Interracial and Same-race Couples:

Perceptions of Warmth and Competence

BY

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Summary

Research suggests that individuals in interracial relationships have different experiences and are perceived differently than individuals in same-race relationships, tereotypes provide information relevant to intergroup dynamics that may explain differences in perceptions and experiences of these individuals. Two studies examined White research participants' perceptions of interracial and same-race couples. In both studies, participants read profiles of potential adoptive couples and rated the warmth, competence, and perceived similarity to themselves of both members of the couple. In Study 1, perceptions of White and Asian interracial couples were examined. White research participants perceived the Asian male/White female couples to be higher in combined warmth and competence, as compared to White male/Asian female, Asian same-race, and White same-race couples. In Study 2, White same-race, White male/Black female, Black, male/White female, and Black same-race couples were perceived no differently on warmth competence, or similarity. In both studies, higher levels of perceived similarity to the participant were positively related to higher ratings of warmth and competence, which suggests that perceived similarity may play an important role in the formation of perceptions of interracial and same-race couples.

In the United States, interracial marriage was once illegal, but the 1967 Loving vs.

Virginia Supreme Court case removed legal restrictions on interracial marriage. Since that time, interracial marriages rates have increased. In a recent ten-year period, interracial marriage has experienced a 14.7% growth (7.4% of all marriages in 2000, to 18.3% in 2010; U.S. Census Bureau, 2010). This rise has been accompanied by attitudinal changes. In 1958, only 4% of Americans supported interracial marriage (Pew Research Center, 2010). By 1987, rates of support reached 48%, and today, 84% of Americans support interracial marriage (Wang, 2012). Social science evidence suggests that these increases are indicative of broader social changes; researchers often treat interracial marriage attitudes and rates as indicators of the social and physical distance between racial groups (Blau, Blum, & Schwartz, 1982; Bogardus, 1976). In all, these figures provide a positive view of the current climate of race relations in the United States.

Despite these social trends, opposition to interracial marriage still exists. Although, 43% of Americans believe that the rise of interracial marriage is a change for the better, 11% of Americans believe it is a change is for the worse, with the remaining 46% saying it makes no difference (Wang, 2012). People today are still less comfortable dating and marrying someone of a different race than with the prospect of merely working or being friends with such a person (Bonam & Shih, 2009). Parents are less supportive of interethnic dating and marriage for their children than interethnic friendships (Munniksma et. al, 2012). Further, Americans are less likely to support interracial dating and marriage for themselves than for others (Herman & Campbell, 2012). Interracial dating has become more popular in recent years; however, the likelihood of interracial romantic involvement decreases between the ages of 18-35—the time period when many individuals transition into marriage relationships (Joyner & Kao, 2005).

Rates of interracial marriage are low (18.3% of all opposite-sex marriages; U.S. Census Bureau, 2010) in comparison to same-race marriages. Among all newlyweds in 2010, only 9% of Whites, 17% of Blacks, 26% of Hispanics, and 28% of Asians married someone of a different race (Wang, 2012). Same-race marriage is, by far, the most common pattern among all racial groups. Overall, these findings suggest that social barriers to interracial marriage still exist and may impact actual dating and marriage behavior.

Demographic data point to some differences between individuals in interracial and same-race relationships. Minority groups are more likely to interracially marry and date than Whites (Wang, 2012; Yancy, 2002). Men are found be more open to interracial romantic relationships than women (Feliciano, Robnett, & Komaie, 2009; Herman & Campbell, 2012). A nationally representative sample indicated that those who interracially date and marry are younger, more educated, more politically liberal, and less religious compared to those in intraracial relationships (Herman & Campbell, 2012).

In addition to these differences among individuals who enter interracial relationships, differences also emerge in studies of how these individuals are perceived by others. The race and ethnicity of one's romantic partner can influence social perceptions (Garcia, et.al, 2012). Men who have partners of a different race are perceived as less professionally successful than their counterparts with same race partners (Lewandowski & Jackson, 2001). Individuals in interracial relationships, overall, are perceived as being less psychologically adjusted than those in same-race relationships (McNamara, Tempenis, & Walton, 1999).

The behavioral experiences of people with other-race partners may also differ from the experiences of people in same-race relationships. Individuals in interracial relationships report higher rates of exclusion from social networks and close relationships (Killian, 2001; Wang,

Kao, & Joyner, 2006). Interracial marriages are more likely to end in divorce than are same-race marriages (Bratter & King, 2008). White interracial daters report experiencing secondhand racism, whereas, Asian and Black interracial daters report being labeled as "sell-outs" by other members of their racial groups (Foeman & Nance, 2002; Mok, 1999; Twine & Steibuger, 2006). In sum, findings indicate that interracial relationship status can substantially influence social perception, social behavior, and personal well being.

Stereotypes

One way to understand these differences in perceptions and experiences of individuals in interracial relationships is through stereotypes. Psychologists have long studied the formation and implications of stereotypes, which are generalizations about the characteristics of a group and the individuals who comprise the group. Stereotypes function as mental shortcuts for social categorization by providing guidelines for individuals to make sense of various social situations and interactions, help individuals justify behavior, and help individuals differentiae various groups (McGarty, Yzerbyt, & Spears, 2002). Expanding knowledge of how individuals in interracial relationships are viewed can provide insight to the experiences of these individuals and their interpersonal experiences.

Stereotypes can have bi-directional implications. First, they can influence the individual who holds the stereotype by shaping their cognitive, affective, and behavioral processes. Second, stereotypes can influence those who are the subject of the stereotype through processes such as stereotype threat, in which individuals become aware of the possibility of confirmed stereotypical conception of a group in which they are a member, and as a result have suboptimal performance on cognitive tasks (Schmader & Johns, 2003; Steele & Aronson, 1995; Shapiro, 2011).

A major challenge in research on stereotype mechanisms is to understand the content of stereotypes and the ways in which that content varies from one perceiver, or target, to another. The Stereotype Content Model (SCM) provides a framework to investigate these variations. A primary aim of the present work is to apply the SCM to the study of social perceptions of interracial and same-race couples.

The Stereotype Content Model

The Stereotype Content Model (SCM) states that social stereotypes vary along two primary dimensions—warmth and competence (Fiske, Cuddy, Glick, & Zu, 2002). Variation along these dimensions is determined by two intergroup relation variables, competition and status. The SCM suggests that competition drives variations in warmth. When social groups compete for resources with one's own group, the in-group, they are perceived as lower in warmth. On the other hand, the SCM suggests that status drives variations in competence. When social groups have high status, educational or economic, they are perceived as higher in competence. The SCM states that all social groups (homeless people, elderly, feminists, etc.) fit within the warmth by competence dimensional space, four types of stereotypes emerge.

(1) *High Competence/High Warmth Stereotypes*. People typically hold stereotypes that combine high competence and high warmth when perceiving high-status groups with whom they are often associated (in-group, close allies). Individuals in these groups are usually seen as admirable and elicit feelings of pride. The majority or dominant social group tends to be rated as high on both dimensions, however, only in Western cultures (Cuddy, et. al, 2009). From a White-mainstream perspective, middle class White people would be stereotyped as high in

competence and high in warmth. In the research to be reported, participants are White Americans; the upcoming examples of stereotypes thus take the perspective of this group.

