Fifty Shades of Race: The Influence of Racial Identity on Racial Categorization

Shanye Phillips, McNair Scholar The Pennsylvania State University

McNair Faculty Research Advisors: Jose A. Soto, Ph.D Associate Professor of Psychology Department of Psychology College of Liberal Arts The Pennsylvania State University

Reginald B. Adams, Ph.D Associate Professor of Psychology Department of Psychology College of Liberal Arts The Pennsylvania State University

<u>Abstract</u>

Categorization, including but not limited to social categorization, is a natural and automatic process for human beings. The aim of this study is to investigate whether racial identity plays a role in how racially ambiguous faces are categorized by Black and White individuals. Participants are African Americans and European Americans affiliated with the Pennsylvania State University, as students, staff, or faculty. Participants were given a forced choice task where they had to racially categorize visual stimuli, which were morphed faces of a phonotypical averaged White and a phonotypical averaged Black face, as Black or White and then racial identity was measured by the Race Specific Collective Self-Esteem Scale (CSE) and the Multigroup Ethnicity Identity measure (MEIM). Results found that race, gender, and member self-esteem or private self-esteem was significant predictors for breakpoint scores (or the amount of a Black face morphed into a White face to consider the face Black).

Introduction

It is common for humans to navigate the world through the use of categories, whether natural categories (e.g., plants or animals) or artifact categories (e.g., tools and food). Other types of categorization, such as social categorization, are not as concrete. Social categorization is a process that involves perception and cognition to sort individuals in their surrounding environment (Krueger, 2001). Research suggests that the process of social categorization occurs automatically (Devine, 1989), which is beneficial to humans because it allows individuals to use group based information and apply it to make inductive inferences (Gelman & Davidson, 2013). For example, individuals will use knowledge gained from prior experiences with a group of people and apply it to other group members (Nisbett, Krantz, Jepson, & Kunda, 1983). Social categories help individuals organize their understanding of human characteristics and the relationship systems that human social life consists of (Fiske & Neuberg, 2013).

However, automatic social categorization has drawbacks. The tendency to categorize runs the risk of leading to prejudice and stereotyping, two related concepts that affect how we treat individuals. The term "prejudice" refers to negative affect when interacting with members of an out-group, while the term stereotype refers to the mental portrayal of beliefs or behaviors of members of an out-group (Liberman, Woodward, & Kinzler, 2017). Research has shown that the presence of traits that are perceived to belong to African Americans (e.g., skin tone, thick lips, wide nose) activates stereotypes affiliated with the group, which can happen with or without racial categorization (Blair, Judd, Sadler, & Jenkins, 2002). Stereotyping even occurs within a racial group. A study conducted by Blair, Judd, and Chapleau (2004), showed that Black and White inmates were given harsher sentences for the same crime if they appeared to have more Afrocentric features, regardless of their actual race. Thus, how people categorize in-group and out-group, and/or the traits that are affiliated with in-group or out-group members, may have important consequences for an individual's wellbeing. The purpose of our study is to investigate one possible mechanism behind racial categorization.

Origins of Racial Categorization

Racial categorization is a specific form of social categorization that will be the focus of the current paper. Race is a social construct used to categorize and identify people who share common ancestry, culture, historical affiliation, or physical features. The discussion of race in our society is typically avoided. In fact, children as young as ten years old learn to avoid acknowledging racial differences (Apfelbaum, Pauker, Ambady, & Sommers, 2008). The discomfort of discussing race is a sensitive topic due, in part, to the origins of race as a construct. The construct of race dates back to European colonization. When Europeans first encountered Africans, early English voyagers called Africans "Black" in reference to their skin tones (Jordan, 1974). The term Black became prominent because it was the polar opposite of how Europeans thought of themselves. During the time Black Africans were "discovered," the English beauty standard consisted of fair and white skin. The ideology behind the enslavement of Black Africans was that White people were more civilized and therefore superior to Black people. Thus, the many contrasts between Black and White served as justification for slavery. Although the rationale behind the enslavement of African Americans is not as widespread today, and despite the fact that there are multiple races in existence, racial categorization distinguishing between Black and White race remains salient in today's society,

