical and empirical knowledge on the processes of identifying with a single social group, the processes of identifying with multiple groups is less understood (Hirsch & Kang, 2016). Nonetheless, in an increasingly globalized society, growing numbers of people identify with multiple groups, even within one identity domain. For example, a bicultural person (defined here as an immigrant or child of immigrants to the United States who has incorporated multiple cultures into their self-concept) can identify with two cultural groups (Nguyen & Benet-Martínez, 2007). Similarly, a biracial person (defined here as someone whose parents have different racial backgrounds who has incorporated multiple races into his or her self-concept) can identify with two racial groups (Sanchez, Shih, & Wilton, 2014). Dual identification with both the majority group and a minority subgroup may have several positive effects, including improved intergroup relations (Glasford & Dovidio, 2011). Yet, society does not always welcome or support people who navigate between two groups within one social domain. Specifically, both bicultural and biracial populations experience identity denial, or an acceptance threat where an important cultural or racial identity is challenged by others, when their personal identification does not align with how they are perceived by others (Cheng & Lee, 2009; Cheryan & Monin, 2005; Townsend, Markus, & Bergsieker, 2009).

The extant literature has documented the negative mental health consequences that often follow from these identity challenges (Shih & Sanchez, 2005); yet, the process through which this occurs is less understood. Because bicultural and biracial people have the ability to choose their identity, yet they live in a society where single identification is the norm, recent theorizing suggests that challenges to dual identities may affect a person's mental health. For example, research shows identity challenges can reduce people's sense of autonomy in choosing an identity, decrease the perceived compatibility of their dual identities, and lower their feelings of social belonging (Cheryan & Monin, 2005; Hong, Zhan, Morris, & Benet-Martínez, 2016; Sanchez et al., 2014). Given that the mechanisms of such identity challenges

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remain empirically untested, the purpose of the present studies is to advance an integrated bicultural/biracial model that tests identity autonomy, identity integration, and social belonging as mediators of the relationship between American or White identity denial and psychological health.

Although biracial people can also be bicultural (Markus, 2008), this research focused on monoracial bicultural people and American biracial people to address similarities between two populations who are often discussed separately in the extant literature (Sanchez et al., 2014). Moreover, the studies focused on biracial people with a White racial background and bicultural people with an American cultural background to match the samples on the relative status of their groups, and because these shared identity experiences may be especially common among bicultural and biracial people who identify with both the majority (American or White) group and a minority group (Franco & Franco, 2015; Wang, Minervino, & Cheryan, 2013). People of minority backgrounds may have more limited access to higher status groups, and the combination of high-status and low-status identities better reflects the cultural and racial hierarchy in U.S. society (Chen & Hamilton, 2012; Devos & Banaji, 2005). This work extends current understanding of social identity theory by examining processes and outcomes of identifying with two identities within one identity domain.

Commonalities in Bicultural and Biracial Identity Challenges

Demographically, bicultural and biracial people are exposed to multiple cultural or racial groups through their family ancestry, immigration background, and/or international travels (Nguyen & Benet-Martínez, 2007). However, these populations have a variety of identification options, leading them to differ in how much they identify with each of the groups to which they are exposed (Basilio et al., 2014). Therefore, bicultural and biracial identities may also be conceptualized as psychological constructs reflecting the degree to which people internalize multiple cultures and norms into their own self-concept (Nguyen & Benet-Martínez, 2007; Rockquemore, Brunsma, & Delgado, 2009). The existing literature has yet to systematically compare the experiences of bicultural and biracial populations, despite the key shared experiences of having cultural or racial identity choices and being nonprototypical group members.

Familiarity with multiple groups gives bicultural and biracial people a choice in how they identify. This is unique, as monocultural and monoracial people may vary in the strength or salience of their cultural and racial identities but are generally not extended a choice. However, identity choice is a key aspect of the bicultural and biracial experience, as noted by several bicultural and biracial identification models (Rockquemore et al., 2009; Root, 1996; Schwartz, Montgomery, & Briones, 2006). For example, a bicultural Mexican immigrant may choose to culturally

identify as American, Mexican, Mexican American, Chicano, or a variety of other options (Zarate, Bhimji, & Reese, 2005). Indeed, longitudinal evidence suggests bicultural people vary in their identification and may alter it throughout their lives (Marks, Szalacha, Lamarre, Boyd, & García Coll, 2007). Similarly, biracials may alter their identity in response to situational elicitors as well as throughout the course of their lives (Harris & Sim, 2002). In addition to sharing identity choices, bicultural and biracial people are often perceived as nonprototypical group members. For example, widely held implicit associations between "American" and "White" leave bicultural Asian Americans as outsiders, even in their native country (Devos & Banaji, 2005). Similarly, hypodescent norms that categorize biracials as their lower status racial identity often exclude them from the White racial category (Chen & Hamilton, 2012; Gaither, Pauker, Slepian, & Sommers, 2016). Although some bicultural and biracial people share a superordinate identity with the majority (as Americans and as White), their access to this identity may be restricted by others because they uniquely have a choice in how they identify and are less prototypical, resulting in identity denial experiences that may hinder their sense of autonomy, identity integration, and social belonging.

In the present model, we propose identity denial as a shared acceptance threat for bicultural and biracial populations with negative mental health consequences that operates through similar psychological mechanisms. Although previous research has used the term identity denial to refer to various types of identity challenges, the present studies differentiate between denial of identification (i.e., being told you cannot pick a certain identity) and questioning of identification (i.e., being asked where you are from or about your ancestry) as two forms of the same acceptance threat. Because bicultural and biracial people identify with multiple cultural or racial backgrounds, they often want to claim both their identities but experience interpersonal obstacles (Nguyen & Benet-Martínez, 2007; Rockquemore & Brunsma, 2002). For example, an Asian American bicultural individual may choose to identify as both Asian and American, but be perceived by others as only Asian and not American (Tran, Miyake, Martinez-Morales, & Csizmadia, 2016). Similarly, biracials often experience what Rockquemore and Brunsma (2002) refer to as an unvalidated border identity, which describes biracials who identify a certain way (e.g., as biracial), but are treated differently by others (e.g., as Black). Despite the increasing representation of biculturals and biracials in the United States, both identity denial and identity questioning remain common. In one study, more than 30% of bicultural Asian Americans reported being misperceived as foreign and/or a nonnative English speaker (Cheryan & Monin, 2005). Similarly, other studies showed 87% to 93% of biracial participants reporting experiences of identity denial or questioning (Townsend et al., 2009; Tran et al., 2016).

Identity denial experiences have been linked to poor psychological outcomes (Stepanikova, 2010). For example, bicultural Asian Americans reported that incidences of identity denial evoked negative affect including anger and hostility, which increased stress (Wang et al., 2013). Being aware of the perpetual foreigner stereotype (i.e., the stereotype that bicultural Asian Americans and Latinos are foreigners and will be perpetually denied their American identity) was also predictive of lower hope, life satisfaction, and sense of belonging (Huynh, Devos, & Smalarz, 2011). Similarly, multiracials who feel restricted in their identity choices also report greater depressive symptoms, lower self-esteem, and less motivation (Sanchez, 2010; Townsend et al., 2009). Although this growing body of work suggests there is a clear association between identity denial and questioning experiences and poor psychological outcomes, no work to date has demonstrated the process or processes through which this might occur (Hong et al., 2016). The present research sought to explore three shared mechanisms (identity autonomy, identity integration, and social belonging) that may emerge from the unique experiences of having multiple identities, which afford different levels of access to group membership, different levels of integration, and different levels of acceptance in multiple groups.