- (2) Low Competence/Low Warmth Stereotypes. Stereotypes that combine low competence and low warmth are formed for targets that are viewed as low status and non-competitive (homeless, welfare recipients). Groups that are stereotyped as low competence low warmth elicit feelings of contempt.
- (3) Low Competence/High Warmth Stereotypes. Stereotypes that consist of low competence and high warmth are known as paternalistic stereotypes. These stereotypes occur when individuals see targets as non-competitive but incompetent (housewives, elderly people). Paternalistic stereotypes, overall, are established for disrespected groups that are simultaneously perceived to be friendly and elicit feelings of pity.
- (4) *High Competence/Low Warmth Stereotypes*. Stereotypes that combine high competence and low warmth are known as envious stereotypes. These stereotypes are used for targets that are seen as high status and competitive (Jews, nontraditional women). Envious stereotypes elicit feelings of envy and resentment.

Understanding the stereotypes for interracial and same-race couples can provide insight to the differential perceptions and experiences of individuals in interracial relationships. For these individuals, understanding how being interracially married influences individual level perceptions could provide information related different experiences and intergroup relations for those in interracial relationships. Two social psychological phenomena, the *extended contact effect* and *black sheep effect* may provide insight to the ways in which individuals with same-and other-raced partners are perceived.

Extended Contact Effect

One explanation for potential changes along the SCM dimensions for interracial couples stems from the extended contact effect, which speaks to the social perceivers' perceptions of outgroup members. Building off the Intergroup Contact Theory (Allport, 1954), the extended contact effect suggests that knowledge or awareness of a close relationship between an in-group member and an out-group member can make the perceptions of the out-group member more positive (Wright, Aron, McLaughlin-Volpe, & Ropp, 1997). Similar to direct contact, extended contact with out-groups can reduce prejudice and improve intergroup relations (Dovidio, Eller, & Hewstone, 2011; Wright, et. al, 1997). Often, opportunity for direct contact may be limited and create anxiety for individuals, but extended contact (indirect contact) with out-group members may have benefits for intergroup relations above and beyond direct contact. For minority members, direct contact was less successful for improving intergroup attitudes compared to majority group members but extended contact was equally successful for improving intergroup attitudes for majority and minority members (Gomez, Tropp, & Fernandez, 2011). Further, extended contact leads to lower perceived ignorance of out-groups, increased awareness of positive out-group behavior, and greater inclusion of the other (out-group member) in self evaluation (Eller, Abrams, Zimmermann, 2011). Overall, these findings suggest that awareness of an out-group member's intimate relationship with an in-group member could lead to more positive attitudes and perceptions of the out-group member.

The extended contact effect provides insight to how interracial relationship status could influence perceptions of warmth and competence. Consider a perceiver who learns that an ingroup member is in a close relationship with an out-group member. According to the extended contact effect, the perceiver's view of the out-group member should become more positive. In

principle, this positive shift may occur with respect to either dimension of the content identified in the SCM, which recognizes that people may hold stereotypes of out-groups that are ambivalent (i.e. high on one dimension but low on the other). The extended contact effect would suggest that learning of a close relationship between an in-group member and an out-group member, would increase the positivity of perceptions of that out-group member along whichever dimension of the ambivalent stereotype is low. This change in stereotype content is said to occur, in part, as a result of changes in perceived similarity; extended contact increases perceptions of similarity between one's in-group and the out-group (Eller, Abrams, Zimmerman, 2011). In the case of interracial couples, the extended contact effect provides predictions for perceptions of warmth and competence of out-group members. On the other hand, the black sheep effect sheds light on the way interracial or same-race relationships status can impact in-group members.

Black Sheep Effect

Alternatively, the *black sheep effect* provides insight into the social perceivers' view of in-group members. The black sheep effect is an extension of social identity theory, which states that individuals are motivated to favor their in-group as a strategy of self-enhancement (Tajfel & Turner, 1982). Subsequently, people have more positive attitudes, interactions with, and perceptions of in-group members than out-group members (Tajfel & Turner, 1982). Such ingroup favoritism has been observed in both natural-occurring social groups (race, gender, social groups; Ahmen, 2007) and groups formed arbitrarily, such as in the minimal group paradigm (Brewer, 1979). The black sheep effect extends this theory by addressing the perception of deviant in-group members; specifically the theory predicts that deviant in-group members will be perceived negatively (Marques, Yzerbyt, & Leyens, 1988). This prediction, which contradicts expectations based on in-group favoritism, is grounded in the analysis of self-relevance of the

behavior of in-group members, whose actions impact on one's own social identity (Marques, Yzerbyt, Leyens, 1988). Deviant behavior by an in-group member threatens the positive image of the group. Thus, as a strategy to maintain a positive image of the in-group, individuals will perceive deviant in-group members more negatively.

The black sheep effect has been observed in a variety of contexts including political voting advertisements, abortion, and racial groups (Begue, 2001; Matthews, Dietz-Uhler, 1998; Marques, Yzerbyt, Leyens, 1988). In all of these contexts, individuals contradict group norms. This deviance threatens the positive image of the in-group leading individuals to create separation between the deviant member and the larger in-group. Given that interracial marriage is most common across all racial groups, the black sheep effect can be extended to predict warmth and competence perceptions of interracial and same-race couples.

Across all racial groups, same-race marriages are most common and perceived as the martial status norm (Herman & Campbell, 2012). Individuals feel more comfortable being friends with and working with racial out-group members compared to dating and marrying them (Bonam & Shih, 2009), and are more likely to support interracial marriage for others but not themselves (Herman & Campbell, 2012). Taken together, these findings suggest that same-race marriages are more normative for all racial groups than interracial marriage. Thus, individuals who interracially marry break this expectation. Consistent with the black sheep effect, perceptions of deviant in-group members would become more negative, because perceives will be motivated to distance themselves from deviant in-group members to maintain a positive image of their group.

Study 1: White and Asian Interracial Couples

Study 1 examines perceptions of White and Asian interracial couples. According to the 2010 U.S. census, White and Asian interracial marriages make up 13.7% of all interracial marriages. According to Pew Research Center, White/Asian interracial couples have the highest combined income above both White/White and Asian/Asian couples (Wang, 2012). However, Lewandowski and Jackson (2001), found that White and Asian interracially married men were perceived as less professionally successful compared to men who intraracially married. In a mock trial experiment, jurors viewed defendants more guilty in cases of domestic violence for White/Asian interracial couples compared to same-race couples (Maeder, Mossiere, & Cheung, 2012), highlighting the importance of understanding the link between perceptions of those in White and Asian interracial relationships and the outcomes they experience. Together these findings emphasize the importance of understanding perceptions of warmth and competence for White and Asian interracial couples.

The aim of Study 1 is to use the SCM framework to examine perceptions of White/Asian interracial couples. More specifically, Study 1 aims to understand how interracial and same-race relationship status influence perceptions of warmth and competence for each individual partner within the couple. Based on the extended contact and black sheep literature, two sets of hypotheses are proposed. First, the extended contact hypotheses predict that White participants (i) will perceive Asian men and Asian women who are interracially married as higher in warmth than Asian men and Asian women who are intraracially married, (ii) will not differ in perceptions of warmth and competence for White men and White women who are interracially and intraracially married, and they (iii) will perceive interracially married Asians as more similar to themselves than Asians with same-race partners. Second, black sheep hypotheses predict

that White participants (iv) will perceive White men and women who are interracially married as lower in warmth and lower in competence compared to their intraracially married counterparts, and they (v) will perceive White men and women who are intraracially married as more similar to themselves than interracially married White men and women.