Racial categorization is not a process limited to adults. The ability to distinguish different races is not innate, but there is some evidence that infants as young as three months are beginning to distinguish between their own race's faces and the faces of individuals of other races. Using the visual preference paradigm, which tracks eye movements to see which image they preferred, Kelly et al. (2005) displayed that three-month-old infants exhibited a significant preference for looking at faces from their own racial group over faces from other racial groups. At six months of age infants begin to develop the other race effect (ORE), which is a phenomenon whereby individuals are more prone to make recognition mistakes when faces are from a different racial group rather than from their own. By nine months old, the other race faces can be described by the multidimensional face space model (Valentine, 1991). This model states that a face is encrypted as a vector according to how much it diverges from the prototypical norm. At

birth there is no clear prototype; the prototype can have a broad range or be unstated. The prototype is formed through experience and interactions with faces in an infant's environment (Nelson, 2001). In other words, facial input experienced early in life, in regards to race and species, serves as the foundation for face-processing abilities.

Mechanisms Behind Racial Categorization

There are many different ways people place other individuals into categories. Appearance serves as a salient cue when determining the race of an individual. In a study conducted by Brown, Dane, and Durham (1998), participants ranked skin color as the most important determining factor for race. Skin color was followed by hair, eyes, nose, mouth, cheeks, eyebrows, forehead, and ears. Examples of physical features specific to African Americans that are commonly a determining factor for racial identity include wide noses, thick lips, and dark skin (Blair et al., 2002). When determining racial categories, children's decision is based almost exclusively on skin tone with physiognomic features barely being considered. Adults can determine race without skin tone cues because adults consider facial features in addition to skin tone when deciding racial categories (Dunham, Stepanova, Dotsch, & Todorov, 2014).

Another mechanism that impacts racial categorization is the previously mentioned other race effect, also known as the cross-race effect or own-race advantage. The other race effect was first exhibited initially in a study conducted by Malpass and Roy (1969). During this study, participants were flashed 10 faces of their own race and 10 faces of another race for one second each. Participants were then shown 80 pictures and asked to recall which 20 they had seen before. Results of this study showed that memory for the faces they had already seen was more accurate when the face was from their own racial group. The initial explanation for individual's superior ability identifying members of their racial group is due to daily encounters. People tend to have more interactions with members of their in-group which, in turn, leads to the ability to identify them more effectively than people who belong to their out-group (Nelson, 2001). A later study conducted by Malpass (2003) used identical faces and changes in hair styles to fit a racial marker. Once the hair styles were changed, despite the faces remaining the same, the racial categorization was changed. Findings of this study suggest that the memory associated with other race effect occurs due to placing the faces in a social category rather than exposure (MacLin & Malpass, 2003).

Another factor that could possibly play a role in racial categorization is group identification. Castano, Yzerbyt, Bourguignon, and Seron (2002) conducted a study in Italy which investigated how identifying as a member of a group impacts the categorization of others as in-group or out-group members. This study was completed using 36 undergraduate females who were all born and resided in northern Italy. Castano et al. measured the strength of the participants' identity and had them categorize morphed picture of northern and southern Italians. Results of this study showed that people who identified highly with northern Italy were more strict when categorizing people as a member of their in-group (i.e., they tended to classify faces as in-group when they had fewer southern Italian features morphed in). Both low identifiers and high identifiers were biased to reject faces as members of their in-group, which displays the over-exclusion effect. In other words, regardless of how they identified, participants were more prone to classify faces as members of the out-group. However, highly identified Northern Italians were more likely to categorize faces as out-group than those who were less strongly identified. This study showed that there is some relationship between identity and the process of racial identification. Similar to Castano et al. (2002), this study looks at how identity influences categorization of other individuals, but rather than focusing on categorization within one racial background, it looks at two completely different racial backgrounds. Group identification has also been shown to influence the extent to which race influences the ability to remember faces (Hehman, Mania, & Gaertner, 2009) and emotion decoding (Stevenson, Soto, & Adams, 2012).