Identity Autonomy

Although bicultural and biracial people may choose how they identify, not all perceive the identity options as true choices. Experiences of identity denial may thwart people's feelings of having control over their identity, also referred to as identity autonomy. Specifically, the identity autonomy perspective (IAP; Sanchez et al., 2014) is an integrative theory of bicultural and biracial identities that describes identity autonomy as the ability to freely choose and express one's identity or identities. Research supporting self-determination theory has documented that 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 has found strong associations between autonomy and positive psychological health (Deci & Ryan, 2002). For multiracial participants, research employing a forced-choice scenario has found that restraining racial identification choices leads to lower feelings of agency and autonomy (Sanchez, 2010; Townsend et al., 2009). Moreover, other work suggests that among biracials, a more fluid experience of racial identity is associated with greater life satisfaction and lower stress only if people do not experience high levels of identity questioning (Smith, 2014). Therefore, autonomy, or the ability to freely engage in racial malleability without questioning or challenges, may be associated with well-being. Although the role of identity autonomy has never (to our knowledge) been studied in bicultural populations, this preliminary evidence supports the IAP's claim that autonomy is another determinant of bicultural well-being and may be stymied by denial and questioning experiences.

Identity Integration

A key aspect of identifying with multiple groups is managing the competing norms and expectations of these groups (Hirsch & Kang, 2016). The multiple groups to which one belongs can be seen as contradictory or complementary, 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: The cultural or racial groups one belongs to are seemingly related and share similar values and goals (Cheng & Lee, 2009). In contrast, people with low integration feel they must choose one or the other identity, as this is easier than identifying with both simultaneously (Benet-Martínez & Hariatos, 2005). Indeed, several theories of multiple identities emphasize the importance of integrating identities. For example, the social identity complexity theory (Roccas & Brewer, 2002) suggests that people can view their various identities as highly or lowly overlapping, with implications for intergroup relations. Similarly, the multiple self-aspects framework posits that people's identities are composed of multiple different roles, which may be well integrated and accessible or compartmentalized (McConnell, 2011).

The benefits of identity integration are plenty. For example, 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 biculturals (Chen, Benet-Martínez, & Bond, 2008) and biracials (Cheng & Lee, 2009). Indeed, higher identity integration among Latino adolescents predicted better mental health outcomes up to 3 years later (Schwartz et al., 2015). Identity integration may also be an important factor relating to the well-being of bicultural and biracial people because essentialist norms in society promote strict division between social groups, often highlighting differences rather than overlap between groups (Kang, Plaks, & Remedios, 2015). Based on this lay theory, people may expect bicultural or biracial people to identify with only one group, and may communicate these expectations through identity challenges. Because identity denial and questioning experiences often undermine the harmonious dual existence of two cultural or racial identities by forcing people to choose only one or defend their membership, these may lead to fragmented, seemingly oppositional identities. Hence, through experiences of identity denial and questioning, bicultural and biracial people may come to perceive their identities as poorly integrated and highly conflicting if others often treat them as unable to coexist. However, the direct comparison of identity integration levels between bicultural and biracial people has not been investigated.

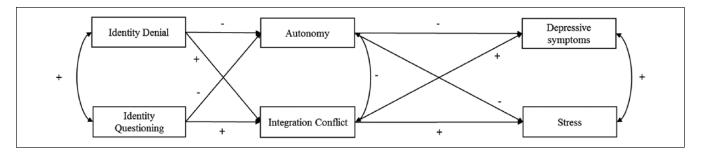


Figure 1. Hypothesized model in Study 1.

The Present Research

The present research is among the first to combine the bicultural and biracial literatures and provide an overarching framework that fits dual identities more broadly. Mutually exclusive qualification criteria for bicultural and biracial participants allowed us to test the model among two separate samples. The proposed model sought to advance current understanding of dual-identity processes by testing identity autonomy and identity integration as mediators of the relationship between identity challenges and psychological health. Moreover, although social identity theory establishes the importance of singular social group membership, the present work advances this theory by examining how these processes differ for those with dual identities that coexist within the same social domain (Tajfel & Turner, 1986).

The present study included two large samples of bicultural and biracial individuals and used path analysis to test the hypotheses. As shown in Figure 1, we hypothesized that identity autonomy and identity integration would mediate the relationship between identity denial and questioning experiences and psychological health outcomes. In Study 2, we expanded the model by including social belonging as a mediator. Because both populations are less prototypical members of each group, and because of shared identity experiences, we expected that the model would fit similarly among the bicultural and biracial samples.

Study I

Participants

Bicultural (N=435) and biracial (N=544) people were recruited online via Amazon Mechanical Turk (13%), email listserves at multiple universities (74%), and the undergraduate research pool at a large Northeastern university (13%) to participate in a study on bicultural or biracial identity and well-being. Mechanical Turk participants received US\$0.40, whereas research pool participants received course credit and email listserve participants were not compensated. As recommended, we aimed to collect at least 195 people in each sample to obtain a ratio of 15 people for every parameter estimated in the path model (Kline, 2011). We overrecruited to ensure

that we would meet our minimum after excluding participants who were not qualified. We ended data collection after meeting our collection stop point of 3 months.

Participants first completed a demographic questionnaire to confirm their identity. Based on previous research (e.g., Benet-Martínez, Lee, & Leu, 2006), participants were eligible to participate in the bicultural sample if they spoke English fluently, lived in the United States, were at least 18 years old, were monoracial, and were born outside the United States or had at least one parent born outside the United States. Participants were eligible to participate in the biracial sample 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: (a) selected their own race as "biracial/multiracial," (b) selected more than one racial option for themselves, (c) selected different racial options for their mother and father, and (d) selected "biracial/multiracial" for at least one parent.

In the bicultural sample, participants were excluded if they answered all three attention check questions incorrectly (n=3), did not identify as American (n=19), or did not identify as bicultural (n=18). These criteria left a final sample size of 395 bicultural people. The average age was 21.97 years, SD=6.91 years, and the sample was 67% (n=264) female. The sample was 59% Asian, 26% Latino, 12% White, and 3% Black. Most participants (88%) were citizens, and second-generation immigrants (63%).

In the biracial sample, participants were excluded if they answered all three attention check questions incorrectly (n=2), did not identify as biracial (n=21), were born outside the United States (n=29), or listed two minority backgrounds (n=178), leaving a final sample of 340 biracial participants. Although we recruited broadly, we only included mixed-White participants, given that identity denial was operationalized as the denial of a high-status White identity to be consistent with bicultural denial of the American identity. The average age of this analytical sample was 24.26 years, SD=7.46 years, and the sample was 69% (n=234) female. The sample was 38% White Asian, 28% White Black, 20% White Latino, and 14% White Multiracial, based on reports of parent race. See supplemental material for additional demographic information including identification strength and country of origin.

Table I. Factor Loadings for Factor Analysis With Oblimin Rotation for Study I.

	Identity questioning	Identity denial	Factor 3
How often are you asked where you are from/about your racial appearance?	.95	.03	.004
How often are you asked about your nationality/about your racial ancestry?	.77	.07	02
How often are you told you are not American /not White?	.04	.36	.40
How often are you told you cannot identify as American/White?	02	.47	.32
How often are you told you should culturally /racially identify differently?	.02	.94	11
How often are you told you should identify with one cultural /racial identity over another?	.05	.84	04
How often are you asked about your citizenship status/about your racial identity? ^a	.25	.06	.62
How often are you asked if you speak English/what race you are? ^a	.15	09	.83
How often are you misperceived as being not an English speaker /monoracial? ^a	20	.05	.54
How often are you misperceived as being from another country /of a different race than you identify? ^a	.31	.03	.35

^altems not retained in analysis due to double-loading or not loading. Bolded wording represent bicultural sample.

Measures ¹

Identity denial and questioning experiences. Participants completed 10 items that measured how often they experienced interpersonal identity denial and questioning. The items were created by the researchers based on previous identity denial research (Cheryan & Monin, 2005). Bicultural participants received questions with largely identical wording to the biracial sample besides the key difference that bicultural individuals experience American identity denial and biracial individuals experience White identity denial. Both refer to the high-status identity denial, which is more common (see Table 1 for exact wording). The items were subjected to a maximum likelihood factor analysis with oblimin rotation and Kaiser normalization. The data suggested the presence of three factors, but after items that loaded onto multiple factors (loadings > .4) or did not load onto any factors (loadings < .4; Fabrigar, Wegener, MacCallum, & Strahan, 1999) were removed, two factors were retained, which cumulatively explained 73% of the variance (see Table 1). Examination of the corresponding scree plots confirmed this number of factors (Henson & Roberts, 2006). The first factor formed the Identity Questioning subscale (two items, e.g., "When you first meet strangers, how often are you asked about your nationality/about your racial ancestry?"), r(734) = .75, p < .001. The second factor represents identity denial (four items, e.g., "When you first meet strangers, how often are you told you are not American/you are not White?"), $\alpha = .82$. Participants responded on a scale of 1 (never) to 7 (always).