Method

Participants. For Study 1, participants were recruited online through Mechanical Turk (MTuk). Participants received \$0.30 in return for participation in the study. To maintain in-group and out-group status consistency, only individuals who self-categorized as White on a self-report measure of racial identity were included in the participant population; individuals with other racial self-identifications were excluded.

The participant population in the analyses reported below included only those individuals who passed a methodological attention check and manipulation check. After removing those who failed the attention check and/or the manipulation check (n=39), 264 participants were included in data analyses. Among these individuals, degree of White identification varied (M=3.00, SD=2.58). Participants' age ranged from 18-75 years (M=34.76, SD=12.74, Median=32).

Materials and Measures

Couple profile. Participants viewed couple profiles that provided information about both individual targets within the relationship. The couple profile was intentionally minimal to reduce the influence of variables such as physical attractiveness (pictures) or personality traits that could cue warmth and competence. The profile provided basic demographic information regarding each partner (name, race, gender, age) and the couple as a whole (joint income; see Appendix A). To manipulate the racial and gender composition of the couples, four variations of the profile were created; these consisted of White/White, White/Asian, Asian/White, and White/White. (For

each couple type, the writing notation employed is that race of the male target corresponds with the first race listed, whereas, the race of the female target corresponds with the second race listed. Thus, a White/Asian couple consists of a White male and an Asian female). Thus, there were two interracial couples and two same-race couples. The only information that varied across couple type conditions was the race of each individual target in the couple.

Warmth and competence. Perceptions of warmth and competence were measured through self-reported items adapted from Fiske, et. al (2002). The SCM dimension warmth was measured using three items. Participants were asked, "To what extent do you believe (target) is friendly/warm/good-natured?" Likewise, three items assessed competence: "To what extent do you believe (target) is capable/competent/skillful" Participants responded to all items on 5-point scales ranging from 1 (not at all) to 5 (very much). Higher scores indicate greater perceived warmth and competence. Warmth and competence items were randomly ordered.

Perceived Similarity. The Inclusion of Other in Self (IOS) scale was used to measure perceived similarity between the participant and the target (Aron, Aron, & Smollan, 1992). The IOS represents the self and another person (the target) via two circles, and presents seven sets of circles that represent varying degrees of self and other overlap. Participants were instructed to "Indicate the pair of circles best represents your view of the relationship between you and Mark/Amy." Responses range from a 1 (no overlap between circles) to 7 (the most overlapping circles) scale. Higher scores indicate higher inclusion of other in self, that is, higher perceived similarity between the participant and the target.

Demographics. Participants were asked to report demographic information including age, racial identification, and gender identification. Only participants who self-categorized as White were included in the participant population and, as aforementioned, these participants then rated

strength of their White identification on a 0 (*non-White*) to 11 (*White*) scale. For gender identification, participants rated their gender identification on an 11-point scale. Responses ranged from 0 (*male*) to 11 (*female*). Higher responses indicate higher identification with the female gender category.

Procedure. Prior to the study all participants gave informed consent to participate in the research. At the beginning of the study, participants were informed that the purpose of the research was to identify factors that lead to successful adoption outcomes. Although this was not the true focus of the research, the adoption context provided a natural setting within which participants could think about the qualities of the individuals in the couple.

Prior to the presentation of the main study materials, participants completed an initial attention check. Participants were presented with a paragraph of text overviewing the study and were then asked, "What is your favorite color?" At the end of the overview paragraph, they were instructed, "Please select 'red' to the question below." Participants who failed this initial attention check were excluded from the study.

Next, participants were told they would view a profile of a potential adoptive couple, and to ensure confidentiality only basic information would be provided. Participants were then randomly assigned to see one of four couple profiles: White/White (n=76), White/Asian (n=57), Asian/White (n=61), and Asian/Asian (n=70). After looking over the profile, participants completed a manipulation check where they were asked to recall the racial information about each target listed in the couple profile.

Next, participants were asked to complete two tasks that were designed to prompt participants to think about the couple and thereby activate potential stereotypes about these individual targets. For the first task, participants were asked, in a free response format, to list

questions they believed to be important to determine their suitability as adoptive parents. For the second task, participants were shown a list of potential questions and asked which three they believed were most important to evaluations of the couple's suitability for adoption.

Participants then completed the main dependent measures: the items for warmth, competence, and perceived similarity. Each participant completed warmth, competence, and similarity items separately for both targets in the couple. The order of items varied randomly. After the main dependent measures, participants completed a second manipulation check, provided comments about their experience in the study, and provided the demographic information. Participants were then debriefed and thanked for their participation.

Results

The main purpose of Study 1 was to examine White perceivers' perceptions of the warmth and competence of individuals in same-race and interracial relationships. A preliminary question is whether, as anticipated by the SCM framework, warmth and competence were relatively independent dimensions of social perception. To explore this question, mean levels of warmth and competence were computed by averaging responses to the three items measuring respective constructs. Figure 1 displays the relationship between the variables in scatterplot form. The corresponding correlation between variables was strongly positive, r=.82. The majority of the participants perceived individuals as high in warmth and high in competence regardless of couple type; relatively few data points fall into the low/low quadrant of Figure 1. Further, competence and warmth ratings were very strongly, and linearly related, indicating that few data points reflect ambivalent stereotypes (high on one dimension and low on the other), which is a component of the extended contact hypotheses.

Nonetheless, SCM rating was retained as a two-level factor for two reasons. First, in SCM research designed to understand content of stereotypes, participants are asked to report how various social groups are perceived by society as a whole. In the current research, which employs the SCM framework to investigate individual perception, participants were instructed to report their *individual* perceptions. Thus, the high correlation between warmth and competence does not deter from the ability to conduct analyses but will be considered in the interpretation of the analyses. Second, the hypotheses that are grounded in the extended contact rely on the emergence of ambivalent stereotypes; these hypotheses thus would be untestable if the two SCM dimensions were aggregated prior to data analysis. Therefore, despite the high correlation between warmth and competence, SCM rating will be retained as a two-level factor in the following analyses.

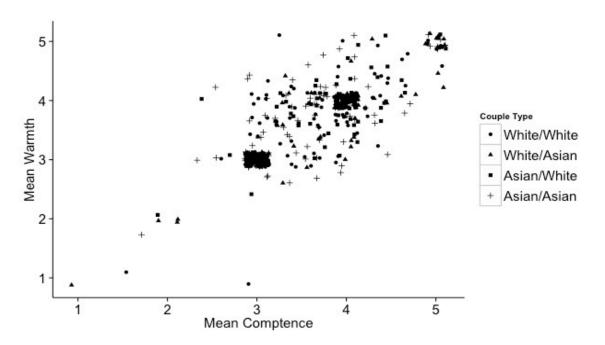


Figure 1. The SCM dimensional space: Average warmth and competence ratings of targets across couple types for study 1.