The Present Study

The goal of the present study was to investigate whether racial identity impacts how African Americans and European Americans categorize racially ambiguous faces. In this experiment we used a between participant design. The independent variable was strength of racial identity (weak or strong) and race of the participant, while the dependent variable was an index of when participants classified morphed Black/White faces as Black. There is an extensive amount of research that looks at racial categorization; however, not many studies have investigated the link between racial identity and categorization. This study involved a forcedchoice racial categorization task and then measured racial identity through two questionnaires, the Multigroup Ethnicity Identity Measure (MEIM) and a race-specific version of the Collective Self-Esteem Scale (CSE). We expect to find that Black participants with a strong racial identity will be more exclusive than Black participants with weak racial identities when completing our racial categorization task. In other words, as identification with in-group gets stronger with Black participants, they become more stringent or exclusive in what they consider to be an in-group. This was only hypothesized for Black participants and not White participants (an identity by race interaction effect), because racial identity tends to be more important for racial minorities than for White individuals (Crocker, Luhtanen, Blaine, & Broadnax, 1994).

Method

Participants

Snowball sampling, which is a type of nonprobability sampling where participants refer their acquaintances to the study, was used to gather participants for this study. Initial participants were recruited through recruitment emails sent to various multicultural listserv at the Pennsylvania State University. We recruited an initial sample of 45 participants, 20 Black (six males and 14 females), 15 White (six males and nine females), and 10 describing themselves as "other" or unspecified. Since the visual stimuli used in the present study is a morph between Black and White faces, participants who were not Black or White were dropped from analyses. The final sample included a total of 35 participants, 20 Black subjects and 15 White subjects.

Materials

Forced-choice categorization task. Participants completed a forced choice categorization task where they were shown a morphed-race picture of an individual which they had to categorize as either Black or White. In all there were 202 pictures, 101 male and 101 female. The individual pictures were created as averages of White and Black faces (separated within gender) using 100 faces of each category from the Chicago Face Database (Ma, Correll, & Wittenbrink, 2015). We did this by using a morphing procedure in order to pull out the most phenotypically average traits of each racial category. We then morphed the facial averages from each racial category in increments of 1% in order to create a continuum. The continuum consisted of faces that started at the morphed phenotypically averaged White face and ended at the morphed phenotypical averaged Black face. Pictures were randomized to control for

anchoring effects. We used the categorization breaking point as our main dependent variable. The breaking point refers to the percentage of Black face morphed into a White face required for the subject to categorize a face as Black. Participants' breaking points were averaged for both the male and female visual stimuli to give each participant one overall breaking point.

Self-Report Measures. After completing the racial categorization task, participants completed a number of self-report measures to assess racial/ethnic identity. These scales are described below. Finally, we asked participants to provide some basic demographic information which included race, education, class standing, and gender.

Race Specific Collective Self-Esteem. The Race-Specific Collective Self-Esteem Scale, developed by Crocker, Luhtanen, Blaine, & Broadnax (1994), is a 16-item seven-point Likert scale that measures feelings towards social group membership. In the race specific CSE, rather than asking questions about belonging to any social group (e.g., religion, sex, etc.) questions are phrased to consider race. The CSE has four subscales. The first subscale is membership esteem, which evaluates whether an individual feels worthy of belonging to a social group. The second subscale is the private collective self-esteem scale which measures how an individual personally feels about the value of their social group. The third subscale is the public collective self-esteem, which investigates how an individual believes other people perceive their social group. The public self-esteem scale was not used in this study because there is no correlation between any other subscales for black participants due to awareness of prejudice and discrimination (Crocker et al., 1994). The public self-esteem subscale was not used because it is not a valid measurement of identity for Black participants. The last subscale of the CSE is importance to identity which determines how important belonging to a social group is to the individual's character. The race specific CSE has been shown to be a reliable measure (alphas above .70).

