

Racial Identification in Biracial Individuals Following an Out of the Loop Experience

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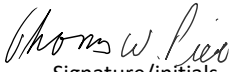

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Abstract

Past research has found that biracial individuals shift their racial identification depending on which of their identities is salient. It has also been shown that they are subject to rejection from their monoracial peers when choosing an identity. Another specific form of ostracism is feeling out of the loop, which results from being unfamiliar with information known to others in one's ingroup. It is associated with decreases in need satisfaction and mood. For the current research, biracial Black/White ($n = 204$) and monoracial Black or White ($n = 204$) participants viewed a series of either Black or White celebrities who were either familiar (very well known) or unfamiliar (much less well known). They then responded to measures analyzing racial identification, need satisfaction, mood, stress, feeling out of the loop, self-uncertainty, and perceived standing. Ultimately, it was found that biracial participants familiar with Black celebrities reported greater need satisfaction, more positive mood, and feeling less out of the loop than those unfamiliar with them; and that biracial participants familiar with White celebrities reported higher self-uncertainty than those unfamiliar with them. There were no differences in any other hypothesized interactions for biracial or monoracial participants. Results on need satisfaction, mood, and feeling out of the loop demonstrate the sensitivity that biracial individuals have when perceiving differences from their Black racial group specifically.

Racial Identification in Biracial Individuals Following an Out of the Loop Experience

To be multiracial means to identify with any two or more races (Gaither, 2015). Despite the growing multiracial population in the United States (Pew Research Center, 2015), psychological research tends to focus on monoracial populations with clearly defined ingroups and outgroups. Such distinctions are not so simple for those with mixed-race heritage and less concrete group membership. For these individuals, race is often viewed more as a social construct than a biological determinant (Bonam & Shih, 2009; Pauker, Meyers, Sanchez, Gaither, & Young, 2018; Remedios & Chasteen, 2013; Shih, Bonham, Sanchez, & Peck, 2007), and therefore variable according to their current environment (Wilton, Sanchez, & Garcia, 2012). While the number of multiracial individuals in the United States rises, the research continually fails to sufficiently demonstrate a robust account of the variables that can affect this fluidity.

Multiracial identity tends to be highly fluid and variable depending on one's social context (Gaither, 2015; Sanchez, Shih, & Garcia, 2009). When threats to belonging are not present, multiracial individuals are able to shift their racial viewpoints to reflect whichever identity is currently salient (Gaither et al., 2014; Gaither, Sommers, & Ambady, 2013; Pauker, Ambady, & Freeman, 2013). Salience may be affected by a number of variables, including the racial makeup of one's current environment and various other racial primes. For example, Gaither and colleagues (2013) found that after writing a brief essay about their White parent, biracial White/Black¹ participants were likely to report identifying with White individuals more than when they wrote about their Black parent. The respective pattern was found for those primed with their Black identity through writing about their Black parent. Similar effects have

1. For the purposes of this research, the forward slash symbol positioned between two racial categories indicates biracial status. For example, the phrase "a biracial Black/White participant" refers to an individual with Black and White racial background.

been conceptually replicated in numerous contexts, including speech (Gaither, Cohen-Goldberg, Gidney, & Maddox, 2015) and visual search patterns (Chiao, Heck, Nakayama, & Ambady, 2006; Pauker et al., 2013). These studies identify ways to manipulate identification through priming procedures in the lab, but less research has been done to identify more real-world influences on multiracial identification.

Despite this racial fluidity that fluctuates across time and contexts (Rockquemore, Brunson, & Delgado, 2009), biracial individuals are often still expected to choose one side of their racial identity (Buckley & Robert, 2004; Sanchez, 2010; Shih & Sanchez, 2005; Townsend, Markus, & Bergsieker, 2009). This forced-choice dilemma, most commonly reported in the context of filling out demographic forms, often results in negative outcomes for biracial individuals (Sanchez, 2010; Townsend et al., 2009). The monoracial identification of biracial individuals is sometimes met with self-conflict or guilt for “abandoning” their other racial group (Buckley & Robert, 2004; Shih & Sanchez, 2005), which may emphasize the importance of acceptance into their current racial group of choice. This is especially relevant for Black/White biracial individuals, who tend to identify as monoracial more often than do other biracial groups (Townsend, Fryberg, Wilkins, & Markus, 2012) and suffer from cultural homelessness when rejected by their monoracial Black peers, as opposed to other-race peers (Franco & Franco, 2016).

While the threat of cultural homelessness looms overhead (Franco & Franco, 2016), biracial individuals are sensitive to exclusion or rejection from their chosen racial groups (Albuja, Sanchez, & Gaither, 2019). In a recent study, social belonging was shown to mediate the relationship between identity denial and depressive symptoms, such that those who had their identities denied, and felt excluded because of it, were more likely to display depressive

symptoms. Identity denial was described as rejection from an important group or miscategorization into another inapplicable group (Albuja, Sanchez, & Gaither, 2019; Townsend et al., 2009). When this miscategorization or rejection comes from those within the individual's two racial groups, it is termed double rejection (Shih & Sanchez, 2005). Double rejection is an oft-cited source of conflict for biracial individuals, and is formally defined as social rejection from both sides of one's racial heritage that leaves the individual with no true ingroup (Gillem et al., 2001; Rockquemore et al., 2009; Shih & Sanchez, 2005). For example, while interviewing biracial adolescents, Gillem and colleagues (2001) heard the story of a young man with a Black father and White mother. In his interview, he described rejection from his Black peers for not meeting their standard of "Blackness," and the anger and confusion that he felt as a result. Similarly, biracial individuals are also often subject to discrimination or exclusion from their White racial group, as monoracial White individuals have been shown to view biracial individuals as untrustworthy and unlikeable when they present themselves monoracially (Albuja, Sanchez, & Gaither, 2018). Such rejection and identity denial have demonstrated measurable consequences for those subjected to it, including increased levels of self-reported stress and a tone in speech labeled "upset" by research assistants (Albuja, Sanchez, Cipollina, Gaither, & Straka, 2019). Specifically, research assistants blind to conditions rated biracial participants who had their racial identities denied by a confederate as sounding more upset than biracial participants who did not have their racial identities denied. These sentiments of not belonging and the resulting stress demonstrate the very real potential for negative consequences resulting from exclusion from one's group (Albuja, Sanchez, Cipollina et al., 2019).

One potential way to bolster the feeling of belonging is through popular culture (Derrick, Gabriel, & Hugenberg, 2009; Gabriel, Valenti, & Young, 2016): a medium that could serve to

support belonging in rejected biracial individuals as well. Television shows and other forms of popular culture have previously been used to bolster belonging and other threats against one's self concept (Derrick et al., 2009; Derrick, Gabriel, & Tippin, 2008; Young, Gabriel, & Hollar, 2013; Young, Gabriel, & Secrist, 2012). This phenomenon known as social surrogacy refers to a one-sided interaction between an individual and a non-responsive target, such as a fictional character or a favored celebrity that is often used to supplement the need to belong (Derrick, 2012; Gabriel et al., 2016). For example, after having belonging needs induced, participants thinking of their favorite television program reported lower feelings of rejection than participants thinking of a non-favored television program (Derrick et al., 2009). This result is unsurprising considering those with a naturally high need to belong are more likely to engage in social surrogacy than those with a low need to belong (Derrick, Keefer, & Troisi, 2019). Additionally, maintaining a "fan status" of various media forms has been shown to foster well-being, sense of community, and belonging (Chadborn, Edwards, & Reysen, 2018; Schroy, Plante, Reysen, Roberts, & Gerbasi, 2016; Reysen, Plante, & Chadborn, 2017). With this, using popular culture and sharing media interests with a group may serve as an effective method for biracial individuals to form a sense of belonging and to build connections when feeling excluded from their racial groups.