The main data-analytic goal was to evaluate two sets of hypotheses. First, the extended contact hypotheses that White participants (i) will perceive Asian men and Asian women who are interracially married as higher in warmth than Asian men and Asian women who are intraracially married, (ii) will not differ in perceptions of warmth and competence for White men and White women who are interracially and intraracially married, and they (iii) will perceive interracially married Asians as more similar to themselves than Asians with same-race partners. Second, black sheep hypotheses predict that White participants (iv) will perceive White men and women who are interracially married as lower in warmth and lower in competence compared to their intraracially married counterparts, and they (v) will perceive White men and women who are intraracially married as more similar to themselves than interracially married White men and women. To test the hypotheses, mixed model analysis of variance (ANOVAs) were conducted on SCM and IOS ratings.

First, a 4(couple type: White/White, White/Asian, Asian/White, Asian/Asian) x 2(target: Mark, Amy) x 2(SCM dimension: warmth, competence) mixed model ANOVA was used to examine the influence of couple composition on perceptions of SCM dimensions. Couple type was a between-subjects factor and target and SCM dimension were within-subject factors.

Results indicated a main effect of couple type, F(3, 1036) = 6.74, p = .0002. As can be seen in Figure 2, which for simplicity displays SCM ratings by averaging across the two SCM dimensions, the main effect resulted from participants' more positive social perceptions of couples that consisted of an Asian male and White female (i.e. Asian/White). Unexpectedly, all other effects were non-significant (all Fs < 1). These results do not provide support for the extended contact or black sheep hypotheses because there was no evidence of differences at the individual target level. Instead, perceptions of SCM dimensions varied at the dyadic level.

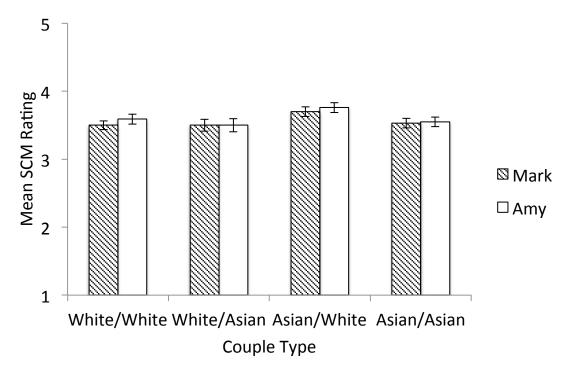


Figure 2. Mean ratings of combined warmth and competence for individual targets within White/White, White/Asian, Asian/White, and Asian/Asian couple types.

Participants perceived the Asian/White couple (M = 3.73, SD = .59) higher on SCM ratings than the White/White couple (M = 3.54, SD = .64,), F(1, 1036) = 90.25, p = .004, d = .32, the White/Asian couple (M = 3.50, SD = .70), F(1,1036) = 58.78, p = .001, d = .35, and the Asian/Asian couple (M = 3.54, SD = .63,), F(1,1036) = 40.11, p = .004, d = .31. In contrast expectations based on prior SCM research, participants showed no difference in perceived similarity to themselves for the White/White and Asian/Asian couple.

The second mixed model ANOVA examined the influence of a couple compositions on perceived similarity. This analysis was a 4(couple type) x 2(target) mixed model ANOVA, with couple type as a between-subjects factor and target as a within-subject factor. There was a main effect of couple type, F(3,518) = 6.67, p = .0002, indicating that participants' level of perceived similarity to the couple varied across couple type conditions. As displayed in Figure 3,

participants saw themselves as relatively more similar to the Asian/White couple. Contrary to the extended contact and black sheep hypotheses, there was a non-significant interaction between couple type and target, (F < 1). Together, these findings demonstrate that variations in perceived similarity occurred on a collective couple level rather than an individual target level. Participants

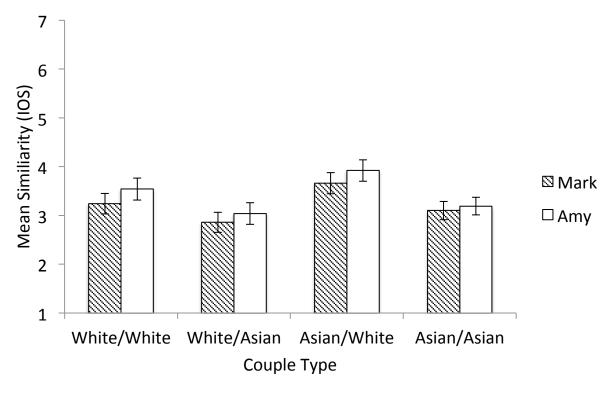


Figure 3. Mean similarity (IOS) ratings across individual targets within White/White, White/Asian, Asian/White, and Asian/Asian couples.

perceived the Asian/White couple (M = 3.79, SD = 1.70) as more similar to themselves than the White/Asian couple (M = 2.95, SD = 1.61), F(1,518) = 7.53, p = .001, d = .51, and the Asian/Asian couple (M = 3.14, SD = 1.54), F(1,518) = 6.83, p = .01, d = .40.

Unexpectedly, participants did not differ in the extent to which they perceived the White/White (M = 3.39, SD = 1.90) couple and the Asian/Asian couple to be similar to themselves, F(1,518) = 4.02, p = ns.

Mediation analyses were conducted to examine the possibility that perceived similarity to the participant mediates the effect of couple type on SCM ratings. Note that, in this analysis, perceived similarity to oneself is a continuous variable, whereas couple type is a categorical variable. To account for the categorical nature of couple type, dummy codes were used in the analyses. The analyses produce various beta values, which indicate the strength of the relations among variables. Based on the dummy codes, each beta value represents the strength of the association relative to a comparison condition. For these analyses, the comparison condition was the White/White couple. Therefore, each beta value for the remaining couple types (White/Asian, Asian/White, and Asian/Asian) represents the change relative to the White/White comparison group.

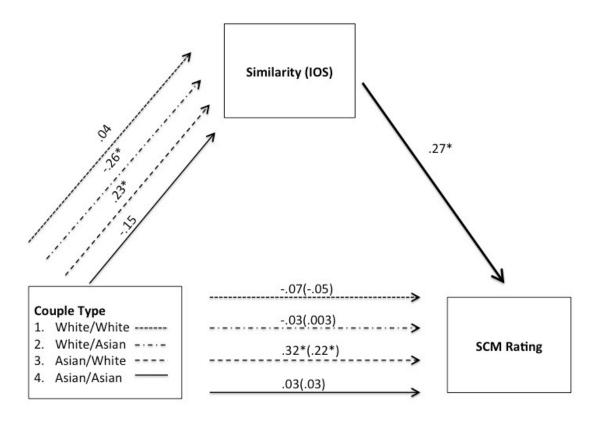


Figure 4. Beta values from the meditational analyses. Each couple type corresponds to the indicated arrow. * indicates p < .05.

As displayed in Figure 4, the first step of mediation analyses regressed couple type onto SCM ratings. Consistent with prior results, the Asian/White couple was perceived higher on SCM dimensions than the White/White couple ($\beta = .32$). In the second step, couple type was regressed onto similarity (IOS). Results indicated that participants perceived the White/Asian couple to be less similar to themselves than White/White couple ($\beta = -.26$), whereas, they perceived the Asian/White to be more similar to themselves than the White/White couple ($\beta = .23$). In the final step, both couple type and similarity were regressed onto SCM ratings. Results indicate that when similarity and couple type are both included in the regression model, similarity to oneself still positively predicts SCM ratings ($\beta = .27$). Subsequently, the initial relationship between couple type and SCM is reduced but still positively related to SCM ratings ($\beta = .22$ for Asian/White). This reduction was supported by a Sobel test, z = 2.16, p = .03, which indicated that perceived similarity partially mediated the relationship between couple type and SCM ratings. Mediation analyses suggest that both perceived similarity to oneself and couple composition influence SCM ratings.