Multigroup Ethnicity Identity Measure. The Multigroup Ethnicity Identity Measure (MEIM), developed by Phinney (1992), is a measure that evaluates the strength of an individual's ethnic identity. There are two factors in the MEIM. One is ethnic identity search, which gets at the developmental and cognitive aspect of identity formation. The other is affirmation, belonging, and commitment, which gets at the affective aspect of identity. The MEIM has been shown to be a reliable (alpha above .80) measure across all ages and ethnic groups.

Procedure

Participants received a link for participation through a recruitment email. The study was administered online via Qualtrics. After participants viewed a consent form and agreed to take the study, the study began with a racial categorization task. Participants were shown the visual stimuli of morphed faces, both male and female, one at a time in a randomized order and instructed that "for the following trials, you will be shown a face one at a time and be asked to categorize it as either a White or Black individual." Afterwards, participants completed the self-report measures described above.

Results

Preliminary Analyses and Descriptives

We calculated the means and standard deviations for our primary variables to look for outliers, or individuals whose data fell three standard deviations above or below the mean. One Black female was excluded from analyses because her breaking point was an outlier, being over three standard deviations below the mean. Thus the final analyses included a total of 34 participants: 19 Black participants and 15 White participants. Table 1 presents means and standard deviations for our primary variables which includes the breakpoint and subscales used in the study. Both Black and White participants' breakpoint average was around 43% and not significantly different from each other. However, Black participants, on average, scored significantly higher than White participants in membership self-esteem (5.12 vs. 4.43), private self-esteem (6.45 vs. 4.92), importance to identity (5.68 vs 3.10), ethnic identity search (3.24 vs 2.41), and affirmation, belonging, and commitment (3.29 vs. 2.59) (see Table 1).

We next determined the Pearson-correlation coefficient between our racial identity measures and the racial categorization breakpoint variables. None of these variables were related across the whole sample, as shown in Table 2. The lack of an overall correlation is not necessarily surprising because we expected these variables to relate differently within each group. Our hypotheses expecting a moderation by race are tested below.

Primary Analyses

The primary purpose of this study was to investigate how racial identity impacted racial categorization. We expected that for Black participants, those with a strong racial/ethnic identity would have a higher breakpoint than those with a low racial/ethnic identity. We ran a set of regression analyses to see if any of the five subscales used to measure racial identity could predict breakpoint scores and whether these identity measures interacted with race to predict breakpoint scores. Table 3 presents the results of these regressions. We found that the subscales used to measure racial identity were not a significant predictor for breakpoint. Race and gender were also not a significant predictor of breakpoint scores. Contrary to the hypothesis, we did not find that race and identity significantly interacted to predict breakpoint scores. There were no significant main effects and no significant interactions between race and any of the identity variables in predicting breakpoint.

Post-Hoc Analyses

We decided to examine gender of the participants as an additional variable in the regressions described above, because the visual stimuli presented were both male and female, and because prior research has shown that both race and gender of the observer can impact racial categorization (Johnson, Freeman, & Pauker, 2012). Results are presented in Table 4.We found a significant main effect of gender of the participant for predicting breakpoint score in the regression model for membership esteem, $\beta = -.040 (.014)$, p = .007. There was also a two-way interaction effect between gender of the participant and membership self-esteem, but this two-way interaction was qualified by a significant three way interaction between race, gender, and membership self-esteem in predicting breakpoint scores, $\beta = -.048 (.014)$, p = .001(see Table 4). Black women who scored low on this scale had a lower breaking point than Black men who scored low on this scale. In other words, Black women who did not feel as though they are worthy of belonging to their racial group were more inclusive while categorizing faces as Black. On the other hand Black men who did not feel as though they were worthy members of their racial group were more exclusive while categorizing faces as Black (see Figure 1a).

The only other significant effect among our regression analyses was a three-way interaction between race, gender, and private self-esteem, $\beta = -.096(.044)$, p = .039. Similar to the previous three way interaction, Black women who scored low on this scale had a lower breaking point than Black men who scored low on this scale. In other words, Black women who personally felt poorly about their racial group were more inclusive while categorizing faces as

Black, while Black men who personally felt poorly about their racial group were more exclusive while categorizing faces as Black (see Figure 1b).

