Seeing Similarity or Distance?
Racial Identification Moderates Intergroup Perception After Biracial Exposure

Leigh Wilton,[1] Diana T. Sanchez,[1] and Lisa Giamo[2]

[1]Rutgers University, Piscataway, NJ, USA, [2]Simon Fraser University, Burnaby, NC, Canada

Abstract. Biracial individuals threaten the distinctiveness of racial groups because they have mixed-race ancestry, but recent findings suggest that exposure to biracial-labeled, racially ambiguous faces may positively influence intergroup perception by reducing essentialist thinking among Whites (Young, Sanchez, & Wilton, 2013). However, biracial exposure may not lead to positive intergroup perceptions for Whites who are highly racially identified and thus motivated to preserve the social distance between racial groups. We exposed Whites to racially ambiguous Asian/White biracial faces and measured the perceived similarity between Asians and Whites. We found that exposure to racially ambiguous, biracial-labeled targets may improve perceptions of intergroup similarity, but only for Whites who are less racially identified. Results are discussed in terms of motivated intergroup perception.

Keywords: biracial, racial identification, intergroup attitudes, racial ambiguity

Biracial individuals who have both White and minority ancestry (i.e., White/minority biracial individuals) are simultaneously members of both a White and minority racial group. However, research on the racial categorization of biracial targets reveals that such individuals are often excluded from the White group because of their minority ancestry. Instead, White/minority biracial targets are most often categorized according to the principle of hypodescent, in which individuals with any amount of minority ancestry are classified as such (Ho, Sidanius, Levin, & Banaji, 2011; Peery & Bodenhausen, 2008; Sanchez, Good, & Chavez, 2011). At the same time, biracial people, and especially those who have ambiguous racial phenotypes, challenge the ease with which race is perceived. For example, when given enough time to do so, perceivers tend to take extra time to racially categorize biracial faces because such categorizations require more thoughtful reflection (Peery & Bodenhausen, 2008). In addition, racially ambiguous faces are often categorized into the nontraditional racial category "multiracial" when this option is made available (Chen & Hamilton, 2012).

Beyond challenging categorization processes, racially ambiguous individuals who are identified as biracial may also shift perceivers' views about race and intergroup relations. Specifically, biracial-identified individuals may serve as reminders that distinctions between racial groups can be permeated, and thus cause individuals to perceive greater similarity between groups – an important precursor to positive changes in intergroup relations. In support of this notion, researchers recently demonstrated that exposure to racially ambiguous Black/White targets with biracial labels prompted Whites to perceive race as less inherent and

biologically-driven (i.e., less essentialized), whereas exposure to the same targets with monoracial labels prompted Whites to perceive race as more inherent and biologically-driven (i.e., more essentialized; Young, Sanchez, & Wilton, 2013). This reduction in essentialist thinking about race is important because researchers have demonstrated the pernicious effects of such beliefs on intergroup relations (e.g., Bastian & Haslam, 2006; Eberhardt, Dasgupta, & Banaszynski, 2003; Keller, 2005; Williams & Eberhardt, 2008; Yzerbyt, Corneille, & Estrada, 2001). However, biracial exposure may not uniformly improve intergroup relations as there may be important individual differences in perceivers' *racial identification* (i.e., the centrality of a person's racial group to his or her self-concept; Luhtanen & Crocker, 1992), and thus motivation to protect their ingroup, that would moderate such findings. The current study tests for the first time whether biracial exposure leads to greater intergroup similarity perceptions but only for those Whites who are lower in racial identification. We expected highly racially identified individuals to be particularly motivated to exclude biracial targets from the ingroup, and therefore unlikely to perceive similarities among racial groups after biracial exposure.

Motivated Perception of Racial Boundaries

Individuals form social groups based on the perceived similarities between themselves and other ingroup members.

Thus, a social group is a collection of individuals who view themselves as similar and as members of the same category (i.e., ingroup members). According to social identity theory (Tajfel & Turner, 1986), group members are motivated to maintain a positive social identity, which in turn motivates their social-perceptual processing of ingroup and outgroup members. For example, individuals favor ingroup members and (to a lesser extent) derogate outgroup members (for a review, see Hornsey, 2008). In addition, one's motivation to positively evaluate the ingroup leads each social group to attempt to differentiate themselves from other groups (Tajfel & Turner, 1986, see also, optimal distinctiveness, Brewer, 1991). Indeed, group membership must be sufficiently exclusive of others to ensure that distinctiveness and differentiation is felt by group members (Brewer, 1991).