In sum, White participants, on average perceived the Asian/White couple to be more competent and warm than the White/White, White/Asian, and Asian/Asian couples. They also judged that the Asian/White couple was more similar to them than the White/Asian and Asian/Asian couple. Surprisingly, perceptions of similarity to the participant did not differ for Asian/White and White/White couple despite the higher SCM ratings of the Asian/White couple. Finally, perceived similarity was found to partially mediate the relationship between couple type and SCM ratings.

The finding that the Asian/White couple was viewed as more similar to the participant compared to the Asian/Asian couple is consistent with extended contact theory at the collective

dyad level rather than the hypothesized individual target level. Interestingly, the Asian/White couple was perceived as more similar to the participants than the White/Asian couple despite the interracial status of both types of couples. To understand this finding it is important to explore the dynamic processes of multiple social identities.

Taking an intersectional approach can provide a critical lens to understand these findings. Individuals are not static in one social category (i.e. race, gender, sexuality) but rather they simultaneously experience these identities in a dynamic process (Cole, 2009). Given that extended contact theory depends on perceived in-group and out-group status, it is possible that intersectional identity across race and gender could influence these group distinctions. Exploratory analyses were conducted to consider how the intersection of race and gender identification might influence perceived similarity to oneself.

To address the intersectional identity between race and gender, analyses first examined the statistical distribution of gender identification ratings. Participants' gender identification averaged a 7.78(SD=3.80). Visual inspection showed gender identification to be a highly bimodal distribution: 90% of participants reporting themselves at the numerical extremes of gender identification. Nonetheless, a small group of individuals reported gender identification between these extremes. In light of the statistical distribution, three gender identification categories were created for subsequent data analyses. Participants who were highly identified as male were categorized as male (n=99), whereas participants who were highly identified as female were categorized as female (n=141), and participants who reported midrange responses on the gender identification scale were categorized as gender-neutral (n=24).

Using these three gender identification categories, a 4(couple type) x 3(gender) x 2(target) mixed model ANOVA was conducted to understand the influence of intersectional

identity on perceptions of similarity for interracial and same-race couples. Couple type and gender identification were between subjects factors while target (Mark, Amy) was a within subjects factor. Consistent with previous results, there was a main effect of couple type, F(3,504) = 5.60, p = .001. The main effect of target was non-significant, F(1,504) = 2.03, p = ns, indicating participants, regardless of gender identification, did not rate the individual targets in the couple differently on perceived similarity. Additionally, there was a main effect of gender category, F(2,504) = 4.58, p = .012, such that gender-neutral participants (M = 2.88, SD = 1.61) perceived couples as less similar to themselves than the male participants (M = 3.18, SD = 1.66) and female participants (M = 3.46, SD = 1.75). Female participants had higher overall perceptions of similarity to themselves than male participants.

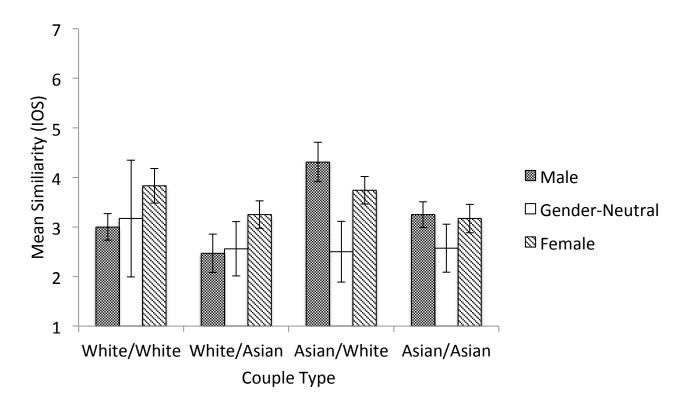


Figure 5. Mean similarity ratings of couple types across gender.

As illustrated in Figure 5, there was an interaction between couple type and gender identification category, F(6,504) = 3.12, p = .01. All other interactions were non-significant (ps > .25). The interaction between couple type and gender suggests that perceptions of similarity between the couple and the participant vary at different levels of gender identification. In the White/White and Asian/Asian same-race couple conditions, there were no differences in perceived similarity to oneself for male, female, and gender-neutral participants. Additionally, in the White/Asian interracial couple condition, participants' degree of perceived similarity to the couple was consistent across male, female, and gender-neutral identities. However, in the Asian/White couple condition, gender-neutral participants (M = 2.50, SD = 1.51) had lower levels of perceived similarity to the couple compared to male participants (M = 4.30, SD = 1.69), F(1,504) = 124.34, p = .004, and female participants (M = 3.74, SD = 1.65), F(1,504) = 59.00, p = .03. Importantly, these exploratory findings highlight differences of perceived similarity patterns across gender identities.

Discussion

Study 1 findings did not support either the extended contact or black sheep hypotheses. It was predicted that participants would perceive individual targets within the couple differently across couple types, however, there were no interaction effects with target. Findings indicate that there were no differences in perceptions of warmth, competence, or perceived similarity to the participant for the individual members that comprise the couples (Mark, Amy). Because no differences emerged for these individual targets across couple types, both the extended contact and black sheep hypotheses were not supported.

However, the findings from Study 1 demonstrate that participants differ in the extent to which they perceive collective couples, rather than individual targets, as similar to them based on

couple composition. Further, the degree of perceived similarity to oneself was positively related to perceptions of warmth and competence. Participants perceived the Asian/White couple as higher in warmth and higher in competence than White/White, White/Asian, and Asian/Asian couple. The degree of perceived similarity between the participant and the couple influences the level of perceived warmth and competence at a dyadic level of couple type condition. Specifically, Asian/White couples were collectively viewed as more similar to participants than White/Asian and Asian/Asian couples. These elevated perceptions of similarity to participants for Asian/White couples may be linked to the higher ratings of SCM dimensions for Asian/White than White/Asian and Asian/Asian couples. Unexpectedly, there was no difference in perceived similarity for Asian/White and White/White couples, despite the Asian/White couple being rated higher in warmth and competence. Participants perceived the Asian/White couple as more similar to themselves than the Asian/Asian couple, which is consistent with extended contact theory at the collective dyad level rather than the hypothesized individual perception level. Interestingly, participants viewed the Asian/White couple as more similar to themselves than the White/Asian couple despite the interracial status of both types of couples.

Exploratory analyses were conducted to examine this discrepancy between White/Asian and Asian/White interracial couples. Participants' gender identification was influential on perceptions of similarity across couple types. Specifically, gender-neutral participants perceived the couples as less similar to themselves compared to male and female participants. This finding demonstrates that White individuals with different intersectional gender identities vary in the extent to which they perceive others to be similar to themselves. For the Asian/White couple, male and female participants had elevated perceptions of similarity to the couple relative to gender-neutral participants. By revealing inconsistent patterns of perceived similarity to oneself

for White participants at different intersections of gender identity, these findings suggest that intersectional identity is important to consider. The data in the present study does not speak to other factors that explain *why* individuals with different intersectional gender identities vary in these processes. Nonetheless, the findings emphasize the significance in taking intersectional identities into consideration in the evaluation of perceived similarity to others.