Discussion

Prior research has demonstrated a relationship between categorization and strength of racial identity. This study aimed to test the relationship between racial categorization and racial identity in Black and White individuals. Our hypothesis, which expected Black participants who had a strong racial identity to categorize racially ambiguous faces as out-group, was not supported when we only examined race and identity in our analyses. However, when we included gender with race and racial identity, we did find an interaction effect along the lines of what we expected. There was a three-way interaction between race, gender, and membership self-esteem and collective private esteem. When membership self-esteem was low, Black males were more exclusive when categorizing faces, while Black females were more inclusive. Among Black participants with low private self-esteem, Black men showed the more exclusive tendency predicted, but women did not. Black women who are low in collective private self-esteem look like everyone else in terms of their categorization tendencies, while Black men who are low in private esteem scored higher than everyone else, meaning Black men required a higher percentage of Black face morphed into a White face relative to Black women and White men and women.

This difference between Black men and Black women who scored low on the membership and private self-esteem could be a result of gendered racial socialization, which refers to the contrasting message families share with Black boys and girls about the racial climate and the experiences they may face due to both race and gender. Black boys are taught to value gender roles such as success, aggression, and competition, but also face cultural expectations of cooperation, resilience, promotion of their group, and survival of their group. In other words, Black boys are taught that as men they should be protectors and providers of both their family and their community which sometimes results in hyper masculine behaviors (Allen, 2016). Thus, Black males with low collective esteem might be overly exclusive when racially categorizing ambiguous faces in order to protect their in-group from outsiders as a means of overcompensating for their feeling less positive about their group (low private collective esteem) or like they are not valuable members of the group (low membership esteem).

Black women face the additional challenge of being a member of two undervalued groups and face gendered racism when seeing depictions of their gender roles. In the public lens, Black women have been stereotyped and socialized as self-sacrificing and nurturing, which is referred to as the Mammy stereotype (West, 1995). The acceptance of these stereotypes has also been linked with lower self-esteem (Thomas, Witherspoon, & Speight 2004). Black girls are also socialized with traditional and nontraditional gender roles by family. Studies have shown that Black girls are taught to value traits such as economic independence, assertiveness, strength, self-reliance, community leadership, and nurturance (Buckley & Carter, 2005). Black females with low collective self-esteem might feel the need to display extreme nurturance, either succumbing to the Mammy stereotype or promoting the emphasized trait nurturance, in effort to compensate for the lack of membership or private self-esteem which results in low-esteem Black females being more inclusive when categorizing racially ambiguous faces.

Interestingly, the only two subscales that had significant results were membership selfesteem and private self-esteem. Neither subscales on the MEIM, ethnic identity search or affirmation, belonging, and commitment, or the importance to identity subscale on the race specific CSE were predictive of breakpoint scores in the racial categorization task. This could be a result of low self-esteem, in general. Luhtanen and Crocker (1992) found that all of the subscales on the CSE were correlated with personal self-esteem; however, the correlation between personal self-esteem and importance to identity had the weakest correlation. Low personal self-esteem could change the outlook on how an individual thinks of themselves as a member of a social group or their social group overall. In the present study, we did not measure or control for personal self-esteem.

Limitations and Future Directions

A major limitation of our study is the small sample size. This sample only included a total of 34 people, therefore this data must be considered a preliminary test of our hypotheses. Data were gathered over a four week time period on a volunteer basis, which contributed to the low sample size and makes it necessary to interpret our findings with caution. In fact, the two groups that appeared to drive the significant interaction (Black men and women) were the smallest subgroups (two individuals from each group). Another limitation of our study was that it was completed online by participants, as opposed to in the laboratory. Thus, participants could complete the study from any location and we were therefore unable to control the environment where the study was completed. Finally, this study used convenience samples and snowball sampling and as a result might not be reflective of what we may see in the general population. Future directions should try to replicate these analyses with a larger and more representative sample to examine how robust our findings were. Also future testing should involve controlling for personal self-esteem, which would allow us to determine whether collective esteem is uniquely predictive of racial categorization or if it our findings are driven by differences in personal self-esteem.