Perceivers vary to the extent that they may or may not be motivated to protect the ingroup and guard against challenges to racial boundaries. The current study explores whether perceivers' racial identification motivates their willingness to perceive similarities between racial groups after biracial exposure. Racial identification is the centrality of a specific group to a person's self-concept (Luhtanen & Crocker, 1992; Turner, Hogg, Oakes, Reicher, & Wetherell, 1987). Compared with those who are weakly identified with the group, highly identified individuals are more likely to stay with the group and so they are more motivated to promote its interests (Zdaniuk & Levine, 2001) and preserve a positive group image (Crocker & Luhtanen, 1990). Thus, individuals who are highly group identified display more ingroup bias (Castano & Yzerbyt, 1998) and contempt toward ingroup members who reflect poorly on the group (e.g., black sheep effect; Castano, Paladino, Coull, & Yzerbyt, 2001; Coull, Yzerbyt, Castano, Paladino, & Leemans, 2001). In addition, those who are highly identified are more motivated to see their ingroup as cohesive, and so they perceive greater ingroup homogeneity (Castano & Yzerbyt, 1998; Doosje, Ellemers, & Spears, 1995; Kelly, 1989) and self-stereotype more (Spears, Doosje, & Ellemers, 1997) compared to those who are not.

Highly racially identified group members have been shown to be extremely selective and protective of their group through strategies such as social exclusion. For example, compared with those who were less highly racially identified, highly racially identified individuals took longer to categorize and subsequently accept unlabeled racially ambiguous faces as ingroup members, and categorized fewer of these targets as ingroup members (Castano et al., 2001; Knowles & Peng, 2005). Because Whites who are highly racially identified tend to exclude racially ambiguous people from their ingroup, they are unlikely to see biracial populations as blurring the boundaries between White and minority groups. Thus, exposure to biracial-labeled, ambiguous faces would be unlikely to shift their perceptions of the similarities between groups. However, Whites who are less racially identified should not be motivated to guard against the blurring of group boundaries. Therefore, we expected White perceivers who were less racially identified to evidence greater perceived intergroup similarity after exposure to biracial-labeled racially ambiguous faces.

The Current Study

The current study examined the joint roles of biracial labels and perceivers' levels of racial identification in the motivated perception of racial group boundaries. In order to examine Whites' perceptions of intergroup similarity, Whites were asked to rate the facial similarity of racially ambiguous faces (with biracial, Asian, or White labels) to White faces, and subsequently to report their broader intergroup perceptions about similarities between White and Asians. The self-reported beliefs about similarities between White and Asian groups served as the primary measure of intergroup perception because it was a broader measure of intergroup beliefs. We also measured perceived facial similarity because monoracial labels have been shown to particularly influence the perceived physical similarity of racially ambiguous and biracial faces (Eberhardt et al., 2003; Hilliar & Kemp, 2008; Levin & Banaji, 2006; MacLin & Malpass, 2001; Pauker et al., 2009). For example, Asian/White biracial faces with European names (e.g., David Smith) were seen as more European-looking than the same faces given Asian names (e.g., Tan Tze Siong; Hilliar & Kemp, 2008). Thus, we sought to examine if biracial labels may similarly affect the physical perception of ambiguous faces, and whether these judgments of physical similarity may in turn influence views about racial group similarities.

Consistent with prior work on essentialism and Black biracial exposure (Young et al., 2013), we predicted that biracial labels would challenge perception of racial boundaries between groups, such that Whites will view greater similarity between Asians and Whites after exposure to racially ambiguous Asian/White faces accompanied by biracial (vs. Asian or White monoracial) labels. Unique to this study, we further expected perceivers' levels of racial identification to moderate these effects, such that biracial exposure is most likely to increase intergroup similarity for those who are weakly identified as White. We also explored whether facial similarity would show a similar pattern such that weakly racially identified Whites would perceive the greatest similarity between ingroup faces and biracial (or other outgroup) faces.