Study 1 provided information about White participants' perceptions of White and Asian interracial couples. Extending this work to other types of interracial couples is important both for the scientific purpose of testing generalizability of results and the socio-historical purpose of speaking to interpersonal relationships in contemporary American society. Given the centrality of contemporary Black-White race relationships and the deep-rooted racial history of those in the United States, perceptions of White and Black interracial couples are of particular interest.

Study 2: White and Black Interracial Couples

To a greater degree than in prior historical eras, interracial romantic relationships between Black and White individuals today are a significant feature in American social life. According to the U.S. census, 7.9% of interracial marriages are between White and Black individuals (2010). This figure raises the question of how White individual perceive the qualities of people within Black/White interracial marriages. Study 2 explores this question.

Study 2 employs the same SCM framework that was presented in Study 1. The research again investigates hypotheses about out-group and in-group social perceptions that are grounded in the extended contact and black sheep effects. The exact hypotheses for Study 2, differ from those in Study 1, with the difference reflecting the differential nature of Black versus Asian stereotypes. Asians are commonly stereotyped as high in competence and low in warmth. By comparison, SCM research suggests that Blacks, as a social group, do not elicit mixedstereotypes, instead Blacks are viewed collectively as less warm and less competent relative to high competence/high warmth groups, such as White middle-class Americans (Eckes, 2002; Fiske, et. al, 2009). Black stereotypes fall in the middle of the SCM dimensional space, whereas Asian stereotypes fall in the low warmth/high competence quadrant. In light of these stereotypical racial perceptions, the extend contact hypotheses are that White participants will (i) perceive Black men and Black women who are interracially married to be more warm and more competent than their intraracially married counterparts, and (ii) will not differ in their perceptions of White men and White women who are interracially and intraracially married, (iii) perceive interracially married Black men and women as more similar to themselves than intraracially married counterparts. Second, the black sheep hypotheses, that White participants (i) will perceive White men and women who are interracially married lower in warmth and lower

in competence than their interracially married counterparts, and (ii) perceive White men and women who are interracially married as less similar to themselves than their intraracially married counterparts.

Method

Participants. Participants in Study 2 were recruited online through Mechanical Turk (MTurk). Participants received \$0.30 in return for participation in the study. To maintain ingroup and out-group status consistency, only participants who self-categorized as White were included in the study. After removing participants who failed the attention check or the manipulation check (n=54), 254 participants were included in data analyses.

As in Study 1, demographic information about participants was collected in Study 2. Degree of White identification varied (M = 3.03, SD = 2.67). Participants' age ranged from 18-76 years (M = 36.65, SD = 12.83, Median = 33). Participants' gender identification averaged an 8.9 (SD = 3.45).

Measures and Procedure. Study 2 procedures replicated those of Study 1 except for the racial composition of couples. In Study 2, participants were randomly assigned to view one of the four couple profiles: White/White, White/Black, Black/White, and Black/Black. The only information that varied across couple type conditions was the racial composition of the couple. Items used to measure perceptions of warmth, competence, and similarity (IOS), were identical to items used in Study 1.

Results

The main purpose of Study 2 was to examine White participants' perceptions warmth and competence of White and Black individuals in same-race and interracial relationships. Similar steps to those in Study 1 were taken to address the preliminarily question regarding the

independence of warmth and competence dimensions. Figure 6 displays the relationship between the variables in scatterplot form. Warmth and competence variables were highly correlated, r=.84. The majority of participants perceived targets as high in warmth and high in competence. Similarly to Study 1, relatively few data points fall in the low/low quadrant of Figure 6. Additionally, relatively few data points fell in the mixed-stereotype regions of Figure 6, reflecting the strong linear relationship between warmth and competence. Nonetheless, SCM ratings were used as a two-level factor to test the hypotheses and for consistency with analyses from Study 1.

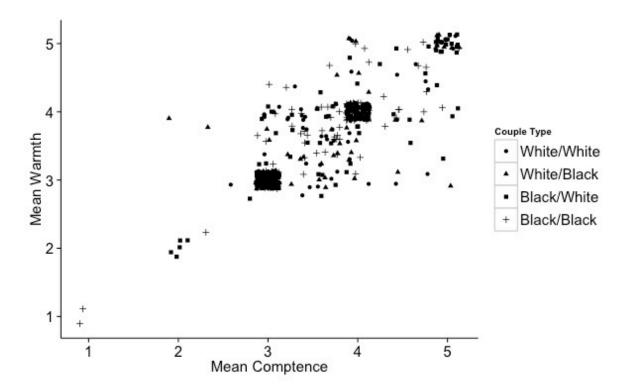


Figure 6. The SCM dimensional space: Average warmth and competence ratings for targets across couple types in study 2.

The data-analytic goal for Study 2 was to test two sets of hypotheses. First, the extended contact hypotheses predicted that White participants will (i) perceive Black men and Black women who are interracially married to be more warm and more competent than their

intraracially married counterparts, and (ii) will not differ in their perceptions of White men and White women who are interracially and intraracially married, (iii) perceive interracially married Black men and women as more similar to themselves than intraracially married counterparts. Second, the black sheep hypotheses, that White participants (i) will perceive White men and women who are interracially married lower in warmth and lower in competence than their interracially married counterparts, and (ii) perceive White men and women who are interracially married as more less similar to themselves than their intraracially married counterparts. To test these hypotheses mixed model ANOVAs were conducted on SCM and IOS ratings.

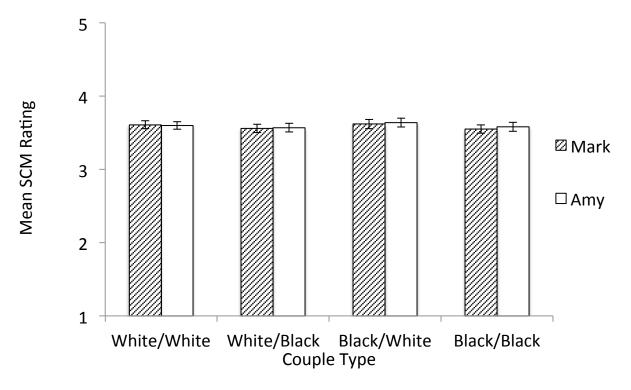


Figure 7. Mean ratings of combined warmth and competence for individual targets within White/White, White/Black, Black/White, and Black/Black couples.

Figure 7 displays SCM ratings (averaged across the two SCM dimensions) for each target across couple type conditions. As can be seen in the figure, overall SCM ratings did not vary at the individual target level or the collective couple level. These observations were confirmed by a

4(couple type: White/White, White/Black, Black/White, Black/Black) x 2(target: Mark, Amy) x 2(SCM dimension: warmth, competence) mixed model ANOVA, in which couple type was the sole between-subjects factor. Contrary to both sets of hypotheses, all main effects and interactions were non-significant (all Fs < I, all ps = ns).