Unfortunately, it is possible for this method of bolstering to backfire if the observed media is not favored, but is instead unfamiliar. Being out of the loop has been described as a form of partial ostracism in which individuals lack information that is believed to be known to other group members (Jones, Carter-Sowell, Kelly, & Williams, 2009). It differs from complete ostracism in the sense that the individual is not excluded from all aspects of group membership, but is also not completely informed of all group proceedings (Jones et al., 2009; Williams, 2009).

Previous research has shown that being out of the loop on information supposedly known by others resulted in negative mood and reduced need satisfaction, including decreased feelings of belonging, self-esteem, meaningful existence, and control (Jones et al., 2009; Jones & Kelly, 2010).

Recently, this phenomenon has been observed specifically within the realm of popular culture (Iannone, Kelly, & Williams, 2018). In one study, participants exposed to images of unfamiliar actors felt more out of the loop and reported lower need satisfaction and more negative mood than participants exposed to images of familiar actors (Iannone et al., 2018). Further research showed that this feeling of being out of the loop was even stronger when the information was relevant to one's ingroup as opposed to one's outgroup (Iannone, Kelly, & Williams, 2019). In relation to racial identification, being unfamiliar with cultural practices of one's group, such as language, has been shown to negatively influence one's perceived fitness or belonging within the group (Sanchez, Chavez, Good, & Wilton, 2010).

A proposed cause of this deficit in need satisfaction, including belonging, following out of the loop experiences is based in the fundamental need to belong (Baumeister & Leary, 1995) and ostracism (Iannone et al., 2018; Williams, 2009). Securing a status of inclusion within a group is viewed as invaluable, as it at one time meant the difference between life and death. Thus, the detection of ostracism has been deemed an evolutionarily adaptive trait to aid human beings in maintaining an inclusionary status within their groups (Williams, 2009). This drive for status maintenance was demonstrated in a series of studies conducted by Jones and Kelly (2010). In their research, participants' perceived standing within their experimenter-assigned groups was found to explain the relationship between being out of the loop and deficits in need fulfillment. Specifically, those who were out of the loop rated their standing lower than those who were kept

in the loop, and this status deficiency explained why the out of the loop participants reported lower need fulfillment than in the loop participants. For biracial individuals, whose racial group membership is already perceived as precarious (Gillem et al., 2001; Rockquemore, 2002), the incentive to maintain an inclusionary status, or to be in the loop, may be even stronger than it is for monoracial individuals. Such an idea may be explained by research conducted on the behaviors of peripheral group members, or group members whose social identity is uncertain (Choi & Hogg, 2019; Hohman, Gaffney, & Hogg, 2017).

Research has shown that participants made to feel peripheral from their groups, as is often the case for biracial individuals (Gillem et al., 2001; Rockquemore, 2002; Shih & Sanchez, 2005), felt high levels of self-uncertainty and motivation to identify more strongly with the group's prototype (Hohman et al., 2017). This effect was demonstrated after telling participants that their personality resembled that of someone from a complete outgroup. This would likely not be the case for biracial individuals made to feel peripheral from one of their racial groups, as they may regard themselves as members of two racial groups. Therefore, perceiving high resemblance to an unexpected but still relevant racial group (e.g., a Black/White biracial individual believing that they resemble monoracial White individuals more closely than they resemble monoracial Black individuals) would not be equivalent to perceiving high resemblance to a complete outgroup (e.g., a monoracial Black individual believing that they resemble monoracial White individuals more closely than they resemble monoracial Black individuals). Instead, biracial individuals may see the opposite effect, and instead identify more strongly with the more appropriate group, as is commonly seen in identity-uncertain individuals who perceive a more accurate group identity option (Choi & Hogg, 2019; Wagoner & Hogg, 2016).

Without priming, multiracial participants may be likely to identify with whichever side of their identity is contextually relevant. However, if they find themselves out of the loop on information relevant to one of their racial groups, they might be likely to disengage with it and identify more strongly with the group with which they are more familiar. Their experiences with rejection from both sides of their monoracial heritage and strong need to belong (Albuja, Sanchez, & Gaither, 2019; Gillem et al., 2001; Shih & Sanchez, 2005) may make them especially susceptible to this effect. For the present research, it was hypothesized that biracial participants made to feel out of the loop, or partially excluded from one monoracial group, would report greater identification with the opposite racial category as well as reduced need satisfaction and more negative mood. Monoracial individuals were not expected to vary in racial identification, but were expected to show less need satisfaction and more negative mood upon being made to feel out of the loop. The specific hypotheses were as follows:

Hypothesis 1: Biracial Black/White participants exposed to familiar Black celebrities were expected to racially identify with Black people more than biracial Black/White participants exposed to unfamiliar Black celebrities and biracial Black/White participants exposed to familiar White celebrities.

Hypothesis 2: Biracial Black/White participants exposed to familiar White celebrities were expected to racially identify with White people more than biracial Black/White participants exposed to unfamiliar White celebrities and biracial Black/White participants exposed to familiar Black celebrities.

Hypothesis 3: Biracial Black/White participants who were familiar with celebrities that they believed most Black individuals can recognize were hypothesized to feel greater need

satisfaction, more positive mood, less out of the loop, less stress, less self-uncertainty, and higher perceived standing than biracial Black/White individuals exposed to unfamiliar Black celebrities.

Hypothesis 4: Biracial Black/White participants who were familiar with celebrities that they believe most White individuals can recognize were hypothesized to feel greater need satisfaction, more positive mood, less out of the loop, less stress, less self-uncertainty and higher perceived standing than biracial Black/White participants exposed to unfamiliar White celebrities.

Although not the primary focus of the proposed study, monoracial participants were explored as well. Social identity theory suggests that an individual derives his or her identity from the groups to which he or she belongs (Tajfel & Turner, 1986). With this, the individual identifies with an ingroup and distinguishes the self from the outgroup. Therefore, if an individual discovers that they are not familiar with information known to most others in the outgroup, they are likely to be unaffected. However, lacking information known to most others in the ingroup may be a more concerning experience, as similarities between ingroup members are typically emphasized (Tajfel & Turner, 1986). This experience has previously been demonstrated in research examining the feeling of being out of the loop, in which participants felt more out of the loop when unfamiliar with ingroup-relevant information than when unfamiliar with outgroup-relevant information (Iannone et al., 2019).

Hypothesis 5: Monoracial participants unable to recognize the celebrities from their racial ingroup were hypothesized to feel lower need satisfaction, less positive mood, and more out of the loop than monoracial participants who were unable to recognize celebrities from their racial outgroup.

Method

Participants

Participants were 204 Black/White biracial individuals, 102 monoracial Black individuals, and 102 monoracial White individuals, making 408 participants total. Of the total 408 participants, 220 were male, 186 were female, 1 was nonbinary, and 1 participant preferred to not report a gender. Their ages ranged between 18 and 40 years, with a mean of 29.78 years ($SD = 6.38$). Because gender differences are not reliably observed in studies of biracial identity (Gaither et al., 2014; Sanchez, 2010) or in studies of partial exclusion (Iannone et al., 2018), there were no gender restrictions on participation.