Method

Participants

Seventy-one White participants (55% female) were recruited from the Introductory Psychology Subject Pool to participate in an experiment in exchange for course credit. Two participants who indicated that they had a

biracial White background were dropped from the analysis. The average age was 18.48 years (SD = 0.89).

Procedure

The present research employed a between-subjects design, with participants randomly assigned to one of three target label conditions: Biracial versus White versus Asian. As part of the requirements of subject pool participants, participants completed an online prescreen questionnaire which included their racial background, gender, age, and level of racial identification as measured by the racial centrality scale from Luhtanen and Crocker's (1992) collective self-esteem measure (see Materials below). White participants were invited to the lab to participate in a study of visual perception and their prescreen measures of racial identification were obtained.

Participants entered the lab in groups of one to five participants and were seated at individual computer workstations. After providing informed consent, participants were shown a total of four racially ambiguous morphed Asian/White faces (e.g., the target) and asked to rate the facial similarity between those target faces and an ingroup White photograph (e.g., the anchor). The target photo was accompanied by one of the three following labels: "Asian/White Biracial Male,[1] 20 years old" (Biracial label), "White Male, 20 years old" (White label), or "Asian Male, 20 years old" (Asian label). Participants were randomly assigned to one label condition and saw the same label accompanying each of the four target photographs. For example, participants in the biracial condition saw all four target faces with a biracial label. Anchor faces had no label, as pretests confirmed that they were seen as unambiguously White. For each target photo, participants were asked to rate the facial similarity (see Materials) between the target photo and one White photo that, unbeknownst to participants, was the photo used to create the facial morph. We used White faces that comprised the faces because they would partially resemble the morphed faces (see Figure 1, e.g., target and anchor faces). Following the facial similarity task, participants estimated the similarities between Asian and White groups (see Materials), and then they were thanked and fully debriefed.

Pretesting of Racially Ambiguous and White Faces

Using FantaMorph (Version 3; Abrosoft Co., Beijing, China) facial morphing software, we created 50% Asian and 50% White target photos from East Asian faces taken from university students who agreed to have their photograph taken and used in research and White faces taken from the Productive Aging Lab Face Database (Minear & Park, 2004). All photos were of male faces. Eleven White research assistants (72.7% female) served as raters and

ASIAN/WHITE BIRACIAL MALE, 20 YEARS OLD

1. How much does THE PERSON ABOVE look like the photo BELOW?

1 Not at all

2

3

4

5

6

7 Very much

Figure 1. The computer screen displaying the Asian/White Biracial photo morph (top) and the White ingroup photo anchor (bottom). This screenshot captures the Asian/White Biracial photo morph in the biracial label condition only. Only the label changed in the Asian and White conditions; the anchor (bottom) photo, obtained from the Minear and Park's (2004) Productive Aging Lab Face Database, question wording and placement, and age and gender of the target was never modified.

independently coded the attractiveness and racial ambiguity of a series of White and morphed Asian/White faces. White raters on average evaluated a subset of both the Asian/White facial morphs (M = 2.64, SD = 0.84) and the White faces (M = 2.75, SD = 0.65) used in the study as equally attractive on a scale from 1 (= *not at all attractive*) to 5 (= *very attractive*), $t(10)$ = 0.37, p = .72, *ns*. Moreover, raters were asked to indicate to what extent the faces looked White on scale from 1 (= *not at all*) to 5 (= *very much*). White participants viewed White faces as unambiguously

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[1] Pilot testing revealed that participants subsume "biracial" labels without specific remarks about ethnicity (e.g., Asian/White Biracial Male vs. Biracial Male) into Latino racial categories. Thus, we had to indicate the specific ethnicity in the biracial label.

White ($M = 4.95$, $SD = 0.12$) and viewed morphed Asian/White faces as somewhat White ($M = 2.77$, $SD = 0.68$), but less so than the White faces, $t(10) = 9.61$, $p < .001$. Raters were also asked to indicate the extent to which Asian/White faces were viewed as Asian on a scale from 1 (= *not at all*) to 5 (= *very much*). Morphed Asian/White photos were viewed as equally Asian ($M = 3.43$; $SD = 0.64$) and White, $t(10) = 1.72$, $p = .12$, *ns*, with Asian and White likeness at the midpoint of the 5-point scale. Thus, the Asian/White photos were perceived as equally Asian and White and therefore ambiguous in racial group membership, while the White photos were seen as unambiguously White. Moreover, we have no concerns that attractiveness of the photos contributed to the results.