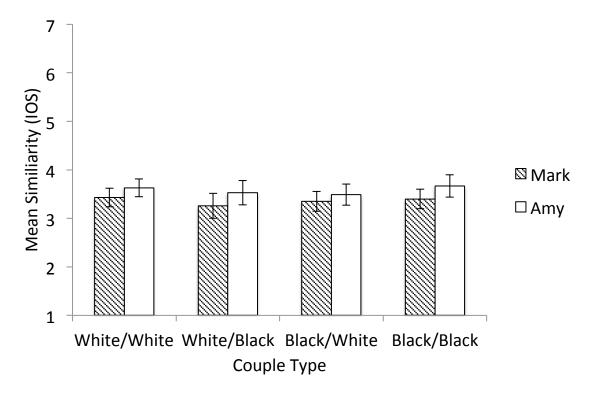


Figure 8. Mean similarity ratings for individual targets within White/White, White/Black, Black/White, and Black/Black couples.

Perceived similarity was analyzed with a 4(couple type) x 2(target) mixed model ANOVA. There was no main effect of couple type, F(3,498) < 1, p = ns, or main effect of target, F(1,498) < 1, p = ns. Contrary to the extended contact and black sheep hypotheses, there was no interaction between couple type and target, F(3,498) < 1, p = ns. As illustrated in Figure 8, participants rated individual targets within White/White, White/Black, Black/White, and White/White relationships no differently on perceived similarity to themselves.

A final set of analyses explored the association between perceptions of similarity to oneself and SCM ratings. This was done using a regression model that examined the relationship between perceived similarity to oneself and overall SCM rating while controlling for couple type and target. Perceived similarity to oneself was shown to positively predict overall SCM ratings, $\beta = .28, t(502) = 6.53, p < 001$. Participants who saw themselves as more similar to the targets tended to rate those targets as higher in warmth and higher in competence.

Overall, for White/White, White/Black, Black/White, and White/White couples, participants did not differ in perceptions of warmth, competence, and similarity to themselves at the dyadic or individual target level. Across couple types, participants had similar patterns in of perceived similarity to themselves and SCM dimensions. Further, participants did not differ in perceptions of individual targets in warmth, competence, and perceived similarity to themselves. Importantly, perceived similarity to oneself was found to be a positive predictor for overall SCM ratings. Regardless of couple type condition, higher perceived similarity to oneself was related to elevated warmth and competence ratings.

Discussion

The findings from Study 2 do not support the extended contact or black sheep hypotheses. It was predicted that differences in perceptions of warmth, competence, and similarity to oneself would emerge for individual targets depending on couple composition. However, participants did not differ in their perceptions of warmth, competence, and similarity to themselves for White/White, White/Black, Black/White, and White/White couples collectively or individual targets within these couples. Thus, findings do not provide evidence for either the extended contact or black sheep effects. Consistent with social identity theory, perceived similarity was found to be linked to overall SCM ratings, such that regardless of couple type, the

more similar the participant perceived the couple to themselves the higher they rated that couple across SCM dimensions. In contrast to Study 1, participants in Study 2 did not perceive interracial and same-race couples differently on SCM dimensions or similarity to themselves. To understand this inconsistency, examining the content of Black stereotypes and the intersectional identity of individual targets, rather than perceivers, may provide insight.

SCM research suggests that Blacks, relative to White, middle-class, Americans, are perceived lower in both warmth and competence (Eckes, 2002; Fiske, 2009). However, in other SCM research, Black stereotypes were examined at different intersectional points with socioeconomic status (Fiske, et. al, 2002). Poor blacks and black professionals were viewed differentially on the warmth and competence dimensions—poor blacks were stereotyped as low warmth and low competence, whereas, black professionals were stereotyped as high competence and high warmth (Fiske, et. al, 2002; Walzer & Czopp, 2011). This suggests that the cue for these Black stereotypes was income rather than race itself. Additional research expanded the definition of competence to incorporate competence-intelligence and competence-talent distinctions. This work indicted that black athletes and black musicians were seen as high on competence-talent but not competence-intelligence (Walzer & Czopp, 2011), emphasizing the difference in competence evaluations for Blacks versus Asians.

In the present study, the couples' SES was held constant (middle-class) across all couple compositions. The findings from Study 2 may reflect perceptions based on stereotypes consistent with information provided of couples' SES, rather than racial information. It is possible that participants based their perceptions of targets, specifically black targets, on the target's intersectional identity of race and SES. Black targets were perceived consistent with their intersectional identity of race and SES (i.e. black professionals). If SES is a more salient cue for

Black stereotypes than race alone, then the results from Study 2 are not surprising. Black targets in White/Black, Black/White, and Black/Black couples were perceived no differently on SCM dimensions than the White targets. However, increased perceived similarity to the participant was related to elevated ratings of SCM, suggesting that perceived in-group and out-group status was influential for ratings of warmth and competence.

General Discussion

Findings from Study 1 and Study 2 do not support either the extended contact or the black sheep predictions. It was predicted that participants would perceive the individual target within the couple differently depending on the race and gender configuration of the couple. However, in both studies no differences at the individual target level within the couple emerged. As a result, the specific extended contact and black sheep hypotheses were not supported.

In Study 1, variation in degree of perceived similarity to oneself for Asian and White interracial couples was related to differences in perceptions of combined warmth and competence. Specifically, participants viewed the Asian male/White female couple as the most similar to themselves, which was related to elevated SCM ratings for this couple collectively. Additional analyses suggest that gender-neutral participants perceived couples, regardless of race and gender composition, to be less similar to them than female and male participants. Further, levels of perceived similarity across couple types were different for male, female, and gender-neutral participants, which highlights the significance of taking intersectional identity into consideration for participants' the degree of perceived similarity to the couple.

In Study 2, participants perceived White and Black interracial and same-race couples no differently in warmth, competence, and perceived similarity to themselves. For all couple type conditions, participants did not perceive individual targets or couples collectively differently. Importantly, in both Study 1 and Study 2, findings demonstrate the significance of perceived similarity to oneself in perceptions of warmth and competence. Regardless of race and gender composition, increased perceived similarity of couples to the perceiver was related to higher perceptions of warmth and competence. This finding is consistent with social identity theory, which suggests that, individuals have more positive perceptions of those who are perceived as

more similar to oneself (in-group) to maintain positive group image (Eller, Abrams, & Zimmermann, 2011).

In other social science research, perceived similarity between participants and targets has been influential on emotions and attitudes towards interpersonal interactions with out-group members (Mallet, Wilson, & Gilbert, 2008). Specifically, emphasis on dissimilarities between oneself and out-group members leads to more negative expectations for interpersonal experiences. However, when people focus on similarities between themselves and out-group member, they have more positive expectations and experiences in interracial interpersonal interactions (Mallet, Wilson, & Gilbert, 2008). Consistent with this work, the results of Study 1 and Study 2 also highlight the influence of perceived similarities. Future research should investigate additional factors that may influence how similar to themselves participants perceive individuals in same-race and interracial relationships above and beyond singular identities.

Limitations

One limitation of the present study is the minimal nature of information provided in the stimulus material. The information in the couple profile was kept simple—name, age, gender, race, and income. The hypothesized interactions were based on differences at an individual level, but the minimal nature of information could have hindered perception at this level. Additionally, across both studies participants were asked about how they *personally* perceived the targets on the SCM dimensions, rather than how *society* views the targets. In the initial SCM research, participants are asked to report how society view members of various social groups, rather than their personal opinions. Often, participants own beliefs do not align with stereotypes consistent with attitudes held by society. Thus, it is possible that participants felt pressure to ensure that their responses reflected their personal judgments. Given that participants were instructed to

make personal judgments, rather than larger society judgments, the minimal information might have been insufficient. There might not have been enough information for individuals to feel justified making distinct evaluations at the individual target level that were reflective of their own attitudes. In follow-up research, it is important to consider the amount of information needed for people to make evaluations of these dimensions at the individual level (versus collective level) and at the personal level (versus the societal level). Future research should explore both paths to understand the way stereotypes and person perception change across racial and gender composition of couples.