Identity autonomy. Participants completed a five-item measure of identity autonomy that reflected freedom in cultural or racial identification (modified from Sanchez, 2010). The scale assessed the extent to which participants felt free to culturally/racially identify as they wished. The bicultural sample received the cultural wording, whereas biracial individuals received the racial wording. An example item is "I feel that I

can culturally/racially identify as I want." Participants indicated their agreement on a scale of 1 (*strongly disagree*) to 7 (*strongly agree*) and the items were averaged, $\alpha = .89$.

Identity integration. Identity integration was measured via Cheng and Lee's (2009) Multiracial Identity Integration Scale, which was based on Benet-Martínez and Hariatos' (2005) scale developed for bicultural identity. The scale was presented as is for the biracial sample and reworded for the bicultural sample. The scale included eight items that measured perceived distance and conflict between one's cultural or racial groups such as, "I am conflicted between my different cultural/racial identities." The items were rated on a scale from 1 (completely disagree) to 5 (completely agree). As in past work, the measure was divided into two subscales, Distance and Conflict. The Conflict subscale had high reliability ($\alpha = .83$), but the Distance subscale had low reliability ($\alpha =$.58) and, therefore, was not included in the analyses (see supplemental material for model results including the Distance subscale).

Depressive symptoms. Participants completed the 10-item version of the Center for Epidemiological Studies Depression Scale (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 averaged ($\alpha = .88$).

Stress. Participants completed the 10-item Perceived Stress Scale (Cohen, Kamarck, & Mermelstein, 1983; Taylor, 2015), which measured the frequency with which participants experienced stress in general. 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 were averaged ($\alpha = .87$).

Table 2. Co	rrelations Betwe	en Study Vari	ables for Stud	dy I Separate	d by Sample.
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	I	2	3	4	5	6
I. Identity denial	_	.33***	28***	.24***	.06	.11*
2. Identity questioning	.36***	_	06	.09	.06	.04
3. Identity autonomy	19***	12*	_	38***	24***	26***
4. Integration conflict	.20***	.15**	38***	_	.30***	.35***
5. Stress	.19**	.10*	21***	.24***	_	.78***
6. Depressive symptomatology	.14***	.13**	21***	.34***	.75***	_

Note. Correlations above the diagonal were calculated among the biracial sample, and those below the diagonal among the bicultural sample. p < .05. **p < .01. ***p < .01.

Table 3. Independent Samples t Tests Between Bicultural and Biracial Samples.

	Bicultural	Biracial			
Variable	M (SD)	M (SD)	Τ	D [95% CI]	Range
Identity denial	1.88 (1.35)	2.31 (1.25)	4.35***	0.32 [0.18, 0.47]	1-7
Identity questioning	4.58 (1.73)	3.92 (1.66)	5.29***	0.39 [0.24, 0.54]	1-7
Identity autonomy	5.35 (1.31)	4.91 (1.43)	4.30***	0.32 [0.17, 0.46]	1-7
Identity conflict	2.57 (1.05)	2.78 (1.14)	-2.59*	0.19 [0.05, 0.34]	1-5
Depressive symptoms	2.11 (0.68)	1.95 (0.60)	3.41**	0.25 [0.11, 0.40]	1-4
Stress	2.95 (0.76)	2.68 (0.74)	4.81***	0.36 [0.21, 0.50]	1-5

Note. CI = confidence interval.

Results and Discussion

Analysis plan. We tested the hypothesized model and conducted mediation analyses using path analysis on Mplus 6 (Muthén & Muthén, 2010). Mediation analyses were tested using 5,000 resampled bootstraps of the estimate of the indirect effect. We examined model fit through the chi-square test of model fit, root mean square error approximation (RMSEA), comparative fit index (CFI), and standardized root mean square residual (SRMR). Guidelines to assess adequate model fit recommend null chi-square values, RMSEA < 0.06, CFI values ≥ 0.95, and SRMR < 0.08 (Hu & Bentler, 1999; Kline, 2011). We tested whether the model was moderated by sample through multigroup path analysis.

Preliminary results. See Table 2 for correlations between the key variables. To examine mean-level differences between the samples on the study variables, we conducted a series of independent samples t tests (see Table 3). Bicultural participants reported less frequent experiences of identity denial, yet more frequent experiences of identity questioning, than biracial participants. Bicultural participants also reported greater autonomy and less conflict, but reported higher depressive symptoms and stress than biracial participants. Although mean-level differences existed, the primary goal of this study was to test whether the relationships between these variables were consistent across bicultural and biracial samples. Thus, we conducted multigroup path analysis.

Path analysis. We compared the model fit between the unrestrained and restrained models (see Figure 2 for the unstandardized path coefficients; the standardized coefficients for the unrestrained model may be found in the supplemental material). In the unrestrained model, all parameters were free to vary between groups, whereas 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. Both the restrained model, $\chi^2(16,$ N = 734) = 17.51, p = .353, RMSEA = 0.02, 90% confidence interval (CI) = [0.00, 0.05], CFI = 1.00, SRMR =0.03, Akaike information criterion (AIC) = 12,207.87, and the unrestrained model, $\chi^2(8, N = 734) = 9.16, p = .329$, RMSEA = 0.02, 90% CI = [0.00, 0.07], CFI = 1.00, SRMR= 0.02, AIC = 12,215.51 indicated good fit. The chi-square difference test was not significant, suggesting that the model was not moderated by sample, $\chi^2(8, N = 734) = 8.35, p =$.400. The model fit equally well when the path coefficients were restrained to be equal across both samples as when they were free to vary, indicating that the data fit the model similarly for both bicultural and biracial people.

Among both samples, denial and questioning were significantly correlated, such that participants who reported being asked about their background more often also reported being told to identify differently more often. In addition, more frequent experiences of identity denial were associated with a lower sense of freedom in selecting an identity, and greater perceived conflict between ones' identities. Identity

^{*}p < .05. **p < .01. ***p < .001.

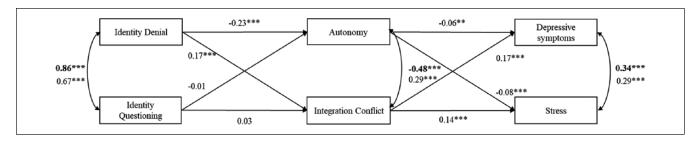


Figure 2. Unstandardized path coefficients for the restrained model in Study 1. *Note.* Bolded coefficients represent bicultural sample. $^*p < .05$. $^{***}p < .01$. $^{***}p < .001$.

questioning was not significantly associated with autonomy or integration conflict. Greater autonomy was associated with lower stress. Similarly, greater integration conflict was associated with greater stress and greater depressive symptoms. Stress and depressive symptoms were also strongly and positively correlated.

Mediation analyses. Mediation analyses were conducted using 5,000 bootstrap resamples to examine whether autonomy and integration conflict were parallel mediators of the relationship between identity denial and questioning, and stress and depressive symptoms. In addition, we tested whether the indirect effects varied significantly by group using likelihood ratio tests (Ryu, 2015). The indirect effects did not significantly differ by sample, ps > .202. Analyses of the bootstrapped estimate of the 95% CIs of the indirect effects revealed the association between identity denial and depressive symptoms was significantly mediated through integration conflict, $\beta = 0.05$, 95% CI = [0.01, 0.09], but not through autonomy, $\beta = 0.02, 95\%$ CI = [-0.01, 0.04]. Similarly, the association between identity denial and stress was significantly mediated through integration conflict, B = 0.03, 95% CI = [0.002, 0.06], but not through autonomy, $\beta = 0.03, 95\%$ CI = [-0.01, 0.06]. Participants who experienced greater denial reported more depressive symptoms and stress, which was associated with greater conflict but not with lower autonomy. There were no significant indirect effects of identity questioning on stress or depressive symptoms.