Materials

Collective Self-Esteem – Racial Centrality Scale

To assess racial identification, we used the four-item racial centrality subscale of Luhtanen and Crocker's (1992) collective self-esteem measure. Participants were asked their level of agreement with the four items on a 1 (= *strongly disagree*) to 7 (= *strongly agree*) scale ($\alpha = .80$). An example item is, "The racial group I belong to is an important reflection on who I am."

Perceived Intergroup Similarity

Participants indicated how similar Asians and Whites were in terms of attitudes, beliefs, and behaviors on a 1 (= *not at all similar*) to 6 (= *very similar*) scale with three items ($\alpha = .81$). Higher levels indicate greater perceived similarity (less distance) between Asians and Whites.

Perceived Facial Similarity Ratings

Participants rated the extent to which the four targets and four ingroup faces resembled one another on a scale from 1 (= *not at all*) to 7 (= *very much*) in four separate ratings. Ratings were consolidated into an overall facial similarities measure ($\alpha = .64$).

Results

We tested whether racial identification moderated responses to biracial-labeled targets using multiple moderated regression. To do so, we followed the procedures outlined in Aiken & West (1991) and first created two dummy coded variables (named Biracial label and Asian label) to represent the label conditions using the White label as the referent group. Then, we standardized racial identification and created two interaction terms between racial identification and the two condition variables (i.e., Biracial label ×

Racial identification; Asian label × Racial identification). Finally, we separately regressed the intergroup similarity and the facial similarity perception variables on racial identification, Biracial label (0 = White, 1 = Biracial label), Asian label (0 = White, 1 = Asian label), and the two two-way interactions between Biracial label × Racial identification and Asian label × Racial identification. Participant gender (0 = female, 1 = male) was included as a covariate in the intergroup perception analyses because preliminary analysis suggested that men reported greater similarity between Whites and Asians ($\beta = .25$, $p = .049$). The results for each variable are reported below.

Perceived Intergroup Similarity

There was a main effect of biracial label condition such that those who viewed ambiguous targets with a Biracial label also reported greater intergroup similarity between Asian and Whites ($\beta = .32$, $p = .03$; see Figure 2). However, this effect was moderated by racial identification ($\beta = -.42$, $p = .03$; see Figure 3). As expected, greater racial identification was associated with lower intergroup similarity ratings only in the Biracial ($\beta = -.58$, $p = .003$) label condition, though the effect appeared to be largely driven by weakly identified Whites showing greater intergroup similarity perception after exposure to racially ambiguous faces with biracial labels. No other significant interactions were found in the main regression analyses (all other ps > .41).

Perceived Facial Similarity

There was a significant main effect of biracial label condition such that biracial-labeled faces were seen as less similar to ingroup faces ($\beta = -.30$, $p = .03$; See Figure 4). Moreover, Asian labeled faces were also seen as significantly less similar to ingroup faces ($\beta = -.34$, $p = .02$). Again, the comparison group was identical faces that only differed because they had White labels. Thus, White labeled faces were across the board seen as more similar
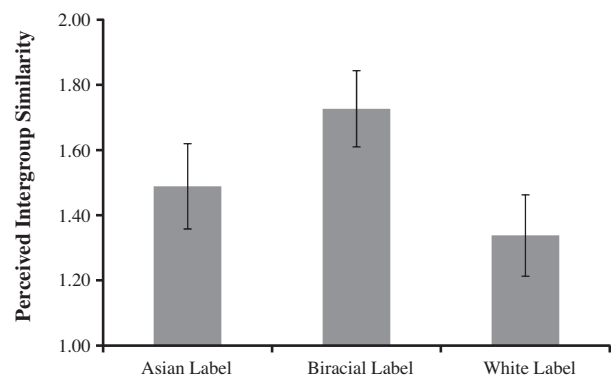