Participants were recruited through Qualtrics Panels, an online survey assistance company that recruits according to particularly desired demographics, and compensated for their participation through Qualtrics (approximately \$8). Participants recruited from Qualtrics Panels are typically more representative of the United States population than other online forms of participant recruitment in terms of age, education, income, race, ethnicity, geographic location, and political affiliation (Boas, Christenson, & Glick, 2018). Qualtrics Panels also filtered data based on participants' responses to an attention check item requesting participants to select the number 3. Only those who correctly selected the number 3 were included in the final data set.

Design

This study implemented a 2 (participant race: White/Black monoracial vs. White/Black biracial) x 2 (familiarity: familiar vs. unfamiliar) x 2 (celebrity race: White vs. Black) between-subjects factorial design.

Procedure

After agreeing to participate via the cover letter for internet research, all participants completed demographic information. Only participants who reported themselves to be monoracial White, monoracial Black, or biracial Black/White were screened into the study. Additionally, participants had to be between 18-40 years old to participate due to wanting participants not much older than the age of the pilot test participants. Once they responded to questions about their race, age, and gender, participants rated their familiarity with images of either White or Black celebrities via an online Qualtrics survey. To induce the feeling of being out of the loop, they were informed that the images were familiar to most White or Black individuals. Specifically, when viewing Black celebrities, they were told that the images were pre-tested for familiarity and were able to be identified by most Black participants. When viewing White celebrities, they were told that the images were pre-tested for familiarity and were able to be identified by most White participants. They then responded to questions regarding their levels of need satisfaction, mood, and perceived stress in the reflexive stage (assessing how they felt during the task); present racial identification; perceived standing; racial identity affirmation and belonging; self-uncertainty; feelings of being out of the loop; a manipulation check; and need satisfaction, mood, and perceived stress in the reflective stage (assessing how they are currently feeling). The last measures participants completed were a trait measure of need to belong and a trait measure of racial identification, and engagement with each of their racial cultures. Finally, they were debriefed and the study concluded. The entirety of the procedure took approximately 20-30 minutes. Although data from a number of measures were collected, a few of them were for future exploratory analyses. Only data from the measures directly pertaining to the five hypotheses were analyzed.

Materials

Celebrities. Familiar Black celebrities for the present study included people such as Michelle Obama and Will Smith, whereas unfamiliar Black celebrities included people such as Lolly Adefope and Rick Worthy. Familiar White celebrities included people such as Miley Cyrus and Leonardo DiCaprio, whereas unfamiliar White celebrities included people such as Jami Gertz and Jason Ralph. Participants indicated their familiarity one at a time with 16 celebrities (14 matching their condition and two in the same racial category but opposite familiarity condition) on a scale ranging from 1 (not at all familiar) to 7 (very familiar). The 28 familiar (14 White, 14 Black) and 28 unfamiliar celebrities were determined via pre-testing in which participants were asked to rate their familiarity with a series of celebrities on a scale of 1 (not at all familiar) to 7 (very familiar). Average scores for selected familiar celebrities ranged from 5.17 to 6.79, while average scores for selected unfamiliar celebrities ranged from 1.17 to 1.79.

Measures

Need satisfaction. Participants then completed a 12-item measure of need satisfaction by Williams (2009), including subscales for belonging, self-esteem, meaningful existence, and control. The belonging scale included items such as “I felt disconnected,” while the self-esteem scale included items such as “I felt good about myself.” The meaningful existence scale included items such as “I felt invisible,” and the control scale included items such as “I felt powerful.” All items were measured on a scale of one to seven, where one corresponded to “not at all” and seven corresponded to “extremely.” Items were reverse-scored as necessary and combined to form one scale of need satisfaction (as suggested by Williams, 2009). The scale was reliable ($\alpha = .83$).

Mood. Participants then completed a measure of mood in the reflexive stage, also by Williams (2009). They rated the extent to which they were feeling a series of emotions, including “pleasant,” “angry,” and “sad,” during the task. These items were measured on a scale of one to seven, where one corresponded to “not at all” and seven corresponded to “extremely.” Items were reverse-scored as necessary and combined to form one scale of mood. The scale was reliable ($\alpha = .84$).

Perceived stress. Additionally, perceived stress in the reflexive stage was measured using four statements similarly used by Albuja, Sanchez, Cipollina et al. (2018), including items such as “I felt stressed” and “I felt annoyed.” These items were measured on a scale from one (not at all) to seven (extremely). The scale was reliable ($\alpha = .91$).

Current racial self-identification. Present racial self-identification was measured using three items similarly measured by Gaither et al. (2013). These included “Please rate the extent to which you identify with Black people at this very moment,” “Please rate the extent to which you identify with White people at this very moment,” and “Please rate the extent to which you identify with biracial people at this very moment.” These items were measured on a scale from one (not at all) to seven (very much).

Perceived standing. Perceived standing was measured using six items adapted from Jones and Kelly (2010), including statements such as “I felt that I had been cut off from my racial group.” These items were measured on a scale of one (strongly disagree) to seven (strongly agree). The scale was somewhat reliable ($\alpha = .63$), although does not meet the traditional desired level of internal reliability.

Inclusion of Other in Self. Participants completed three Inclusion of Other in Self Scales (Aron, Aron, & Smollan, 1992). Instructions read “You and your [Black, White, biracial]

racial group are represented by two circles below. Please choose the numbered picture below which best illustrates your perceived standing in the group.” These items were measured on a scale from one to seven.

Racial identity affirmation and belonging. Racial identification and belonging were measured using five items from the Affirmation and Belonging subscale of the Multigroup Ethnic Identity Measure (Phinney, 1992). An example item from this subscale is “I have a strong sense of belonging to my own racial group.” These items were measured on a one (strongly disagree) to four (strongly agree) scale. Items were reverse-scored as necessary and combined to form a scale of racial identity affirmation and belonging. The scale was reliable ($\alpha = .90$).

Self-uncertainty. Self-uncertainty was measured with 12 items by Hohman et al. (2017), including statements such as “I feel that I am not really the person that I appear to be.” These items were measured on a scale of one (strongly disagree) to seven (strongly agree). The scale was reliable ($\alpha = .88$).

Out of the loop. The feeling of being out of the loop was measured using the nine-item Feeling Out of the Loop Scale (Iannone et al., 2018). Participants were asked to report how they felt while completing the task. An example item from this scale included “I felt excluded on information that others seemed to know.” This scale ranged from one (not at all) to seven (extremely). Items were reverse-scored as necessary and combined to form one scale of feeling out of the loop. The scale was reliable ($\alpha = .84$).

Manipulation check. A manipulation check with the statement “I recognized most of the celebrities” was included to ensure that the familiarity manipulation worked. Participants indicated their agreement on a scale ranging from 1 (not at all) to 7 (extremely).

Need recovery. Participants completed the same 12-item measure of need satisfaction by Williams (2009), including subscales for belonging, self-esteem, meaningful existence, and control, but in the reflective stage. The belonging scale included items such as “I feel disconnected,” while the self-esteem scale included items such as “I feel good about myself.” The meaningful existence scale included items such as “I feel invisible,” and the control scale included items such as “I feel powerful.” All items were measured on a scale of one to seven, where one corresponds to “not at all” and seven corresponds to “extremely.” Items were reverse-scored as necessary and combined to form one scale of need satisfaction (as suggested by Williams, 2009). The scale was reliable ($\alpha = .87$).

Mood recovery. Participants completed a measure of mood in the reflective stage, by Williams (2009). They rated the extent to which they were presently feeling a series of emotions, including “pleasant,” “angry,” and “sad.” These items were measured on a scale of one to seven, where one corresponded to “not at all” and seven corresponded to “extremely.” Items were reverse-scored as necessary and combined to form one scale of mood. The scale was reliable ($\alpha = .88$).