Alternative models. We tested several plausible alternative models to compare with our hypothesized model. For example, Alternative Model 1 suggests that identity denial and questioning experiences are not impactful or frequent enough to alter the degree of people's identity integration. It is possible that it is integration itself that predicts whether people perceive denial and questioning experiences. This model indicated poor fit, $\chi^2(14, N = 734) = 167.22, p < .001$, RMSEA = 0.17, 95% CI = [0.15, 0.20], CFI = 0.85, SRMR = 0.11. Similarly, Alternative Model 2 tests the notion that people who already have higher depressive symptoms perceive more denial and questioning experiences. This model,

too, showed poor fit, $\chi^2(10, N = 734) = 681.71$, p < .001, RMSEA = 0.43, 95% CI = [0.40, 0.46], CFI = 0.34, SRMR = 0.16. Although causal conclusions cannot be made given the correlational data, these results support our hypothesized model above alternative models. See supplemental material for additional alternative models.

Summary

Study 1 indicates that bicultural and biracial participants who reported more frequent experiences of identity denial and questioning reported feeling less able to freely choose their own identity and perceived greater conflict between their identities, which was ultimately associated with higher depressive symptoms and stress. The model fit similarly well and was not moderated by sample. Moreover, the indirect effects did not vary by sample, suggesting that the processes may be shared. Specifically, integration conflict was a significant mediator of the association between denial and mental health outcomes, whereas autonomy was not. These results indicate that for both bicultural and biracial people, identity denial may have downstream consequences, which are associated with seeing their two identities as more in conflict with each other, but not associated with feeling less free to choose their identity.

Study 2 sought to replicate the model presented in Study 1 and extend it by also including social belonging as a mediator. Unlike other social identity threats that result from membership in a stigmatized group, identity denial and questioning are prompted by exclusion from a group important to one's self. Because people often draw their self-worth and image from their group memberships, threats to social group identities may also reduce feelings of social belonging and devalue people's group-level self-identification (Baumeister & Leary, 1995; Branscombe, Ellemers, Spears, & Doosje, 1999). Social group memberships not only contribute to people's self-concept but also give people the opportunity to create and maintain relationships with others (Baumeister & Leary, 1995; Tajfel & Turner, 1986). In turn, interpersonal relationships with ingroup members contribute to a sense of self (Andersen & Chen, 2002). Across a variety of other domains, the extant literature suggests threats to one's identity trigger

concerns about whether he or she belongs (Murphy, Steele, & Gross, 2007). Similarly, being denied membership in an identity-relevant group may threaten not only bicultural and biracial people's self-definition but also their feelings of connectedness with others (Baumeister & Leary, 1995).

Indeed, biculturals who experience more identity denial have reported feeling less connected to other members of their group than those who experienced less identity denial (Vargas & Stainback, 2016). Similarly, Asian/White biracial individuals have reported identifying with multiple groups, yet sometimes being excluded from monoracial groups, which reduced their sense of belonging (AhnAllen, Suvemoto, & Carter, 2006). Moreover, a broader literature on social belonging has demonstrated that the need to belong is universal, and can result in negative mental health outcomes such as lower life satisfaction if unmet (Baumeister & Leary, 1995). Given that individuals with membership in multiple groups are less prototypical members of each group, they may feel excluded by peers or family members (Castillo, Conoley, Brossart, & Quiros, 2007). Through these social pressures, bicultural and biracial people may be marginalized from their groups, reducing their feelings of social belonging.

Given this literature, we hypothesized that identity denial and questioning would have indirect effects on depressive symptoms and stress through social belonging. Specifically, we expected greater denial and questioning to be associated with lower feelings of social belonging, which would predict greater depressive symptoms and stress among both bicultural and biracial people. Here, we also asked participants for the frequency of denial and questioning experiences they have had in their lifetime, and to report who most often perpetrated these challenges rather than specifying denial from strangers.

Study 2

Participants

We recruited bicultural (N = 530) and biracial (N = 344) people online via Amazon Mechanical Turk (39%) and email listserves at a Northeastern university (61%) using the same criteria from Study 1. To avoid recruiting the same participants as in Study 1, we targeted emails to only first-year students who were not on campus during the previous recruitment. We aimed to recruit at least 285 participants to achieve a ratio of 15 participants for every parameter estimated (Kline, 2011). We finished data collection after 1 month.

In the bicultural sample, participants were excluded if they answered both attention check questions incorrectly (n = 18), did not identify as American (n = 30), or did not identify as bicultural (n = 13). These criteria left a final sample size of 469 bicultural people. The average age was 24.26 years, SD = 6.83 years, and the sample was 54% (n = 252)

female, though 25% (n=120) did not report gender. The sample was 70% Latino, 21% Asian, 8% White, and 2% Black. Most participants (53%) were citizens, and 37% were second-generation immigrants, though 25% (n=120) did not report generation status.

In the biracial sample, participants were excluded if they answered both attention check questions incorrectly (n = 9), did not identify as biracial (n = 8), or listed two minority backgrounds (n = 42), leaving a final sample of 286 participants.² The average age of this analytical sample was 35.40 years, SD = 13.75 years, and the sample was 75% (n = 213) female. The sample was 34% White Multiracial, 26% White Black, 21% White Asian, and 11% White Latino, and 9% White Native American. See supplemental material for additional information including identification strength and country of origin. After answering identity and demographic questions, participants completed the following measures in the order presented below.³

Measures

Participants responded to the same identity denial ($\alpha = .89$) and questioning, r(753) = .71, p < .001, items used in Study 1 on a scale from 1 (never) to 7 (always). However, in Study 2, participants were instructed to report how often they have had these experiences in their lifetime, and the items did not specify the perpetrators of denial (i.e., we did not instruct participants to think of strangers specifically as we did in Study 1). Participants next reported whether most of these experiences were from strangers, acquaintances, or close others.

Participants completed the same measures of identity autonomy ($\alpha=.84$), depressive symptoms ($\alpha=.86$), and stress ($\alpha=.87$) from Study 1. Because the Distance subscale of the identity integration measure used in Study 1 demonstrated low reliability (Tavakol & Dennick, 2011), we only included the Conflict subscale ($\alpha=.83$) in Study 2. Participants also completed a seven-item measure of belonging based on the Sense of Belonging Instrument (SOBI; Hagerty & Patusky, 1995). A sample item is "Sometimes I wonder if there is any place on earth that I really fit in." Participants responded using a scale of 1 (*strongly disagree*) to 7 (*strongly agree*) and the items were averaged ($\alpha=.89$). The results of confirmatory factor analyses on all the variables can be found in the supplemental material.

Results

Preliminary results. Nearly half (46%) of bicultural participants reported that denial and questioning experiences most often come from strangers, whereas 27% reported acquaintances as the perpetrators, and 27% reported close others as the perpetrators, suggesting we had only captured a subset of identity challenges in Study 1. Similarly, nearly half (n = 138, 48%) of biracial participants reported that most of their

Table 4. Correlations Between Study Varial	bles Separated by Sample for Study 2.
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	I	2	3	4	5	6	7
I. Identity denial	_	.49***	13*	.39***	21***	.13*	.08
2. Identity questioning	.29***	_	04	.29***	11	.06	.01
3. Identity autonomy	I6***	.03	_	36****	.19**	13*	14*
4. Integration conflict	.29***	.11*	37****	_	50***	.32***	.28***
5. Social belonging	19***	11*	.23***	32***		63****	64***
6. Stress	.18***	.05	- .26***	.26***	62***	_	.80**
7. Depressive symptomatology	.20***	.06	27****	.32***	. 65***	.77***	_

Note. Correlations above the diagonal were calculated among the biracial sample, and those below the diagonal among the bicultural sample. *p < .05. **p < .01. **p < .001.