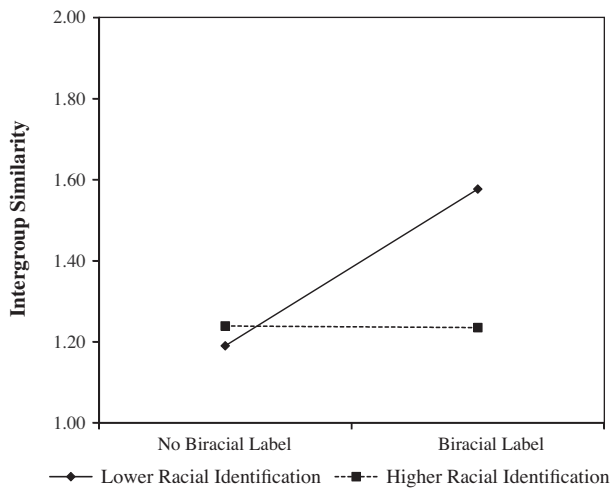*Figure 2.* Perceived intergroup similarity ratings as a function of racial label.

Figure 3. Perceived intergroup similarity ratings as a function of racial label and racial identification.
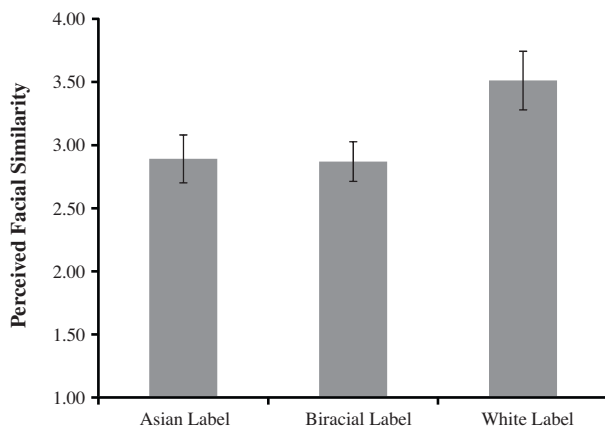

Figure 4. Perceived facial similarity to ingroup faces as a function of racial label.

to the ingroup, even though the faces were identical in all other regards. No other significant main effects or interactions with racial identification were found (all other ps > .30).

Discussion

The present study examined the role of the target's biracial or monoracial (White or Asian) label and perceivers' levels of racial identification on the motivated perception of racial boundaries. As expected, we found that Whites who were exposed to racially ambiguous Asian/White faces subsequently perceived the least distance between racial groups when such faces were labeled as biracial as compared to Asian or White. Results further demonstrated that perceiv-

ers' levels of racial identification moderated these effects such that Whites who were lower in racial identification were more likely to report greater intergroup similarity after exposure to biracial-labeled ambiguous faces compared to Whites who were higher in racial identification. We also found that Whites attended to racial labels in their visual perception of faces, as White labeled faces were seen as more similar to the ingroup than biracial and Asian labels. However, we did not find compelling evidence that racial identification moderated their responses to such labels. This suggests that racial identification does not influence the reading of faces, but rather primarily influences the broader conclusions drawn about intergroup relationships. Together, the data suggest that biracial labels indeed challenge perception of racial boundaries between groups, and highlight the important role of biracial identity, as construed via racial labels, and racial identification in the social-perceptual processing of racial groups and ambiguous faces.

Most significantly, our research reveals that perception of racially ambiguous, biracial-labeled faces may extend to intragroup judgments that guide individuals' perceptions of the social distance between racial groups. Prior work on race essentialism suggests that perceiving broad and immutable divisions between racial groups has negative impacts on intergroup relations, including increased stereotype use and reduced interest in interacting with racial minorities (e.g., Eberhardt et al., 2003; Keller, 2005; Williams & Eberhardt, 2008). Other research suggests that focusing on common identities or goals can reduce prejudice and discrimination (e.g., Common Ingroup Identity Model; Gaertner & Dovidio, 2000). Our finding that Whites' perceptions of the distances between groups are reduced after exposure to biracial-labeled, racially ambiguous faces suggests that social contexts that encourage and promote biracial labels have the potential to improve intragroup relations by reinforcing the commonalities among groups. For example, organizations that allow multiracial or biracial identifications may increase the number of individuals who label themselves as multiracial or biracial. Moreover, through interactions with monoracial individuals, those multiracial or biracial individuals who self-identify as such may encourage others to perceive greater similarities among groups. Although speculative in scope at this point, this idea is bolstered by research that touts the ability of multiracial populations to bridge racial gaps and thus ameliorate racial tensions (e.g., Daniel, 2002; Nakashima, 1992; Spencer, 2004; for a review, see Telles & Sue, 2009), or that demonstrates the positive impacts of diversity on intergroup relations (e.g., Antonio et al., 2004; Gurin, Dey, Hurtado, & Gurin, 2002; Sommers, 2006). Future research should examine this notion using research methods that enable real, naturalistic exposure to racially ambiguous individuals who identify as biracial, such as laboratory interactions or roommate studies.