Perceived stress recovery. Perceived stress in the reflective stage was measured using four statements measured by Albuja, Sanchez, Cipollina et al. (2018), including items such as “I feel stressed” and “I feel annoyed.” These items were measured on a scale from one (not at all) to seven (extremely). The scale was reliable ($\alpha = .87$).

Trait need to belong. Trait need to belong was measured using the 10-item Need to Belong Scale by Leary, Kelly, Cottrell, and Schreindorfer (2013), including statements such as “I want other people to accept me.” These items were measured on a scale from one (strongly disagree) to five (strongly agree). The scale was reliable ($\alpha = .75$).

Trait ethnic identity. Trait identification and engagement was measured using the 20-item Multigroup Ethnic Identity Measure (Phinney, 1992). Identification and cultural engagement were measured using items from this scale such as “I have spent time trying to find out more about my own ethnic group, such as its history, traditions, and customs.” These items were measured on a one (strongly disagree) to four (strongly agree) scale. The scale was reliable ($\alpha = .85$). Additionally, self-perceived identity was measured based on the open-ended statement “In terms of ethnic group, I consider myself to be...”

Results

Results for hypotheses involving only biracial participants were analyzed using a series of 2 (familiarity: familiar vs. unfamiliar) x 2 (celebrity race: Black vs. White) MANOVAs for the variables of identification with White and Black individuals, and for the variables of need satisfaction, mood, stress, and feeling out of the loop; and 2 x 2 ANOVAs for the variables of perceived standing and self-uncertainty.

Results for hypotheses involving monoracial participants were analyzed using a 2 (participant race: Black vs. White) x 2 (familiarity: familiar vs. unfamiliar) x 2 (celebrity race: Black vs. White) MANOVA for the variables of need satisfaction, mood, and feeling out of the loop. Because there was neither a significant main effect of race, nor any significant interactions involving race ($ps > .26$), monoracial White participants and monoracial Black participants were combined into one monoracial participant group and a 2 x 2 MANOVA was conducted.

Although data from a number of measures were collected, only variables directly pertaining to hypotheses 1 through 5 were analyzed for the current research.

Manipulation Check

A 2 x 2 univariate ANOVA was conducted to test the effects of familiarity and celebrity race on the manipulation check item “I recognized most of the celebrities” on a 1 to 7 scale.

There was a significant main effect of familiarity, $F(1, 404) = 64.35, p < .001$, partial $\eta^2 = .14$, and a marginally significant main effect of celebrity race, $F(1, 404) = 3.23, p = .073$, partial $\eta^2 = .01$. However, the interaction between familiarity and celebrity race on the manipulation check was not significant, $F(1, 404) = .23, p = .635$, partial $\eta^2 = .001$.

T-tests were conducted to analyze the significant main effect of familiarity and the marginal effect of celebrity race on the manipulation check. As intended, participants in the familiar condition reported being more familiar with the celebrities ($M = 5.53, SD = 1.58$) than participants in the unfamiliar condition ($M = 4.06, SD = 2.05$), $t(406) = 8.09, p < .001, d = .80$. Additionally, participants viewing Black celebrities reported greater familiarity ($M = 4.97, SD = 1.88$) than participants viewing White celebrities ($M = 4.59, SD = 2.05$), $t(406) = -1.93, p = .054, d = .19$.

Hypotheses 1 and 2

Black Identification and White Identification in Biracial Participants

A 2 x 2 MANOVA was conducted to test the effects of familiarity and celebrity race on Black identification and White identification for biracial participants. Multivariate tests revealed no significant main effects of familiarity or celebrity race on either dependent variable, $ps > .31$. Further, the interaction between familiarity and celebrity race was not significant for Black identification or White identification, Pillai's Trace = .01, $F(1, 199) = 1.24, p = .293$, partial $\eta^2 = .01$. This does not provide support for *Hypothesis 1* or *2*. Biracial participants who were familiar with the Black celebrities they viewed did not identify with Black individuals ($M = 5.65, SD =$

1.35) more than those who were unfamiliar with them ($M = 5.22$, $SD = 1.42$), $t(102) = .158$, $p = .118$, $d = .31$, or more than those who were familiar with the White celebrities they viewed ($M = 5.54$, $SD = 1.24$), $t(98) = -.401$, $p = .689$, $d = .08$. Similarly, biracial participants who were familiar with the White celebrities they viewed did not identify with White individuals ($M = 4.48$, $SD = 1.72$) more than those who were unfamiliar with them ($M = 4.87$, $SD = 1.57$), $t(98) = -1.19$, $p = .236$, $d = .24$, or more than those who were familiar with the Black celebrities they viewed ($M = 4.30$, $SD = 1.83$), $t(98) = .51$, $p = .612$, $d = .10$.

Hypotheses 3 and 4

Need Satisfaction, Mood, Stress, and Out of the Loop in Biracial Participants

A 2 x 2 MANOVA was conducted to test the effects of familiarity and celebrity race on need satisfaction, mood, stress, and the feeling of being out of the loop for biracial participants. Multivariate tests revealed a significant main effect of familiarity, Pillai's Trace = .05, $F(4, 197) = 2.42$, $p = .050$, partial $\eta^2 = .05$, and an interaction between familiarity and celebrity race, Pillai's Trace = .05, $F(4, 197) = 2.73$, $p = .031$, partial $\eta^2 = .05$. There was no significant main effect of celebrity race on any of the variables, Pillai's Trace = .01, $F(4, 197) = .43$, $p = .786$, partial $\eta^2 = .01$.

In examining the main effect of familiarity, there was a significant effect on feeling out of the loop specifically. Analysis of the univariate tests showed that biracial participants who were familiar with the celebrities that they viewed felt less out of the loop ($M = 2.95$, $SD = 1.22$) than those who were not familiar with the celebrities that they viewed ($M = 3.54$, $SD = 1.60$), $F(1, 200) = 8.57$, $p = .004$, partial $\eta^2 = .04$. There were no differences, however, in need satisfaction, mood, or stress depending on familiarity, $ps > .13$.

Furthermore, the univariate tests for the interaction between familiarity and celebrity race showed a marginally significant effect on need satisfaction, $F(1, 200) = 1.79, p = .096$, partial $\eta^2 = .01$. T-tests were conducted to interpret this result, and showed that biracial participants who were familiar with the Black celebrities that they viewed reported higher need satisfaction ($M = 5.28, SD = .97$) than those who were unfamiliar with the Black celebrities that they viewed ($M = 4.84, SD = 1.48$), $t(102) = 1.80, p = .075, d = .35$. This provides partial support for *Hypothesis 3*, suggesting that biracial participants viewing Black celebrities would report higher need satisfaction when they were familiar with the images than participants who were unfamiliar with them. However, these patterns were not found for biracial participants viewing White celebrities, which does not provide support for *Hypothesis 4*. Participants viewing White celebrities did not report higher need satisfaction when they were familiar with the images ($M = 4.89, SD = 1.18$) than when they were unfamiliar with them ($M = 5.02, SD = 1.19$), $t(98) = -.55, p = .584, d = .11$.

Analysis of the univariate tests for the interaction between familiarity and celebrity race showed a significant effect on mood, $F(1, 200) = 4.67, p = .032$, partial $\eta^2 = .02$. T-tests were run to interpret this result, and showed that biracial participants who were familiar with the Black celebrities that they viewed reported more positive mood ($M = 5.79, SD = 1.09$) than those who were unfamiliar with the Black celebrities that they viewed ($M = 5.14, SD = 1.60$), $t(102) = 2.44, p = .017, d = .47$. This provides partial support for *Hypothesis 3*, suggesting that biracial participants viewing Black celebrities would report higher mood when they were familiar with the images than participants who were unfamiliar with them. However, these patterns were not found for biracial participants viewing White celebrities, which does not provide support for *Hypothesis 4*. Participants viewing White celebrities did not report higher mood when they were

familiar with the images ($M = 5.33$, $SD = 1.12$) than when they were unfamiliar with them ($M = 5.44$, $SD = 1.18$), $t(98) = -.50$, $p = .618$, $d = .10$.