Conclusion

This study, when taken in consideration with prior research (Castano et al., 2002), demonstrates that identity is a possible factor in how people engage in racial categorization. Since racial categorization has implications for how people are treated (e.g., stereotypes prejudices faced), it will be important for research to continue to look at what other personal factors might drive the process of categorization. Strategies that individuals use for social categorization have implications for their social surroundings and can create positive or negative racial environments. Research has shown that the presence of traits that are perceived to belong to African Americans (e.g., skin tone, thick lips, wide nose) leads can activates stereotypes (e.g., violent, uneducated, criminal, etc.) affiliated with that group regardless of whether a racial categorization decision is being made(Blair et al., 2002). However, much more research should be done to examine what guides the process of racial categorization. We know that there are negative results from racial categorization, so by studying the processes involved in racial categorization we can try to prevent some of these negative outcomes. As we find more evidence for the relationship between collective/ethnic identity and racial categorization, this knowledge could be used to develop and implement anti-stereotype and anti-prejudice programs.

References

- Allen, Q. (2016) 'Tell your own story': manhood, masculinity and racial socialization among black fathers and their sons. *Ethnic and Racial Studies*, 39(10), 1831-1848. doi: 10.1080/01419870.2015.1110608
- Apfelbaum, E.P., Pauker, K., Ambady, N., & Sommers, S.R. (2008). Learning (not) to talk about race: When older children underperform in social categorization. *Developmental Psychology*, 44(5), 1513-1518
- Blair, I.V., Judd, C.M., Sadler, M.S., & Jenkins, C. (2002). The role of Afrocentric features in person perception: Judging by features and categories. *Journal of Personality and Social Psychology*, 83, 5-25. doi:10.1037/0022-3514.83.1.5
- Blair, I.V., Judd, C.M., & Chapleau, K.M. (2004). The influence of afrocentric facial features in criminal sentencing. *Psychological Science*, 15(10), 674-679.
- Brown, T.D., Dane, F.C., & Durham, M.D. (1998). Perception of race and ethnicity. *Journal of Social Behavior and Personality*, 13, 295-306.
- Buckley, T.R., & Carter, R.T. (2005). Black adolescent girls: Do gender role and racial identity: impact their self-esteem? *Sex Roles*, 53(9-10), 647-661. doi: 10.1007/s11199-005-7731-6
- Castano, E., Yzerbyt, V., Bourguignon, D., &Seron, E. (2002). Who may enter? The impact of in-group identification on in-group/out-group categorization. *Journal of Experimental Psychology*, 38 (315-322). doi: 10.1006/jesp.2001.1512
- Crocker, J., Luhtanen, R., Blaine, B., & Broadnax, S. (1994). Collective self-esteem and psychological well-being among White, Black, and Asian College students. *Personality & Social Psychology Bulletin*, 20(5), 503-513

Devine, P.G. (1989). Stereotypes and prejudice: Their automatic and controlled components.

Journal of Personal Social Psychology, 56, 5-18.

- Dunham, Y., Stepanova, E.V., Dotsch, R., &Todorov, A. (2014). The development of race based-perceptual categorization: Skin color dominates early category. *Developmental Science*, 18(3), 469-483. doi: 10.1111/desc.12228
- Fiske, S.T., & Neuberg, S.L. (2013). Category-based and individuating processes as a function of information and motivation: Evidence from our lab. Stereotyping and Prejudice: Changing Conceptions, Springer Science Press (2013), pp. 83-104
- Gelman, S.A. & Davidson, N.S. (2013). Conceptual influences on category-based induction. Cognitive Psychology, 66(3), 327-353.
- Hehman, E., Mania, E.W., Gaertner (2010). Where the division lies: Common ingroup identity Moderates the cross-race facial-recognition effect. *Journal of Experimental Psychology*,
- Johnson, K.L., Freeman, J.B., Pauker, K. (2012). Race is gendered: How covarying phenotypes and stereotypes bias sex categorization. *Journal of Personality and Social Psychology*, *102*, 116-131.
- Jordan, W.D. (1974). The white man's burden: Historical origins of racism in the United States. London: Oxford University Press.
- Kelly, D.J., Quinn, P.C., Slater, A.M., Lee, K., Gibson, A., Smith, M., Ge, L., & Pascalis, O. (2005). Three-month-olds, but not newborns, prefer own-race faces. *Developmental Science*, 8(16), F31-F36. doi:10.1111/j.1467-7687.2005.0434a.x
- Kelly, D.J., Quinn, P.C., Slater, A.M., Lee, K., Ge, L., & Pascalis, O. (2007). The other race effect develops during infancy: Evidence of perceptual narrowing. *Psychological Science*, 18(12), 1084-1089.