Another limitation of the research is that motivation to control prejudice and social desirability factors were not measured or controlled for in the analyses. It is possible that responses could have been biased by these two variables. When individuals are asked questions about race, they may be motivated to avoid being viewed as prejudiced, and therefore their responses may not represent their true perceptions and attitudes. As with much research on race relations, the heightened awareness and negative implications of being viewed or labeled as "racist" result in biased responses due to individuals strong motivations to respond positively. Similarly, social desirability refers to an individual's motivation to appear positive by others. Again, this could lead to biased responses, which may relate to the low variation in SCM ratings across interracial and intraracial couples. To understand the role of motivation to control prejudice and social desirability, future research should include measures to address these biases.

Given the current and historical racial context in the United States, motivation to control prejudice and social desirability factors may have also contributed to the inconsistencies between Study 1 and Study 2. Black and Asian stereotypes stem from different racial histories. Asians have historically been viewed as the "model minority," which is typically associated with

positive traits. On the other hand, Black stereotypes in an American context are more negative, which may create pressure for White participants to monitor their biases and attitudes towards Black individuals. As a result, participants may have felt more comfortable expressing positive perceptions towards Asian targets (Study1), whereas, they may have increased motivation to control prejudice when reporting perceptions of Black targets (Study 2). Further, participants may consider expressing positive stereotypes about groups more socially desirable than expressing negative stereotypes about groups. These differences in motivations to control biases and act in socially desirable ways could explain the inconsistent findings for White and Asian interracial couples (Study1) and White and Black interracial couples (Study 2).

An additional factor to consider as a limitation, relevant to overall bias in responses, is a potential order effect. In both studies, participants completed SCM and IOS measures for both targets in the couple, Mark and Amy; however, the order of target was randomized. Thus, some participants first completed SCM and IOS measures for Amy and then completed the same items for Mark, whereas, other participants did the reverse. For interracial couple type conditions, one target was a racial out-group member and one target was a racial in-group member. For these couple type conditions, especially, order of target could have potentially had an effect on responses. Individuals are often motivated to maintain cognitive consistency; therefore, if a participant first completed items for a racial in-group target then they could have been motivated to respond consistently when completing items for the second target in the couple. Likewise, individuals may have been motivated to maintain consistency in responses across couple types more generally. Future research could explore the influence of an order effect by including order as a variable in analyses. Alternatively, future research could address order effects by asking participants to complete items for only one of the targets within the couple.

Further, the adoption context in which both studies were conducted may have altered the way in which participants thought about the individuals within each couple. These changes could have contributed to the high correlation between the warmth and competence dimension ratings. In both studies, participants were informed that the couples were potential adoptive parents. This context could have primed participants to perceive targets as high in warmth and high in competence without considering the racial information provided for each target, which could explain the high correlations between the warmth and competence ratings in both studies. To understand how this context could have influenced the results, future research should consider alternative contexts to understand how interracial relationship status can impact how individuals are perceived.

Lastly, future research should consider the suitability of the SCM framework for the investigation of individual interpersonal perceptions. Given the high correlation between warmth and competence in both Study 1 and Study 2, future research should consider the measures used to assess individual level perceptions of people with same- or other-race partners. It is possible that the measures used in the current research were not sufficient enough to capture the psychological phenomena. For instance, individuals may have emotional responses to various social stimuli, in which case, the measures should capture the emotional reaction. To move forward, research should utilize suitable measures to capture the phenomena.

Despite these limitations, these studies demonstrated that perceived similarity is an influential factor in perceptions of interracial couples. One question that a remains why these couples are perceived as more or less similar to participants. What are potential factors that could explain perceptions of similarity for in-group and out-group members? Exploratory analyses highlight the importance of considering intersectional identity; however, future research must

examine the dynamic processes of multiple identities of individual who make perceptions and individuals who are perceived. Expanding our understanding of the ways in which multiple identities can shape in-group and out-group boundaries is important as the gender and racial lines in society continue to blend. Stepping outside the traditional perspective of race and gender categories can expand our understanding of inter-group and interpersonal relations in the future.

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Appendix A: Couple profile

Name	Mark	Amy
Gender	Male	Female
Age	32	30
Race	White	White
Class Status	Middle Class	
Couple ID#	6748392	

Kendal M. Wong Curriculum Vitae

University of Illinois at Chicago, Department of Psychology 1007. West Harrison Street. Chicago, IL. 60614 kwong31@uic.edu

Education

The College of Wooster | August 2009-May 2013

- -B.A. Psychology and Mathematics
- -Independent Study Thesis: Exercise Intention and Motivation: Intrapersonal Relationships, Feedback, and Personality

University of Illinois at Chicago | August 2013-present

- -anticipated M.A. and Ph.D Social Psychology
- -minor in Statistics, Methods, & Measurement

Academic Honors, Scholarships, & Awards

The College of Wooster

- -Make A Difference Scholarship (2009-2013)
- -Dean's List (2009-2013)
- -Wooster Grant (2009-2013)
- -Psi Chi International Honor Society in Psychology (2010-2013)
- -David A. Leach Memorial Prize (2013)
- -Magna Cum Lade (2013)

University Of Illinois at Chicago

- -LAS PhD Travel Award (2014)
- -Departmental Travel Award (2015)
- -Graduate College Travel Award (2015)

Publications & Presentations

Publications:

Karazsia, B. T., & Wong. (in press, 2016)

Does Training in table creation enhance table interpretation? An experimental study with follow up. Karazsia, B.T., van Dulman, M. H. M., Wong K., & Crowther, J. H. (2013). Thinking meta-theoretically about the role of internalization in the development of body dissatisfaction and body change behaviors. *Body Image: An International Journal of Research*, 10, 433-411.

Presentations:

- -Wong, K. (March, 2015).
- "Does Training in table creation enhance table interpretation? An Experimental study with follow-up" Poster presentation at the International Convention for Psychological Science. Amsterdam, Netherlands.
- -Wong, K. (November, 2014).
- "Prosocial Behavior" Guest Lecture for Psychology 312: Social Psychology at the University of Illinois at Chicago, Chicago, Illinois.
- -Wong, K. (May, 2013).
- "Exercise Intention and Motivation: Intrapersonal Relationships, Feedback, and Personality" Poster presentation at the College of Wooster's Independent Study Research Symposium. Wooster, Ohio.

Teaching Experience

- -Intro to Psychology | Teaching Assistant (2013, 2014, 2015-Head TA)
- -Statistics | Teaching Assistant (College of Wooster: 2013, University of Illinois at Chicago: 2014, 2015)
- -Social Psychology | Teaching Assistant (2014)
- -Personality Psychology | Teaching Assistant (2016)

Academic Affiliations

- -Society for Personality and Social Psychology
- -Association for Psychological Science
- -Psi Chi International Honor Society in Psychology
- -Diversity Advancement Committee (UIC Psychology Department)