There was no significant interaction for stress, $F(1, 200) = .05$, $p = .828$, partial $\eta^2 < .001$, nor was there a significant interaction for feeling out of the loop, $F(1, 200) = .71$, $p = .399$, partial $\eta^2 = .004$, for biracial participants. Biracial participants who were familiar with the Black celebrities that they viewed did not report lower levels of stress ($M = 6.00$, $SD = 1.48$) than those who were unfamiliar with the Black celebrities that they viewed ($M = 5.81$, $SD = 1.80$), $t(102) = .59$, $p = .56$, $d = .12$. Similarly, biracial participants who were familiar with the White celebrities they viewed did not report lower levels of stress ($M = 5.96$, $SD = 1.38$) than those who were unfamiliar with the White celebrities they viewed ($M = 5.67$, $SD = 1.53$), $t(98) = .97$, $p = .335$, $d = .20$. Upon analyzing the t-tests for feeling out of the loop, it was found that biracial participants did report feeling less out of the loop when familiar with the Black celebrities ($M = 2.93$, $SD = 1.19$) than when unfamiliar with the Black celebrities ($M = 3.69$, $SD = 1.66$), $t(102) = -2.66$, $p = .008$, $d = .53$. This pattern was not present for biracial participants viewing White celebrities, as those familiar with the White celebrities they viewed did not report feeling less out of the loop ($M = 2.98$, $SD = 1.27$) than those who were unfamiliar with the White celebrities they viewed ($M = 3.40$, $SD = 1.55$), $t(98) = -1.46$, $p = .148$, $d = .30$.

Perceived Standing

A 2 x 2 univariate ANOVA was conducted to test the effects of familiarity and celebrity race on perceived standing. No significant main effects were found for familiarity or celebrity race, $ps > .31$. Further, the interaction between familiarity and celebrity race on perceived standing was not significant, $F(1, 200) = 1.88$, $p = .172$, partial $\eta^2 = .01$. This does not provide support for *Hypothesis 3* or *4*. Biracial participants who were familiar with the Black celebrities

they viewed did not perceive themselves as having higher standing ($M = 4.98$, $SD = 1.07$) than participants who were unfamiliar with them ($M = 4.77$, $SD = 1.36$), $t(102) = .896$, $p = .372$, $d = .17$. Similarly, biracial participants who were familiar with the White celebrities they viewed did not perceive themselves as having higher standing ($M = 4.93$, $SD = 1.08$) than participants who were unfamiliar with them ($M = 5.17$, $SD = 1.17$), $t(98) = -1.05$, $p = .295$, $d = .21$.

Self-Uncertainty

A 2 x 2 univariate ANOVA was conducted to test the effects of familiarity and celebrity race on self-uncertainty. No significant main effects were found for familiarity or celebrity race, $ps > .140$. Further, the interaction between familiarity and celebrity race was not significant for self-uncertainty, $F(1, 200) = 4.52$, $p = .113$, partial $\eta^2 = .01$. This does not support *Hypothesis 3* or *Hypothesis 4*. Biracial participants who were familiar with the Black celebrities they viewed did not feel less self-uncertainty ($M = 3.76$, $SD = 1.33$) than participants who were unfamiliar with them ($M = 3.78$, $SD = 1.32$), $t(102) = -.079$, $p = .937$, $d = .02$. However, biracial participants who were familiar with the White celebrities they viewed did feel more self-uncertainty ($M = 3.93$, $SD = 1.15$) than participants who were unfamiliar with them ($M = 3.36$, $SD = 1.49$), $t(98) = 2.13$, $p = .036$, $d = .43$, contradicting *Hypothesis 4*.

Hypothesis 5

Need Satisfaction, Mood, and Out of the Loop in Monoracial Participants

A 2 x 2 MANOVA was conducted to test the effect of familiarity and celebrity race on need satisfaction, mood, and feeling out of the loop for monoracial participants. Celebrity race was re-coded for this analysis in order to account for collapsing across races. Instead of simply referring to the race of the celebrity, it referred to whether the race of the celebrity matched the race of the participant (race match vs. race mismatch) in this analysis. Results of the multivariate

analyses showed a main effect of familiarity, Pillai's Trace = .06, $F(3, 198) = 4.26$, $p = .006$, partial $\eta^2 = .06$.

In examining the main effect of familiarity, there was a significant effect on need satisfaction, mood, and feeling out of the loop. Analysis of the univariate tests showed that monoracial participants who were familiar with the celebrities that they viewed reported higher need satisfaction ($M = 4.89$, $SD = 1.11$) than those who were not familiar with the celebrities they viewed ($M = 4.50$, $SD = 1.16$), $F(1, 200) = 5.60$, $p = .019$, partial $\eta^2 = .03$; reported more positive mood ($M = 5.23$, $SD = 1.25$) than those who were not familiar with the celebrities they viewed ($M = 4.83$, $SD = 1.33$), $F(1, 200) = 4.82$, $p = .029$, partial $\eta^2 = .02$; and felt less out of the loop ($M = 3.23$, $SD = 1.14$) than those who were not familiar with the celebrities that they viewed ($M = 3.79$, $SD = 1.15$), $F(1, 200) = 12.06$, $p = .001$, partial $\eta^2 = .06$.

However, there was no main effect of whether the celebrities were race-matched to the participants, $p = .776$. Additionally, there was no interaction between familiarity and race-matching celebrities to participants, Pillai's Trace = .13, $F(3, 198) = .87$, $p = .456$, partial $\eta^2 = .01$. This does not support *Hypothesis 5*. Monoracial participants who were unable to recognize the race-matched celebrities did not feel lower need satisfaction ($M = 4.59$, $SD = 1.16$) than those who were unable to recognize the race mismatched celebrities ($M = 4.42$, $SD = 1.16$), $t(102) = .73$, $p = .470$, $d = .15$; those who were unable to recognize race-matched celebrities did not feel less positive mood ($M = 5.01$, $SD = 1.37$) than those who were unable to recognize the race mismatched celebrities ($M = 4.66$, $SD = 1.27$), $t(102) = 1.36$, $p = .175$, $d = .26$; and those who were unable to recognize race-matched celebrities did not feel more out of the loop ($M = 3.72$, $SD = 1.08$) than those who were unable to recognize the race mismatched celebrities ($M = 3.85$, $SD = 1.23$), $t(102) = -.57$, $p = .567$, $d = .11$.

Discussion

The main purpose of the present research was to examine racial fluidity in biracial individuals in a more realistic context than previous research, as well as to examine whether celebrity race would influence participants' responses to being out of the loop. Specifically, it was hypothesized that biracial Black/White participants exposed to familiar Black celebrities would racially identify with Black individuals more than those exposed to unfamiliar Black celebrities and those exposed to familiar White celebrities; and that biracial Black/White participants exposed to familiar White celebrities would racially identify with White individuals more than those exposed to unfamiliar White celebrities and those exposed to familiar Black celebrities. However, upon analyzing the data, it was found that neither of these hypotheses were supported. Neither identification with Black individuals nor identification with White individuals varied according to familiarity or celebrity race.