At the same time, we urge cautious interpretation of intergroup similarity results observed in our research. Indeed, while it is the case that exposure to biracial labels increased the perceived similarities between racial groups, participants still viewed Asian and White racial groups as

fundamentally dissimilar in attitudes, beliefs, and behaviors, even after exposure to biracial labels, as evidenced by their low ratings of similarity across the board. Additionally, the positive effect of biracial exposure on intergroup similarity perceptions may only be observed for those low in racial identification. Moreover, the effect does not necessarily mean that perceivers would view biracial individuals or populations that are labeled or otherwise identified as biracial as full ingroup members, but rather that the two constituent racial groups are similar. Interestingly, Whites also visually process racially ambiguous faces by attending to labels regardless of their level of racial identification, but their judgments about intergroup relations operate distinctly. Future research should explore what social cognitive processes allow weakly identified Whites to show more positive intergroup attitudes. We also encourage research to seek to uncover the psychological mechanisms that support perceptions of intergroup similarity. For example, this research could examine whether these processes were mediated by either (1) the extent to which an individual experienced his or her racial ingroup as threatened by biracial identity or (2) an individual's motivation to exclude dissimilar others.

Thus, further work is needed to examine how and when exposure to biracial-labeled racially ambiguous faces impacts intergroup judgments. Future research should explore how these processes operate for perceptions of White/Minority biracial targets of other minority backgrounds (e.g., White/Black, White/Latino targets). Given that White perceivers who were exposed to biracial-labeled Black/White targets have been shown to reduce their essentialist thinking about race, whereas those who were exposed to the same monoracial-labeled targets showed increases in their essentialist beliefs, it is likely that the effects demonstrated in the current study would be replicated (and perhaps amplified) if tested using Black/White biracial targets (Young et al., 2013). Moreover, we suggest that the present research may be a more conservative examination of the effect of biracial label on perceptual and intergroup judgments. Because individuals with higher levels of racial identification are more likely to exclude low status group members, they should be less likely to exclude Asians, who as the "model minority" are seen as a high-status outgroup (i.e., competent and intelligent; Ho & Jackson, 2001; Lin, Kwan, Cheung, & Fiske, 2005). Future research should also explore how perceivers view biracial individuals who have two minority ancestries, as well as whether similar social-perceptual processes are involved for non-White perceivers. In particular, research should explore whether exposure to biracial-labeled Asian/White faces would similarly increase the perceived similarities between racial groups for Asian perceivers, and whether this effect would also be modified by racial identification.

Additionally, we only used male photographs in this research in order to isolate effects for racial label, which we recognize restricts the generalizability of the observed effects to other gender categories. Prior research on deliberate biracial categorization and perception has largely focused on male biracial targets (e.g., Sanchez et al., 2011) and has yet to disentangle the effects of gender and race for biracial targets. However, recent research suggests that race is gendered and has important effects for categorization processes (Johnson, Freeman, & Pauker, 2012), suggesting that there are varying degrees of overlap between certain racial categories and gender stereotypes. If we included both male and female targets, inconsistencies between stereotype content for race and gender may have influenced processing. We recommend that future research examine the same issues of racial ambiguity, racial label, and racial identification using female targets.

Conclusion

Because they are members of two racial groups, biracial individuals, and those of minority and White ancestry in particular, provide a unique opportunity to investigate the factors that motivate individuals' perceptions of the similarities and differences between racial groups. Such findings have important consequences for both monoracial and multiracial populations, as well as intergroup relations, yet biracial individuals remain among the most understudied minorities in social psychology (Shih & Sanchez, 2005, 2009). By demonstrating a social context under which biracial identity interacts with perceivers' levels of racial identification to motivate the perceived similarities between racial groups, this research extends the scant existing empirical research on biracial populations, as well as contributes to the racial identification and intergroup literatures.