Krueger, J. (2001). Social categorization, the psychology of. International Encyclopedia of the

Social & Behavioral Sciences, 14219-14223. doi: 10.1016/B0-08-043076-7/01751-4.

- Liberman, Z. Woodward, A.L., &Kinzler, K.D. (2017). The origins of social categorization. *Trends in Cognitive Sciences*, 21(7), 556-568
- Luhtanen, R., & Crocker, J. (1992). A collective self-esteem scale: Self-evaluation of one's social identity. *Personality and Social Psychology Bulletin, 18*, 302-318.
- Ma,D.S,Correll, J., &Wittenbrink, B. (2015). The Chicago face database: A free stimulus set of faces and norming data. *Behavior Research Methods*, 47, 1122-1135.
- MacLin, O.H., Malpass, R.S. (2003). Last but not least- The ambiguous face illusion. *Perception*, 32(2), 249-252.
- Malpass, R.S. &Kracitz, J. (1969). Recognition for faces of own and other race. *Journal of Personality and Social Psychology*, *13*(4), 330-334.
- Nelson, C.A. (2001). The development and neural bases of face recognition. *Infant and Child Development, 10*, 3-18.
- Nisbett, R.E., Krantz, D.H., Jepson, C., & Kunda, Z. (1983). The use of statistical heuristics in everyday inductive reasoning. *Psychological Review*, *90*(4), 339-363.
- Phinney, J. (1992). The Multigroup Ethnic Identity Measure: A new scale for use with adolescents and young adults from diverse groups. *Journal of Adolescent Research*, *7*, 156-176.
- Stevenson, M.T., Soto, J.A., & Adams, R.B., Jr. (2012). More than meets the eye: The role of self-identity in reasoning about the emotional states of others. *Emotion*, *12*, 882–886.
- Thomas, A. J., Witherspoon, K. M., & Speight, S. L. (2004). Toward the development of the Stereotypic Roles for Black Women Scale. *Journal of Black Psychology*, *30*(3), 426–442. doi:10.1177/0095798404266061.

- Valentine, T. (1991). A unified account of the effects of distinctiveness, inversion, and race in face recognition. *The Quarterly Journal of Experimental Psychology*, 43A, 161-204.
- West, C. M. (1995). Mammy, sapphire, and jezebel: Historical images of Black women and their implications for psychotherapy. *Psychotherapy: Theory, Research, Practice, Training,* 32(3), 458–466. doi:10.1037/0033-3204.32.3.458.

Tables

Table 1: Descriptive Statistics

	Overall M(SD)	Black M(SD)	White M(SD)
Membership SE	4.81(0.09)	5.12(0.09)**	4.43(.14)**
Private SE	5.77(0.21)	6.45(0.21)**	4.92(0.26)**
Importance to Identity	4.54(.29)	5.68(0.28)**	3.10(0.28)**
Ethnic Identity Search	2.88(0.12)	3.24(0.15)**	2.41(0.13)**
Affirmation, Belonging, & Commitment	2.98(0.13)	3.29(0.16)**	2.59(0.16)**
Female Breakpoint	0.44(0.01)	0.45(0.02)	0.44(0.01)
Male Breakpoint	0.42(0.01)	0.42(0.02)	0.43(0.01)
Breakpoint Average	0.43(0.01)	0.43(0.02)	0.43(0.01)