Table 5. Independent Samples t Tests Between Bicultural and Biracial Samples.

	Bicultural	Biracial			
Variable	M (SD)	M (SD)	Т	D [95% CI]	Range
Identity denial	2.45 (1.43)	3.79 (1.77)	-II.39***	0.85 [0.70, 1.01]	1-7
Identity questioning	5.60 (1.48)	5.03 (1.59)	5.01***	0.38 [0.23, 0.52]	1-7
Identity autonomy	5.65 (1.12)	5.31 (1.37)	3.58***	0.27 [0.12, 0.42]	1-7
Identity conflict	2.60 (1.14)	2.71 (1.09)	-1.23	0.09 [–0.06, 0.24]	1-5
Belonging	4.64 (1.50)	3.87 (1.44)	6.57***	0.52 [0.36, 0.68]	1-7
Depressive symptoms	1.96 (0.59)	2.28 (0.68)	-6.59***	0.51 [0.35, 0.66]	1-4
Stress	2.86 (0.73)	3.17 (0.75)	−5.35 ***	0.42 [0.26, 0.57]	1-5

Note. CI = confidence interval. p < .05; **p < .01; ***p < .001.

identity denial and questioning experiences were perpetrated by strangers, whereas 30% (n=86) reported acquaintances and 22% (n=62) reported close others as the main perpetrators.

See Table 4 for correlations between the key variables. Moreover, there were mean-level differences between the samples on the key variables (see Table 5). Consistent with Study 1, bicultural participants reported less frequent identity denial and more frequent identity questioning experiences than biracial participants. Bicultural participants also reported higher autonomy, higher belonging, and lower depressive symptoms and stress than biracial participants.

Path analysis. Based on Study 1 results indicating the hypothesized model fit best, the same initial model was tested in Study 2 with the addition of social belonging as a mediator.⁴ Both the restrained model, $\chi^2(20, N=647)=19.90, p=.464$, RMSEA = 0.00, 90% CI = [0.00, 0.05], CFI = 1.00, SRMR = 0.03, AIC = 12,514.95, and the unrestrained model, $\chi^2(8, N=647)=3.31, p=.914$, RMSEA = 0.00, 90% CI = [0.00, 0.03], CFI = 1.00, SRMR = 0.01, AIC = 12,522.35, indicated good fit. The chi-square difference test was not significant, suggesting that the model was not moderated by sample, $\chi^2(12, N=647)=16.59, p=.166$. Like Study 1, the model fit was not moderated by sample in Study 2. The model fit both samples equally well (see Figure 3 for the unstandardized path coefficients and

supplemental material for standardized coefficients of the unrestrained model).

Identity denial and questioning were positively correlated with each other. As predicted, greater identity denial was associated with lower autonomy, greater integration conflict, and lower belonging. Identity questioning was not significantly associated with autonomy, conflict, or belonging. Autonomy and integration conflict were not related to depressive symptoms and stress, though greater belonging was associated with lower depressive symptoms and stress. Depressive symptoms and stress were strongly positively correlated.

Mediation analyses. Using 5,000 bootstrapped resamples, we tested autonomy, integration conflict, and social belonging as parallel mediators of the association between identity denial and questioning and stress and depressive symptoms. Likelihood ratio tests indicated that the indirect effects did not significantly differ by sample, $p_S > .132$, with one exception. For bicultural participants, the relationship between identity denial and depressive symptoms was significantly mediated through integration conflict, $\beta = 0.02$, 95% CI = [0.002, 0.03]. This indirect effect was not significant for biracial participants, $\beta = -0.01$, 95% CI = [-0.02, 0.01]. The remaining indirect effects did not vary by sample. The relationship between identity denial and depressive symptoms was significantly mediated through social belonging,

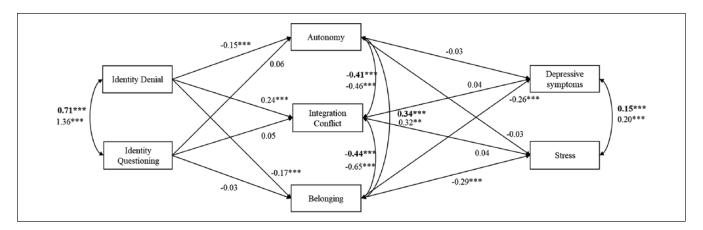


Figure 3. Unstandardized path coefficients for the restrained model in Study 2. *Note.* Bolded coefficients represent bicultural sample. *p < .05. **p < .01. ***p < .001.

 $\beta=0.10,95\%$ CI = [0.03, 0.17], but not through autonomy, $\beta=0.02,95\%$ CI = [-0.002, 0.04]. Participants who experienced greater denial reported more depressive symptoms, which was associated with reduced belonging, but not with lower autonomy. Similarly, the relationship between identity denial and stress was not mediated through integration conflict, $\beta=0.02,95\%$ CI = [-0.01, 0.05], or autonomy, $\beta=0.02,95\%$ CI = [-0.001, 0.04]. However, it was mediated through social belonging, $\beta=0.10,95\%$ CI = [0.03, 0.17]. There was no significant indirect effect of identity questioning on depressive symptoms or stress.

Summary. Study 2 replicated the results of Study 1, in that, bicultural and biracial participants who reported more identity denial also reported less freedom in choosing their own identity and perceived greater conflict between their identities. This study also extended the model through the inclusion of social belonging as a mediator. The results support social belonging as a mediator among both samples. Specifically, for the biracial sample, social belonging was the only significant mediator, indicating that denial experiences are linked to lower psychological health primarily through thwarted social belonging. However, for biculturals, integration conflict was also a significant mediator of the association between denial and mental health outcomes. It is possible that integration conflict plays a larger role for biculturals compared with biracials, but social belonging appears to be especially relevant for the well-being of both groups.

General Discussion

Across two studies with large samples of understudied populations, we present the first test of the role that identity denial and questioning play for various outcomes among dual-identifying populations. Converging evidence across these high-powered studies and two distinct populations

demonstrates that the association between identity denial and questioning and mental health outcomes among bicultural and biracial people was associated with changes in people's identity integration and social belonging. In support of previous work with both populations, bicultural and biracial people who experienced greater challenges to their dual identity reported greater depressive symptoms and stress (Huynh et al., 2011; Sanchez, 2010). Moreover, models testing parallel mediation through autonomy, integration conflict, and social belonging fit the data well for both samples, though there was one difference between samples in the relative strength of integration conflict.

Identity questioning was not associated with the downstream variables. Although identity denial is a blatant form of prejudice, questioning may not always be perceived as a challenge to one's identity but could be seen as a genuine attempt to learn about others. Given this ambiguity, it may operate differently than denial. For example, minorities often use cues about the perpetrator or the situation to discern whether ambiguous feedback is prejudiced (Ruggiero & Taylor, 1995). It is possible that additional context clues allow bicultural and biracial people to interpret identity questioning experiences as nonthreatening to their identities. Furthermore, because questioning is more ambiguous, it may influence psychological well-being through different mechanisms, such as rumination. For example, women who experienced a subtler gender threat through benevolent sexism reported more intrusive thoughts compared with women who experienced a direct gender threat (Dardenne, Dumont, & Bollier, 2007). Thus, additional work should explore the boundary effects stemming from identity questioning. Moreover, including a more direct challenge (identity denial) in the model simultaneously may have obscured the effects of questioning. The strong correlations between denial and questioning found in both samples help support this notion. Overall, these results indicate that experiencing challenges to

their dual identity in the form of identity denial were associated with bicultural and biracial people's lower sense of freedom in choosing their own identity, decreased perception of their identities as harmonious, and decreased sense of social belonging. Through these processes, identity denial was also associated with increased depressive symptoms and stress, which we summarize in more detail below.

Autonomy

More frequent experiences of being told to identify differently were associated with lower feelings of autonomy in choosing an identity. This is consistent with self-determination theory, which suggests that a lack of choice promotes feelings of an external locus of control, which undermines feelings of autonomy and associated positive outcomes such as intrinsic motivation (Ryan & Deci, 2000). The present results indicate that undermining autonomy in selecting one's identity similarly has negative psychological consequences.