Acknowledgments

References

Aiken, L. S., & West, S. G. (1991). *Multiple regression: Testing and interpreting interactions*. Newbury Park, CA: Sage.

Antonio, A. L., Chang, M. J., Hakuta, K., Kenny, D. A., Levin, S. L., & Milem, J. F. (2004). Effects of racial diversity on complex thinking in college students. *Psychological Science, 15*, 507–510.

Bastian, B., & Haslam, N. (2006). Psychological essentialism and stereotype endorsement. *Journal of Experimental Social Psychology, 42*, 228–235.

Brewer, M. B. (1991). The social self: On being the same and different at the same time. *Personality and Social Psychology Bulletin, 17*, 475–482.

Castano, E., Paladino, M. P., Coull, A., & Yzerbyt, V. Y. (2001). Protecting the ingroup stereotype: Ingroup identification and the management of deviant ingroup members. *British Journal of Social Psychology, 41*, 365–385.

Castano, E., & Yzerbyt, V. Y. (1998). The high and lows of group homogeneity. *Behavioural Processes, 42*, 219–238.

Chen, J. M., & Hamilton, D. L. (2012). Natural ambiguities: Racial categorization of multiracial individuals. *Journal of Experimental Social Psychology, 48*, 152–164.

Coull, A., Yzerbyt, V. Y., Castano, E., Paladino, M. P., & Leemans, V. (2001). Protecting the ingroup: Motivated allocation of cognitive resources in the presence of threatening ingroup members. *Group Processes and Intergroup Relations, 4*, 327–339.

Crocker, J., & Luhtanen, B. (1990). Collective self-esteem and ingroup bias. *Journal of Personality and Social Psychology, 58*, 60–67.

Daniel, G. R. (2002). *More than Black? Multiracial identity and the new racial order.* Philadelphia, PA: Temple University Press.

Doosje, B., Ellemers, N., & Spears, R. (1995). Perceived intragroup variability as a function of group status and identification. *Journal of Experimental Social Psychology, 31*, 410–436.

Eberhardt, J. L., Dasgupta, N., & Banaszynski, T. L. (2003). Believing is seeing: The effects of racial labels and implicit beliefs on face perception. *Personality and Social Psychology Bulletin, 29*, 360–370.

FantaMorph (Version 3). (2010). Beijing, China: Abrosoft [Computer Software].

Gaertner, S. L., & Dovidio, J. F. (2000). *Reducing intergroup bias: The Common Ingroup Identity Model.* Philadelphia, PA: The Psychology Press.

Gurin, P., Dey, E. L., Hurtado, S., & Gurin, G. (2002). Diversity and higher education: Theory and impact on educational outcomes. *Harvard Educational Review, 72*, 330–366.

Hilliar, K. F., & Kemp, R. I. (2008). Barack Obama or Barry Dunham? The appearance of multiracial faces is affected by the names assigned to them. *Perception, 37*, 1605–1608.

Ho, C., & Jackson, J. W. (2001). Attitudes toward Asian Americans: Theory and measurement. *Journal of Applied Social Psychology, 31*, 1553–1581.

Ho, A. K., Sidanius, J., Levin, D. T., & Banaji, M. R. (2011). Evidence for hypodescent and racial hierarchy in the categorization and perception of biracial individuals. *Journal of Personality and Social Psychology, 100*, 492–506.

Hornsey, M. J. (2008). Social Identity Theory and Self-categorization Theory: A historical review. *Social and Personality Psychology Compass, 2*, 204–222.

Johnson, K. L., Freeman, J., & Pauker, K. (2012). Race is gendered: How covarying phenotypes and stereotypes bias sex categorization. *Journal of Personality and Social Psychology, 102*, 116–131.

Keller, J. (2005). In genes we trust: The biological component of psychological essentialism and its relationship to mechanisms of motivated social cognition. *Journal of Personality and Social Psychology, 88*, 686–702.

Kelly, C. (1989). Political identity and perceived intragroup homogeneity. *British Journal of Social Psychology, 28*, 239–250.

Knowles, E. D., & Peng, K. (2005). White selves: Conceptualizing and measuring a dominant-group identity. *Journal of Personality and Social Psychology, 89*, 223–241.