The lack of identity shifting in the current study runs contrary to research that has used more explicit methods of priming racial identity in biracial individuals, such as writing an essay about one parent (Gaither et al., 2013; Pauker et al., 2013). One reason the current research may have failed to replicate past results is the potential noise related to the unfamiliar celebrity condition. The mean response to the manipulation check assessing whether participants recognized the celebrities they were exposed to was appropriate for those in the familiar condition, as it landed above the midpoint of the scale and thus suggested high familiarity with familiar celebrities. However, the mean response for the unfamiliar condition was slightly higher than would have been appropriate, as it also landed above the midpoint of the familiarity scale. Specifically, out of the 208 participants in the unfamiliar condition, 124 of them reported familiarity either equal to or above the midpoint of the scale. This shows that participants

reported recognizing most of the celebrities they viewed—even when they were in the unfamiliar condition.

There are a number of possible explanations for why this may have happened. First, it may be the case that the chosen celebrities, despite pre-testing, were too recognizable. If this manipulation did not work, the familiar and unfamiliar condition may not have been different enough to produce valid results. If the celebrities did not successfully create the feeling that there was ingroup information kept from the participants, there would be no motivation to shift racial identification. Although pre-testing was done to ensure that the unfamiliar celebrities would be unrecognizable to most participants, those in the pre-testing sample were primarily White and therefore may not have been a representative sample to determine what is familiar to other racial groups. In fact, their homogenous perspective may explain why Black celebrities were generally rated more familiar than White celebrities, as they may not have insight into the popular culture of other racial groups. To prevent this from happening again, future studies should take even further steps to distinguish between groups. One idea is to use complete non-celebrities rather than less well-known actors, as it is possible that people may recognize them (especially in their subcultures). Another potential explanation for the noise related to the familiarity manipulation check may be participants' hesitance to report their own failures. Prior work has shown that being out of the loop from popular culture can induce feelings of failure among participants (Iannone et al., 2018). If participants chose to reject the notion that they had failed in recognizing information known to their ingroup, and instead responded dishonestly, they may have also inaccurately reported their identification with each racial group.

Further hypotheses predicted that Black/White biracial individuals who viewed familiar Black celebrities would feel greater need satisfaction, more positive mood, less out of the loop,

less stress, less self-uncertainty, and higher perceived standing than those who viewed unfamiliar Black celebrities. Similarly, it was hypothesized that Black/White biracial individuals who viewed familiar White celebrities would feel greater need satisfaction, more positive mood, less out of the loop, less stress, less self-uncertainty, and higher perceived standing than those who viewed unfamiliar White celebrities. Finally, it was predicted that monoracial participants who were unfamiliar with their ingroup would report lower need satisfaction, less positive mood, and more out of the loop than monoracial participants who were unfamiliar with their outgroup.

These hypotheses were partially supported. Neither biracial participants who were familiar with Black celebrities nor biracial participants familiar with White celebrities reported differences in stress or perceived standing from those who were unfamiliar with them. Furthermore, there were no differences in need satisfaction, mood, or feeling out of the loop between biracial participants who were exposed to familiar rather than unfamiliar White celebrities; nor were there differences in any of these variables for monoracial participants exposed to race-matched as opposed to race-mismatched celebrities. However, there *were* notable differences in need satisfaction, mood, and feeling out of the loop among biracial participants exposed to familiar as opposed to unfamiliar Black celebrities, and in self-uncertainty among biracial participants exposed to familiar as opposed to unfamiliar White celebrities. Specifically, biracial participants who were familiar with the Black celebrities reported significantly more positive mood, marginally greater need satisfaction, and less feelings of being out of the loop than those who were unfamiliar with them; and biracial participants who were familiar with the White celebrities reported higher self-uncertainty than those unfamiliar with them.

The significant results regarding mood, need satisfaction, and feeling out of the loop build upon past research measuring the effects of being out of the loop from popular culture. Not only were previous main effects of familiarity on mood, need satisfaction, and feeling out of the loop replicated, suggesting that being unfamiliar with popular culture decreases mood and need satisfaction while it increases feelings of being out of the loop, but they were also extended. As mentioned previously, Black/White biracial people are often pressured or coerced into identifying as exclusively Black (Franco, Katz, & O'Brien, 2016). Because of this, Black/White biracial individuals are especially sensitive to rejection from monoracial Black individuals, and feel the most hurt when rejected by them as opposed to other racial groups (Franco & Franco, 2016). This may explain why the current results are most focused on mood and need satisfaction when unfamiliar with information from their Black racial group rather than their White racial group. Being unfamiliar with Black celebrities may not have been impactful because it made them feel stressed, or because it diminished their perceived standing, but because it served as a distressing reminder that they are often perceived as “too White” to be accepted by their chosen identity (Franco et al., 2016)—a conflict specific to biracial people.

This adds nuance to past research that has examined how participants with distinct group membership would respond to being out of the loop from their ingroup as opposed to their outgroup, which has found no differences in mood, need satisfaction, or feeling out of the loop (Iannone, 2015). Instead, being out of the loop was always equally distressing, regardless of group membership. This was even the case for participants who reported not caring about popular culture (Iannone et al., 2018), which supports the universality of these negative effects. The same patterns were echoed in the present research for monoracial participants, but were more complex for biracial participants.

The results for self-uncertainty were mostly non-significant, but also revealed an interesting finding. While examining the differences between each group, it was found that biracial participants who were familiar with the White celebrities reported significantly higher self-uncertainty than participants who were unfamiliar with them. This directly contrasts the predicted hypothesis that being familiar with either White or Black celebrities would result in less self-uncertainty than being unfamiliar with them. It fits nicely, though, with prior self-uncertainty research in which participants feel more self-uncertain when they perceive themselves as similar to an outgroup (Hohman et al., 2017). For the current study, it was assumed that Black/White biracial individuals would identify equally with both sides of their racial heritage, and thus would react differently from participants with more concrete group membership. However, prior research (Franco & Franco, 2016), and some of the results in this study, suggest that they tended to naturally identify as Black more than they identified as White. With this, monoracial White people may be viewed as an outgroup, and therefore led Black/White biracials to feel higher self-uncertainty when perceiving similarity to them. Future researchers may want to measure self-uncertainty after a more explicit priming of White or biracial identity to determine if the outgroup-perception of White individuals remains.

Although not all of the hypotheses were supported, the current research still adds to the limited knowledge about biracial individuals. Previous research had examined variables that influence racial fluidity and when biracial individuals are likely to shift their racial identification, but none had looked at how those phenomena were related to being out of the loop, or the effectiveness of more subtle manipulation techniques. Moreover, much of the past work conducted with biracial populations has been done with relatively small sample sizes collected in university settings. This marks a strength of the current research, which included over 200

biracial participants of varying ages and backgrounds to make up a final sample that may be more generalizable than university samples. This is especially likely considering how closely samples obtained from Qualtrics Panels tend to mirror the demographics of the national population (Boas et al., 2018). However, this particularly diverse sample may have also impacted the results in unforeseen ways. As the United States population becomes increasingly multiracial, and as more research and media attention are given to multiracial people, multiracial youth may be more comfortable with racial fluidity than older multiracial individuals. Whereas young college students who participated in previous studies may have been encouraged to shift their identification throughout their lives, the older adults in the current study were likely more subject to outdated ideas such as hypodescent or the one-drop rule, which are ideas suggesting that biracial individuals are often categorized into their more socially subordinate racial group (e.g., Black, rather than White)—especially if they have Black racial heritage (Gaither, Chen, Pauker, & Sommers, 2019).