Although past work has found that forcing multiracial people to choose only one identity led to a decreased sense of agency (Sanchez, 2010), the mediation models suggest that variations in felt autonomy do not account for the association between identity denial and psychological outcomes. Although autonomy may be an important factor in psychological health (Deci & Ryan, 2002), identity autonomy appears not to influence health above and beyond feelings of acceptance. Instead, identity autonomy may predict or moderate whether bicultural or biracial people come to identify in ways that challenge societal norms. Common conceptualizations of race as a biological construct reduce the perceived overlap between different racial groups, creating frequent forced-choice scenarios for biracials where they must choose only one race to identify with, or be told which they should choose (Kang et al., 2015; Sanchez et al., 2014). Thus, identity autonomy may determine long-term patterns of identification or short-term identity-related affect and behaviors. Future research should explore these possibilities.

Identity Integration

In Study 1, the association between denial and mental health outcomes was mediated by greater perceived conflict between one's identities. These results support past work, which has demonstrated that identity integration is not merely a fixed trait but may be influenced by social contexts (Cheng & Lee, 2013). Because they belong to two groups, bicultural and biracial people must navigate between different social norms specific to each group (Hirsch & Kang, 2016). When supported in both identities, they may experience less conflict and perceive their identities as compatible and integrated. However, repeated experiences of denial wherein they are pressured to select one identity over another may highlight the differing norms of the group. This could be associated with bicultural and biracial people seeing their

identities as more conflicting, which may ultimately harm their mental well-being. This is consistent with past work, which suggests that identity integration may be influenced by the valence of previous experiences managing multiple identities (Cheng & Lee, 2013). In Study 2, integration conflict was only a significant mediator for the bicultural sample but not the biracial sample. For biracials, integration conflict may have little relationship to depression and stress when belonging needs are met. However, it is possible that identity integration has consequences for other identity-related outcomes such as anticipated stigma or identity-related choices (e.g., romantic partners, cultural practices). For biculturals, being denied an American identity may underscore the differing norms of their cultural groups and be associated with seeing their identity as more conflicted. Future work should further explore this by testing the ability of integration-promoting interventions to buffer against the negative effects of identity denial (see Shih, Sanchez, & Ho, 2010).

Social Belonging

Study 2 tested an extended model that also included social belonging as a mediator. For both bicultural and biracial participants, social belonging significantly mediated the association between denial and well-being. Consistent with past theorizing, which has established social belonging as a fundamental human need, the negative effects of identity denial were largely due to a lower sense of belonging (Baumeister & Leary, 1995). Given that belonging to multiple groups is a key component of their dual identity, a sense of belonging appears to be especially important in predicting bicultural and biracial people's mental health outcomes. Both bicultural and biracial identity development models highlight the need to belong and the threat of cultural homelessness when these populations are marginalized (Vivero & Jenkins, 1999). The results of this model suggest that being denied an important identity may lower feelings of social belonging similarly for people with dual identities. However, belonging may be an especially important factor for biracials, because including it in the model obscured other mediation effects. This is consistent with past work, which suggests that biracials may be excluded from both their racial groups (Root, 1996). However, given that other work suggests biracials are still well adjusted (Shih & Sanchez, 2005), social belonging may be a key component to maintaining well-being. Indeed, biracials value being accepted and validated by others as biracial (Remedios & Chasteen, 2013). Thus, because they are at risk of rejection, biracials may be especially attuned to social rejection and benefit from social belonging.

Limitations and Future Directions

Despite its strengths, aspects of the study design limit the conclusions. Future work should employ experimental methodologies to better understand the causal effect of identity challenges on well-being. Future tests may also focus on the identities of the denial perpetrators and the types of challenges. For example, the type of denial (e.g., denial of White, American, or minority identity) and the group membership of the person who perpetrates it may vary in frequency and effect for specific bicultural or biracial groups. It is possible that White Black biracial people experience more frequent White identity denial due to norms of hypodescent (Chen & Hamilton, 2012), whereas White Native American people experience more minority identity denial due to blood quantum laws that require a certain amount of ancestry for tribal membership (Wilson, 1992). In addition, denial experiences may be more threatening if perpetrated by a minority rather than majority group member, as it may represent not only an interpersonal betrayal but also a group-level betrayal (Huynh et al., 2011). According to cultural betrayal trauma theory, cultural minorities provide support for group members from sociocultural traumas, thereby creating a heightened vulnerability for within-group betrayals because they implicate intragroup trust (Gómez, 2017).

It is also important to note that Study 2 suggests identity denial experiences are more often perpetrated by strangers rather than close others and friends, though a nontrivial percentage of identity denial comes from close others (~20%). Because social threats from close others may be more impactful than those from strangers (Uskul & Over, 2014), identity denial by friends or close others may have more severe consequences. In addition, the current data do not allow for the differentiation of who denial versus questioning is from, as participants were asked about both simultaneously. Because questioning is a less direct challenge to identity, it may be perpetuated more often by close others, whereas denial experiences may be perpetuated by strangers. Therefore, future work may differentiate the perpetrator and type of identity challenge. Moreover, future work should include additional items to measure identity questioning to improve the psychometric properties of this scale.

The present work also focused exclusively on bicultural and biracial people who belong to the majority cultural or racial group in U.S. society. We would expect the results to be similar for other samples of bicultural and biracial people in the United States, but it is important for future work to directly test whether similar processes relate denial and questioning to well-being for biculturals outside the United States and people with two minority racial backgrounds. For example, it is possible that biracial people have different experiences of denial in countries such as South Africa where a colored mixed-race identity is considered an independent racial identity (Adhikari, 2017; Taylor, Roman, & Rule, 2011). This promising area of work would expand our current understanding beyond the most commonly studied demographics. Moreover, the mediators tested here are not exhaustive. Future models should also explore additional mediators of this relationship, including cultural attachment, strength of identification, or dialectical self-views.

Conclusion

In sum, the present studies advanced bicultural and biracial theory by providing an integrated model for members of either two cultural or racial groups. Although previous work has established the negative effects of identity denial and questioning, these studies extend our understanding of the process underlying these effects. The results identified significant predictors of psychological well-being, and mediators of these relationships. A key contribution of the present study is the inclusion of identity autonomy, identity integration, and social belonging as potential mediators between identity denial and mental health outcomes, as well as comparison between two dual-identity populations. Although the studies bridged the bicultural and biracial literatures for the first time, they also provide unique insight into identity processes that may be shared by other dual-identifying populations more broadly.

Given that previous work has identified the positive role of dual identities in promoting intergroup contact and social change (Glasford & Dovidio, 2011), it is important to validate and understand the experiences of dual-identity populations. With the increasing diversification of the United States, including sharp rises in the bicultural and biracial populations in particular, this research underscores the importance and timeliness of this work and highlights specific pathways that can improve the psychological health outcomes for individuals facing high levels of identity denial and exclusion.

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Notes

- Participants also completed measures of Intragroup Marginalization (modified from Castillo, Conoley, Brossart, & Quiros, 2007), public regard (modified from Luhtanen & Crocker, 1992), meta-essentialism (created by the authors), and Perceived Social Support (Zimet, Dahlem, Zimet, & Farley, 1988). These variables were not included in the model tested here, so we do not discuss them further.
- 2. In Study 1, we excluded participants who were born outside the United States from the biracial sample. Given the smaller sample size of biracial participants in Study 2, we retained foreign-born participants (n = 24) to maintain adequate power. The results are similar when these participants are excluded from the model.

- 3. Participants also completed the Vancouver index of acculturation (Ryder, Alden, & Paulhaus, 2000), the Theories of Prejudice Scale (Carr, Dweck, & Pauker, 2012), four items measuring vigilance toward identity denial experiences, and evaluated to what degree they perceived each of the identity denial and questioning items to be prejudice. Because these variables are not included in the model presented here, we do not discuss these variables further.
- 4. The results presented in the text utilized listwise deletion for missing data. The model fit equally well when we employed full information maximum likelihood estimation for missing values, $\chi^2(8, N = 755) = 3.97, p = .860, \text{RMSEA} = 0.00, 90\% \text{ CI} = [0.00, 0.03], \text{CFI} = 1.00, \text{SRMR} = 0.01.$

Supplemental Material

The online supplemental material is available at http://pspb.sage-pub.com/supplemental.