Levin, D. T., & Banaji, M. R. (2006). Distortions in the perceived lightness of faces: The role of race categories. *Journal of Experimental Psychology: General, 135*, 501–512.

Lin, M. H., Kwan, V. S. Y., Cheung, A., & Fiske, S. T. (2005). Stereotype Content Model explains prejudice for an envied outgroup: Scale of anti-Asian American stereotypes. *Personality and Social Psychology Bulletin, 31*, 34–47.

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.

MacLin, O. H., & Malpass, R. S. (2001). Racial categorization of faces: The ambiguous race face effect. *Psychology, Public Policy, and Law, 7*, 98–118.

Minear, M., & Park, D. C. (2004). A lifespan database of adult facial stimuli. *Behavior Research Methods, Instruments, & Computers, 36*, 630–633.

Nakashima, C. L. (1992). An invisible monster: The creation and denial of racially mixed people in America. In M. P. P. Root (Ed.), *Racially mixed people in America* (pp. 162–180). Newbury Park, CA: Sage.

Pauker, K., Weisbuch, M., Ambady, N., Sommers, S. R., Adams, R. B. Jr., & Ivcevic, Z. (2009). Not so Black and White: Memory for ambiguous group members. *Journal of Personality and Social Psychology, 96*, 795–810.

Peery, D., & Bodenhausen, G. V. (2008). Black + White = Black. Hypodescent in reflexive categorization of racially ambiguous faces. *Psychological Science, 19*, 973–977.

Sanchez, D. T., Good, J. J., & Chavez, G. (2011). Blood quantum and perceptions of black/white biracial targets: The Black ancestry prototype model of Affirmative Action. *Personality and Social Psychology Bulletin, 37*, 3–14.

Shih, M. J., & 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. (2009). When race becomes more complex: Towards understanding the landscape of multiracial identity and experiences. *Journal of Social Issues, 65*, 1–11.

Sommers, S. R. (2006). On racial diversity and group decision-making: Identifying multiple effects of racial composition on jury deliberations. *Journal of Personality and Social Psychology, 90*, 597–612.

Spears, R., Doosje, B., & Ellemers, N. (1997). Self-stereotyping in the face of threats to group status and distinctiveness: The role of group identification. *Personality and Social Psychology Bulletin, 23*, 538–553.

Spencer, R. (2004). Beyond pathology and cheerleading: Insurgency, dissolution, and complicity in the multiracial idea. In H. M. Dalmage (Ed.), *The politics of multiracialism: Challenging racial thinking* (pp. 101–124). Albany, NY: SUNY Press.

Tajfel, H., & Turner, J. C. (1986). The social identity theory of intergroup behavior. In S. Worchel & W. G. Austin (Eds.), *The psychology of intergroup relations* (pp. 7–24). Chicago, IL: Nelson Hall.

Telles, E. E., & Sue, C. A. (2009). Race mixture: Boundary crossing in comparative perspective. *Annual Review of Sociology, 35*, 129–146.

Turner, J. C., Hogg, M. A., Oakes, P. J., Reicher, S., & Wetherell, M. S. (1987). *Rediscovering the social group: A self-categorization theory.* Oxford, UK: Basil Blackwell.

Williams, M. J., & Eberhardt, J. L. (2008). Biological conceptions of race and the motivation to cross racial boundaries. *Journal of Personality and Social Psychology, 94*, 1033–1047.

Young, D., Sanchez, D. T., & Wilton, L. S. (2013). At the crossroads of race: Racial ambiguity and biracial identification influence psychological essentialist thinking. *Cultural Diversity and Ethnic Minority Psychology, 19*, 461–467.

Yzerbyt, V., Corneille, O., & Estrada, C. (2001). The interplay of subjective essentialism and entitativity in the formation of stereotypes. *Personality and Social Psychology Review, 5*, 141–155.

Zdaniuk, B., & Levine, J. M. (2001). Group loyalty: Impact of members' identification and contributions. *Journal of Experimental Social Psychology, 37*, 502–509.

Leigh S. Wilton

Department of Psychology
Rutgers University
53 Avenue E
Piscataway, NJ 08854-8040
USA
E-mail lwilton@rci.rutgers.edu