*p<0.05

**p<0.01

		Female Breakpoint	Male Breakpoint	Overall Breakpoint
Membership SE	Pearson Correlation	030	.059	.014
	Sig. (2-tailed)	.866	.738	.935
	Ν	34	34	34
Private SE	Pearson Correlation	029	.022	004
	Sig. (2-tailed)	.873	.903	.981
	Ν	34	34	34
Importance to Identity	Pearson Correlation	010	087	050
	Sig. (2-tailed)	.957	.626	.777
	Ν	34	34	34
Ethnic Identity Search	Pearson Correlation	.001	040	020
	Sig. (2-tailed)	.995	.821	.909
	Ν	34	34	34
Affirmation, Belonging, &	Pearson Correlation	.112	009	.056
Commitment	Sig. (2-tailed)	.528	.958	.751
	Ν	34	34	34

Table 2: Correlation Between Racial Identity and Racial Categorization

	Membership SE	Private SE	Importance to Identity	Ethnic Identity Search	Affirmation, Belonging, & Commitment
Race	001(.014)	.001(0.15)	.000(.018)	.003(.015)	.001(.013)
Identity Subscale	.003(.015)	.000(.015)	005(.017)	003(.015)	.003(.013)
Race x Identity Subscale	.005(.015)	.002(0.15)	025(.018)	.004(.015)	.016(.013)

Table 3: Regression Model Predicting Breakpoint from Racial Identity Subscales

*p <0.05 **p<0.01

***p<0.01

	Membership SE	Private SE	Importance to Identity	Ethnic Identity Search	Affirmation, Belonging, & Commitment
Race	.002(.012)	.059(.031)	.001(.019)	.013(.018)	.006(.015)
Gender	.025(.012)*	.087(.043)	017(.018)	008(.017)	.005(.014)
Identity Subscale	004(.013)	071(.037)	005(.019)	015(.019)	.000(.016)
Race x Gender x Identity Subscale	048 (.014)***	-0.96 (.044)*	.020(.018)	.010(.020)	005(.017)

Table 4: Regression Model Predicting Breakpoint from Racial Identity Subscales, Race, and Gender

*p <0.05 **p<0.01

***p<0.01

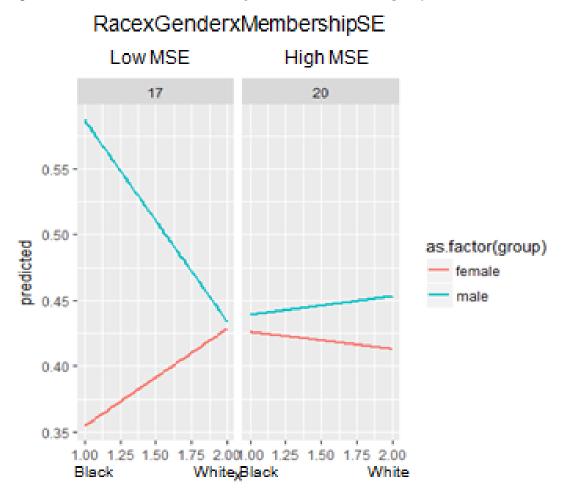


Figure 1a: Interaction between race, gender, and membership self esteem

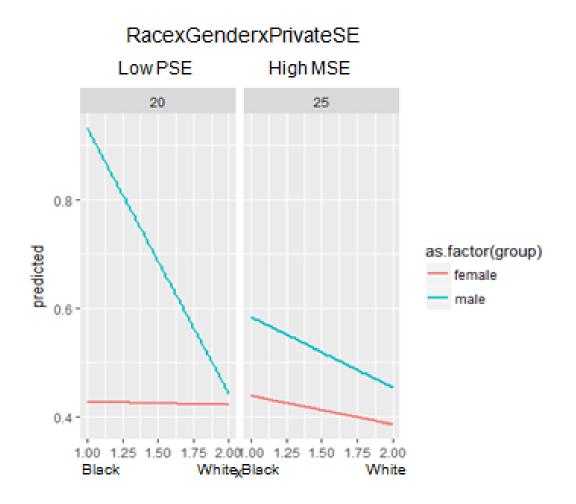


Figure 1b: Interaction between race, gender, and private self esteem