While the present perspective was able to provide a unique examination of how being out of the loop from information known to Black individuals can affect the mood and need satisfaction of biracial individuals, it also had its limitations. Along with the previously mentioned limitations regarding the manipulation of familiarity, the generalizability of the current results to other biracial groups marks another limitation. Past research has demonstrated significant differences between various minority/White biracial mixes (Townsend et al., 2012), and therefore the present results may not be applicable to all biracial groups. Future research should replicate the current design with Asian or Latinx groups to observe these distinctions.

In addition to examining different biracial makeups in the future, improving upon the unfamiliar manipulation used in the current study would hopefully shed more light on biracial

identification when participants are out of the loop on one of their racial groups. Other realistic but more explicit ways to shift racial identity could also be examined in the future, such as mislabeling biracial celebrities as monoracial, or noting how different racial groups feel about the group membership of biracial celebrities. For example, emphasizing that Black/White biracial celebrities such as Rashida Jones and Halsey are often considered White by the media may shift racial identification toward Whiteness more than Blackness. Similarly, emphasizing the discontent felt by much of the Black community when biracial celebrities like Zendaya or Jesse Williams are chosen to represent their racial group (Cooper, 2015) may shift racial identification away from Blackness, as it may serve to remind them that many Black individuals do not see them as complete group members. Finally, past research has compared the experiences of biracial and bisexual individuals, as both groups maintain an intermediate status between two groups that are often contrasted (Burke & LaFrance, 2016; Collins, 2000; King, 2011). Future research should explore how feeling out of the loop from one side of bisexual individuals' sexuality influences how they identify with others in their groups, and whether their experiences parallel those of biracial individuals.

Overall, there is still much to learn about how racial identity fluidity works for biracial individuals, and what can cause identity to shift. Although the current research did not demonstrate identity shifting, it did provide insight into some of the ways biracial and monoracial participants responded differently to being out of the loop. The group membership of monoracial individuals is rarely questioned, and therefore the race of celebrities does not affect them when they are out of the loop, but this is not the case for biracial individuals. Based on this study's results, something as simple as being unfamiliar with the Black celebrities that biracial people see on television or in magazines may be enough to trigger negative mood or need

depletion. This work emphasizes the sensitivity that Black/White biracial individuals may have to rejection from their racial groups—especially their Black racial group—and some of the negative consequences that can come from it.

References

- Albuja, A. F., Sanchez, D. T., Cipollina, R., Gaither, S. E., & Straka, B. (2018). Psychophysiological stress responses to bicultural and biracial identity denial. *Journal of Social Issues, 75*, 1-27. doi:10.1111/josi.12347
- Albuja, A. F., Sanchez, D. T., & Gaither, S. E. (2018). Fluid racial presentation: Perceptions of contextual “passing” among biracial people. *Journal of Experimental Social Psychology, 77*, 132-142. doi:10.1016/j.jesp.2018.04.010
- Albuja, A. F., Sanchez, D. T., & Gaither, S. E. (2019). Identity denied: Comparing American or white identity denial and psychological health outcomes among bicultural and biracial people. *Personality and Social Psychology Bulletin, 45*, 416-430. doi:10.1177/0146167218788
- Aron, A., Aron, E. N., & Smollan, D. (1992). Inclusion of Other in the Self Scale and the structure of interpersonal closeness. *Journal of Personality and Social Psychology, 63*, 596-612. doi:10.1037/0022-3514.63.4.596
- 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. doi:10.1037/0033-2909.117.3.497
- Boas, T. C., Christenson, D. P., & Glick, D. M. (2020). Recruiting large online samples in the United States and India: Facebook, Mechanical Turk, and Qualtrics. *Political Science Research and Methods, 8*, 232-250. doi:10.1017/psrm.2018.28
- Bonam, C. M., & Shih, M. (2009). Exploring multiracial individuals’ comfort with intimate interracial relationships. *Journal of Social Issues, 65*, 87-103. doi:10.1111/j.1540-4560.2008.01589.x

- Buckley, T. R., & Robert, C. T. (2004). Biracial (Black/White) women: A qualitative study of racial attitudes and beliefs and their implications for therapy. *Women & Therapy, 27*, 45-64. doi:10.1300/J015v27n01_04
- Burke, S. E., & LaFrance, M. (2016). Lay conceptions of sexual minority groups. *Archives of Sexual Behavior, 45*, 635-650. doi:10.1007/s10508-015-0655-5
- Chadborn, D., Edwards, P., & Reysen, S. (2018). Reexamining differences between fandom and local sense of community. *Psychology of Popular Media Culture, 7*, 241-249. doi:10.1037/ppm0000125
- Chiao, J. Y., Heck, H. E., Nakayama, K., & Ambady, N. (2006). Priming race in biracial observers affects visual search for Black and White faces. *Psychological Science, 17*, 387-392. doi:10.1111/j.1467-9280.2006.01717.x
- Choi, E. U., & Hogg, M. A. (2019). Self-uncertainty and group identification: A meta-analysis. *Group Processes & Intergroup Relations*. Advance online publication. doi:10.1177/1368430219846990
- Collins, J. F. (2000). Biracial-bisexual individuals: Identity coming of age. *International Journal of Sexuality and Gender Studies, 5*, 221-253. doi:10.1023/A:1010137025394
- Cooper, K. (2017, December 06). *The biracial backlash: Zendaya, Alicia Keys and other activists targeted over mixed race heritage*. Huffington Post. https://www.huffpost.com/entry/the-biracial-backlash-zen_b_8716004
- Derrick, J. L. (2013). Energized by television: Familiar fictional worlds restore self-control. *Social Psychological and Personality Science, 4*, 299-307. doi:10.1177/1948550612454889

- Derrick, J. L., Gabriel, S., & Hugenberg, K. (2009). Social surrogacy: How favored television programs provide the experience of belonging. *Journal of Experimental Social Psychology, 45*, 352-362. doi:10.1016/j.jesp.2008.12.003
- Derrick, J. L., Gabriel, S., & Tippin, B. (2008). Parasocial relationships and self-discrepancies: Faux relationships have benefits for low self-esteem individuals. *Personal Relationships, 15*, 261-280. doi:10.1111/j.1475-6811.2008.00197.x
- Derrick, J. L., Keefer, L. A., & Troisi, J. D. (2019). Who needs friends? Personality as a predictor of social surrogate use. *Personality and Individual Differences, 138*, 349-354. doi:10.1016/j.paid.2018.10.028
- Franco, M. G., & Franco, S. A. (2016). Impact of identity invalidation for Black multiracial people: The importance of race of perpetrator. *Journal of Black Psychology, 42*, 530-548. doi:10.1177/0095798415604796
- Franco, M. G., Katz, R., & O'Brien, K. M. (2016). Forbidden identities: A qualitative examination of racial identity invalidation for Black/White Biracial individuals. *International Journal of Intercultural Relations, 50*, 96-109. doi:10.1016/j.ijintrel.2015.12.004
- Gabriel, S., Valenti, J., & Young, A. F. (2016). Social surrogates, social motivations, and everyday activities: The case for a strong, subtle, and sneaky social self. In J. M. Olson & M. P. Zanna (Eds.), *Advances in experimental social psychology* (Vol. 53, pp. 189-243). San Diego, CA, US: Elsevier Academic Press.
- Gaither, S. E. (2015). "Mixed" results: Multiracial research and identity explorations. *Current Directions in Psychological Science, 24*, 114-119. doi:10.1177/0963721414558115