References

- Adhikari, M. (2017). Burdened by race: Coloured identities in Southern Africa. Cape Town, South Africa: UCT Press.
- AhnAllen, J. M., Suyemoto, K. L., & Carter, A. S. (2006). Relationship between physical appearance, sense of belonging and exclusion, and racial/ethnic self-identification among multiracial Japanese European Americans. *Cultural Diversity & Ethnic Minority Psychology*, 12, 673-686. doi:10.1037/1099-9809.12.4.673
- Andersen, S. M., & Chen, S. (2002). The relational self: An interpersonal social-cognitive theory. *Psychological Review*, 109, 619-645.
- Basilio, C. D., Knight, G. P., O'Donnell, M., Roosa, M. W., Gonzales, N. A., Umaña-Taylor, A. J., & Torres, M. (2014). The Mexican American Biculturalism Scale: Bicultural comfort, facility, and advantages for adolescents and adults. Psychological Assessment, 26, 539-554. doi:10.1037/a0035951
- Baumeister, R. F., & Leary, M. R. (1995). The need to belong: Desire for interpersonal attachments as a fundamental human motivation. *Psychological Bulletin*, 117, 497-529.
- Benet-Martínez, V., & Hariatos, J. (2005). Bicultural Identity Integration (BII): Components and psychosocial antecedents. *Journal of Personality*, 73, 1015-1049. doi:10.1111/j.1467-6494.2005.00337.x
- Benet-Martínez, V., Lee, F., & Leu, J. (2006). Biculturalism and cognitive complexity: Expertise in cultural representations. *Journal of Cross-Cultural Psychology*, *37*, 386-407.
- Branscombe, N. R., Ellemers, N., Spears, R., & Doosje, B. (1999).
 The context and content of social identity threat. In N. Ellemers,
 R. Spears, & B. Doosje (Eds.), Social identity: Context, commitment, content (pp. 35-58). Oxford, UK: Blackwell Science.
- Carr, P. B., Dweck, C. S., & Pauker, K. (2012). "Prejudiced" behavior without prejudice? Beliefs about the malleability of prejudice affect interracial interactions. *Journal of Personality* and Social Psychology, 103, 452-471.
- Castillo, L. G., Conoley, C. W., Brossart, D. F., & Quiros, A. E. (2007). Construction and validation of the Intragroup Marginalization Inventory. *Cultural Diversity & Ethnic Minority Psychology*, 13, 232-240. doi:10.1037/1099-9809.13.3.232
- Chen, J. M., & Hamilton, D. L. (2012). Natural ambiguities: Racial categorization of multiracial individuals. *Journal of*

- Experimental Social Psychology, 48, 152-164. doi:10.1016/j. jesp.2011.10.005
- Chen, S. X., Benet-Martínez, V., & Bond, M. H. (2008). Bicultural identity, bilingualism, and psychological adjustment in multicultural societies: Immigration-based and globalizationbased acculturation. *Journal of Personality*, 76, 803-837. doi:10.1111/j.1467-6494.2008.00505.x
- Cheng, C. Y., & Lee, F. (2009). Multiracial identity integration: Perceptions of conflict and distance among multiracial individuals. *Journal of Social Issues*, 65, 51-68. doi:10.1111/j.1540-4560.2008.01587.x
- Cheng, C. Y., & Lee, F. (2013). The malleability of Bicultural Identity Integration (BII). *Journal of Cross-Cultural Psychology*, 44, 1235-1240. doi:10.1177/0022022113490071
- Cheryan, S., & Monin, B. (2005). "Where are you really from?": Asian Americans and identity denial. *Journal of Personality and Social Psychology*, 89, 717-730. doi:10.1037/0022-3514.89.5.717
- Cohen, S., Kamarck, T., & Mermelstein, R. (1983). A global measure of perceived stress. *Journal of Health and Social Behavior*, 24, 385-396.
- Dardenne, B., Dumont, M., & Bollier, T. (2007). Insidious dangers of benevolent sexism: Consequences for women's performance. *Journal of Personality and Social Psychology*, 93, 764-779. doi:10.1037/0022-3514.93.5.764
- Deci, E. L., & Ryan, R. M. (2002). Overview of self-determination theory: An organismic dialectical perspective. In E. L. Deci & R. M. Ryan (Eds.), *Handbook of self-determination research* (pp. 3-33). Rochester, NY: The University of Rochester Press.
- Devos, T., & Banaji, M. R. (2005). American = White? Journal of Personality and Social Psychology, 88, 447-466. doi:10.1037/0022-3514.88.3.447
- Fabrigar, L. R., Wegener, D. T., MacCallum, R. C., & Strahan, E. J. (1999). Evaluating the use of exploratory factor analysis in psychological research. *Psychological Methods*, 4, 272-299.
- Franco, M. G., & Franco, S. A. (2015). Impact of identity invalidation for Black multiracial people: The importance of race of perpetrator. *Journal of Black Psychology*, 42, 530-548.
- Gaither, S. E., Pauker, K., Slepian, M. L., & Sommers, S. R. (2016). Social belonging motivates categorization of racially ambiguous faces. *Social Cognition*, 34, 97-118. doi:10.1521/ soco.2016.34.2.97
- Glasford, D. E., & Dovidio, J. F. (2011). E pluribus unum: Dual identity and minority group members' motivation to engage in contact, *as well as* social change. *Journal of Experimental Social Psychology*, *47*, 1021-1024.
- Gómez, J. M. (2017). Does gender matter? An exploratory study of cultural betrayal trauma and hallucinations in Latino undergraduates at a predominantly White university. *Journal* of *Interpersonal Violence*. Advance online publication. doi:10.1177/0886260517746942
- Hagerty, B. M., & Patusky, K. (1995). Developing a measure of sense of belonging. *Nursing Research*, 44, 9-13.
- Harris, D. R., & Sim, J. J. (2002). Who is multiracial? Assessing the complexity of lived race. *American Sociological Review*, 67, 614-627.
- Henson, R. K., & Roberts, J. K. (2006). Use of exploratory factor analysis in published research. *Educational and Psychological Measurement*, 66, 393-416. doi:10.1177/0013164405282485