- Gaither, S. E., Chen, E. E., Corriveau, K. H., Harris, P. L., Ambady, N., & Sommers, S. R. (2014). Monoracial and biracial children: Effects of racial identity saliency on social learning and social preferences. *Child Development, 85*, 2299-2316.
doi:10.1111/cdev.12266
- Gaither, S. E., Chen, J. M., Pauker, K., & Sommers, S. R. (2019). At face value: Psychological outcomes differ for real vs. computer-generated multiracial faces. *The Journal of Social Psychology, 159*, 592-610. doi:10.1080/00224545.2018.1538929
- Gaither, S. E., Cohen-Goldberg, A. M., Gidney, C. L., & Maddox, K. B. (2015). Sounding Black or White: Priming identity and biracial speech. *Frontiers in Psychology, 6*, 1-11.
doi:10.3389/fpsyg.2015.00457
- Gaither, S. E., Sommers, S. R., & Ambady, N. (2013). When the half affects the whole: Priming identity for biracial individuals in social interactions. *Journal of Experimental Social Psychology, 49*, 368-371. doi:10.1016/j.jesp.2012.12.012
- Gillem, A. R., Cohn, L. R., & Throne, C. (2001). Black identity in biracial Black/White people: A comparison of Jacqueline who refuses to be exclusively Black and Adolphus who wishes he were. *Cultural Diversity and Ethnic Minority Psychology, 7*, 182-196.
doi:10.1037//1099-9809.7.2.182
- Hohman, Z. P., Gaffney, A. M., & Hogg, M. A. (2017). Who am I if I am not like my group? Self-uncertainty and feeling peripheral in a group. *Journal of Experimental Social Psychology, 72*, 125-132. doi:10.1016/j.jesp.2017.05.002
- Iannone, N. E. (2015). *Being Out of the Loop on Pop Culture*. [Unpublished doctoral dissertation]. Purdue University.

- Iannone, N. E., Kelly, J. R., & Williams, K. D. (2018). "Who's that?": The negative consequences of being out of the loop on pop culture. *Psychology of Popular Media Culture, 7*, 113-129. doi:10.1037/ppm0000120
- Iannone, N. E., Kelly, J. R., & Williams, K. D. (2019). The effect of being out of the loop from your political ingroup on belonging and political engagement. Unpublished manuscript, Radford University, Radford, VA.
- Jones, E. E., Carter-Sowell, A. R., Kelly, J. R., & Williams, K. D. (2009). "I'm out of the loop": Ostracism through information exclusion. *Group Processes & Intergroup Relations, 12*, 157-174. doi:10.1177/1368430208101054
- Jones, E. E., & Kelly, J. R. (2010). "Why am I out of the loop?" Attributions influence responses to information exclusion. *Personality and Social Psychology Bulletin, 36*, 1186-1201. doi:10.1177/0146167210380406
- King, A. R. (2011). Environmental influences on the development of female college students who identify as multiracial/biracial-bisexual/pansexual. *Journal of College Student Development, 52*, 440-455. doi:10.1353/csd.2011.0050
- Leary, M. R., Kelly, K. M., Cottrell, C. A., & Schreindorfer, L. S. (2013). Individual differences in the need to belong: Mapping the nomological network. *Journal of Personality Assessment, 95*, 610-624. doi:10.1080/00223891.2013.819511
- Pauker, K., Ambady, N., & Freeman, J. B. (2013). The power of identity to motivate face memory in biracial individuals. *Social Cognition, 31*, 780-791. doi:10.1521/soco.2013.31.6.780

- Pauker, K., Meyers, C., Sanchez, D. T., Gaither, S. E., & Young, D. M. (2018). A review of multiracial malleability: Identity, categorization, and shifting racial attitudes. *Social and Personality Psychology Compass*, *12*, 1-15. doi:10.1111/spc3.12392
- Pew Research Center. (2015). *Multiracial in America: Proud, diverse and growing in numbers*. Retrieved from https://www.pewresearch.org/wp-content/uploads/sites/3/2015/06/2015-06-11_multiracial-in-america_final-updated.pdf
- Phinney, J. S. (1992). The multigroup ethnic identity measure: A new scale for use with diverse groups. *Journal of Adolescent Research*, *7*, 156-176. doi:10.1177/074355489272003
- Remedios, J. D., & Chasteen, A. L. (2013). Finally, someone who “gets” me! Multiracial people value others’ accuracy about their race. *Cultural Diversity and Ethnic Minority Psychology*, *19*, 453-460. doi:10.1037/a0032249
- Reysen, S., Plante, C., & Chadborn, D. (2017). Better together: Social connections mediate the relationship between fandom and well-being. *AASCIT Journal of Health*, *4*, 68-73.
- Rockquemore, K. A. (2002). Negotiating the color line: The gendered process of racial identity construction among black/white biracial women. *Gender & Society*, *16*, 485-503. doi:10.1177/0891243202016004005
- 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. doi:10.1111/j.1540-4560.2008.01585.x
- 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., Chavez, G., Good, J. J., & Wilton, L. S. (2012). The language of acceptance: Spanish proficiency and perceived intragroup rejection among Latinos. *Journal of Cross-Cultural Psychology, 43*, 1019-1033. doi:10.1177/0022022111416979
- Sanchez, D. T., Shih, M., & Garcia J. A. (2009). Juggling multiple racial identities: Malleable racial identification and psychological well-being. *Cultural Diversity and Ethnic Minority Psychology, 15*, 243-254. doi:10.1037/a0014373
- Schroy, C., Plante, C. N., Reysen, S., Roberts, S. E., & Gerbasi, K. C. (2016). Different motivations as predictors of psychological connection to fan interest and fan groups in anime, furry, and fantasy sport fandoms. *The Phoenix Papers, 2*, 148-167.
- Shih, M., Bonam, C., Sanchez, D., & Peck, C. (2007). The social construction of race: Biracial identity and vulnerability to stereotypes. *Cultural Diversity and Ethnic Minority Psychology, 13*, 125-133. doi:10.1037/1099-9809.13.2.125
- 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. doi:10.1037/0033-2909.13
- Tajfel, H., & Turner, J. C. (1986). The social identity theory of inter-group behavior. In S. Worchel & L. W. Austin (Eds.), *Psychology of intergroup relations*. Chicago, IL: Nelson-Hall.
- Townsend, S. S., Fryberg, S. A., Wilkins, C. L., & Markus, H. R. (2012). Being mixed: Who claims a biracial identity? *Cultural Diversity and Ethnic Minority Psychology, 18*, 91-96. doi:10.1037/a0026845

- 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
- Wagoner, J. A., & Hogg, M. A. (2016). Normative dissensus, identity-uncertainty, and subgroup autonomy. *Group Dynamics: Theory, Research, and Practice, 20*, 310-322. doi:10.1037/gdn0000057
- Williams, K. D. (2009). Ostracism: A temporal need-threat model. *Advances in Experimental Social Psychology, 41*, 279-314. doi:10.1016/S0065-2601(08)00406-1
- Wilton, L. S., Sanchez, D. T., & Garcia, J. A. (2013). The stigma of privilege: Racial identity and stigma consciousness among biracial individuals. *Race and Social Problems, 5*, 41-56. doi:10.1007/s12552-012-9083-5
- Young, A. F., Gabriel, S., & Hollar, J. L. (2013). Batman to the rescue! The protective effects of parasocial relationships with muscular superheroes on men's body image. *Journal of Experimental Social Psychology, 49*, 173-177. doi:10.1016/j.jesp.2012.08.003
- Young, A. F., Gabriel, S., & Sechrist, G. B. (2012). The skinny on celebrities: Parasocial relationships moderate the effects of thin media figures on women's body image. *Social Psychological and Personality Science, 3*, 659-666. doi:10.1177/1948550611434785