- Hirsh, J. B., & Kang, S. K. (2016). Mechanisms of identity conflict: Uncertainty, anxiety, and the behavioral inhibition system. Personality and Social Psychology Review, 20, 223-244.
- Hong, Y. Y., Zhan, S., Morris, M. W., & Benet-Martínez, V. (2016). Multicultural identity processes. *Current Opinion in Psychology*, 8, 49-53. doi:10.1016/j.copsyc.2015.09.020
- Hu, L., & Bentler, P. M. (1999). Cutoff criteria for fit indexes in covariance structure analysis: Conventional criteria versus new alternatives. Structural Equation Modeling: A Multidisciplinary Journal, 6, 1-55.
- Huynh, Q.-L., Devos, T., & Smalarz, L. (2011). Perpetual foreigner in one's own land: Potential implications for identity and psychological adjustment. *Journal of Social & Clinical Psychology*, 30, 133-162. doi:10.1016/j.biotechadv.2011.08.021
- Kang, S. K., Plaks, J. E., & Remedios, J. D. (2015). Folk beliefs about genetic variation predict avoidance of biracial individuals. *Frontiers in Psychology*, 6, 1-11. doi:10.3389/ fpsyg.2015.00357
- Kline, R. B. (2011). Principles and practice of structural equation modeling (3rd ed.). New York, NY: Guilford Press.
- Luhtanen, R., & Crocker, J. (1992). A collective self-esteem scale: Self-evaluation of one's social identity. *Personality and Social Psychology Bulletin*, 18, 302-318.
- Marks, A. K., Szalacha, L. A., Lamarre, M., Boyd, M. J., & García Coll, C. (2007). Emerging ethnic identity and interethnic group social preferences in middle childhood: Findings from the Children of Immigrants Development in Context (CIDC) study. *International Journal of Behavioral Development*, 31, 501-513.
- Markus, H. (2008). Pride, prejudice, and ambivalence: Toward a unified theory of race and ethnicity. *American Psychologist*, 63, 651-670.
- McConnell, A. R. (2011). The multiple self-aspects framework: Self-concept representation and its implications. *Personality and Social Psychology Review*, 15, 3-27.
- Murphy, M. C., Steele, C. M., & Gross, J. J. (2007). Signaling threat: How situational cues affect women in math, science, and engineering settings. *Psychological Science*, *18*, 879-885.
- Muthén, L. K., & Muthén, B. O. (2010). 1998–2010 Mplus user's guide. Los Angeles, CA: Author.
- Nguyen, A., & Benet-Martínez, V. (2007). Biculturalism unpacked: Components, measurement, individual differences, and outcomes. Social & Personality Psychology Compass, 1, 101-114. doi:10.1111/j.1751-9004.2007.00029
- Radloff, L. S. (1977). The CES-D scale a self-report depression scale for research in the general population. *Applied Psychological Measurement*, 1, 385-401.
- Remedios, J. D., & Chasteen, A. L. (2013). Finally, someone who "gets" me! Multiracial people value others' accuracy about their race. *Cultural Diversity & Ethnic Minority Psychology*, 19, 453-460. doi:10.1037/a0032249
- Roccas, S., & Brewer, M. B. (2002). Social identity complexity. *Personality and Social Psychology Review*, 6, 88-106.
- Rockquemore, K. A., & Brunsma, D. L. (2002). Socially embedded identities: Theories, typologies, and processes of racial identity among Black/White biracials. *The Sociological Quarterly*, 43, 335-356.
- Rockquemore, K. A., Brunsma, D. L., & Delgado, D. J. (2009). Racing to theory or retheorizing race? Understanding the

- struggle to build a multiracial identity theory. *Journal of Social Issues*, 65, 13-34.
- Root, M. P. P. (1996). *The multiracial experience: Racial borders as the new frontier*. Thousand Oaks, CA: SAGE.
- Ruggiero, K. M., & Taylor, D. M. (1995). Coping with discrimination: How disadvantaged group members perceive the discrimination that confronts them. *Journal of Personality and Social Psychology*, 68, 826-838.
- Ryan, R. M., & Deci, E. L. (2000). Self-determination theory and the facilitation of intrinsic motivation, social development, and well-being. *American Psychologist*, 55, 68-78.
- Ryder, A. G., Alden, L. E., & Paulhus, D. L. (2000). Is acculturation unidimensional or bidimensional? A head-to-head comparison in the prediction of personality, self-identity, and adjustment. *Journal of Personality and Social Psychology*, 79, 49-65.
- Ryu, E. (2015). Multiple-group analysis approach to testing group difference in indirect effects. *Behavior Research Methods*, 47, 484-493. doi:10.3758/s13428-014-0485-8
- Sanchez, D. T. (2010). How do forced-choice dilemmas affect multiracial people? The role of identity autonomy and public regard in depressive symptoms. *Journal of Applied Social Psychology*, 40, 1657-1677. doi:10.1111/j.1559-1816.2010.00634.x
- Sanchez, D. T., Shih, M., & Wilton, L. S. (2014). Exploring the Identity Autonomy Perspective: An integrative theoretical approach to multicultural and multiracial identity. In V. Benet-Martínez & Y. Y. Hong (Eds.), *The handbook of multicultural identity: Basic and applied psychological perspectives* (pp. 139-159). New York, NY: Oxford University Press.
- Schwartz, S. J., Montgomery, M. J., & Briones, E. (2006). The role of identity in acculturation among immigrant people: Theoretical propositions, empirical questions, and applied recommendations. *Human Development*, 49, 1-30.
- Schwartz, S. J., Unger, J. B., Baezconde-Garbanati, L., Benet-Martinez, V., Meca, A., Zamboanga, B. L., & Szapocznik, J. (2015). Longitudinal trajectories of bicultural identity integration in recently immigrated Hispanic adolescents: Links with mental health and family functioning. *International Journal of Psychology*, 50, 440-450. doi:10.1002/ijop.12196
- Shih, M., & Sanchez, D. T. (2005). Perspectives and research on the positive and negative implications of having multiple racial identities. *Psychological Bulletin*, *131*, 569-591.
- Shih, M., Sanchez, D. T., & Ho, G. C. (2010). Costs and benefits of switching among multiple social identities. In R. J. Crisp (Ed.), *The psychology of social and cultural diversity* (pp. 62-83). Oxford, UK: Wiley-Blackwell.
- Smith, L. E. (2014). Racial malleability and authenticity in multiracial well-being (Unpublished doctoral dissertation). University of Miami, FL.
- Stepanikova, I. (2010). Applying a status perspective to racial/ethnic misclassification: Implications for health. In S. R. Thye & E. J. Lawler (Eds.), *Advances in group processes* (pp. 159-183). Bingley, UK: Emerald Group.
- Tajfel, H., & Turner, J. (1986). The social identity theory of intergroup behavior. In S. Worchel & W. G. Austin (Eds.), *Psychology of intergroup relations* (pp. 7-24). Chicago, IL: Nelson-Hall.
- Tavakol, M., & Dennick, R. (2011). Making sense of Cronbach's alpha. *International Journal of Medical Education*, 2, 53-55. doi:10.5116/ijme.4dfb.8dfd

Taylor, J. M. (2015). Psychometric analysis of the ten-item perceived stress scale. *Psychological Assessment*, 27, 90-101. doi:10.1037/a0038100

- Taylor, J. M., Roman, N., & Rule, C. (2011, June). Coloured identity in post-apartheid South Africa: A study of the new experience of personhood. Talk presented at the 11th International Conference on Diversity in Organisations, Communities and Nations, Cape Town, South Africa.
- Townsend, S. S. M., Markus, H. R., & Bergsieker, H. B. (2009). My choice, your categories: The denial of multiracial identities. *Journal of Social Issues*, 65, 185-204. doi:10.1111/j.1540-4560.2008.01594.x
- Tran, A. G. T. T., Miyake, E. R., Martinez-Morales, V., & Csizmadia, A. (2016). "What are you?" Multiracial individuals' responses to racial identification inquiries. *Cultural Diversity & Ethnic Minority Psychology*, 22, 26-37. doi:10.1037/cdp0000031
- Uskul, A., & Over, H. (2014). Responses to social exclusion in cultural context: Evidence from farming and herding communities. *Journal of Personality and Social Psychology*, 106, 752-771. doi:10.1037/a0035810

- Vargas, N., & Stainback, K. (2016). Documenting contested racial identities among self-identified Latina/os, Asians, Blacks, and Whites. American Behavioral Scientist, 60, 442-464. doi:10.1177/0002764215613396
- Vivero, V. N., & Jenkins, S. R. (1999). Existential hazards of the multicultural individual: Defining and understanding "cultural homelessness." *Cultural Diversity & Ethnic Minority Psychology*, 5, 6-26. doi:10.1037/1099-9809.5.1.6
- Wang, J., Minervino, C., & Cheryan, S. (2013). Generational differences in vulnerability to identity denial: The role of group identification. *Group Processes & Intergroup Relations*, 16, 600-617. doi:10.1177/1368430212461963
- Wilson, T. (1992). Blood quantum: Native American mixed bloods. In M. P. P. Root (Ed.), *Racially mixed people in America* (pp. 108-125). Newbury Park, CA: SAGE.
- Zarate, M. E., Bhimji, F., & Reese, L. (2005). Ethnic identity and academic achievement among Latino/a adolescents. *Journal of Latinos and Education*, 4, 95-114.
- Zimet, G. D., Dahlem, N. W., Zimet, S. G., & Farley, G. K. (1988).
 The multidimensional scale of perceived social support.
 Journal of Personality Assessment, 52, 30-41.