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## The Effect of Race and Masculinity on Female Mate Preference

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THE EFFECT OF RACE AND MASCULINITY  
ON FEMALE MATE PREFERENCE

by

Michael S. Penuliar

A thesis submitted to the Department of Psychology  
in partial fulfillment of the requirements for the degree of  
Master of General Psychology

UNIVERSITY OF NORTH FLORIDA  
COLLEGE OF ARTS AND SCIENCES

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*Dedication and Acknowledgments*

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## Abstract

The current work extends upon the theories of female mate preference in a novel way by examining how the interaction of race and the masculinity of males affect preference in females. In Study 1, I manipulated the facial masculinity of photographs of White, Black, and Asian males. Female participants rated the faces on attractiveness, masculinity, and age. In Study 2, nine photographs were matched on masculinity and participants made judgments on dimensions relating to dateability, attractiveness, resources, masculinity, and parenting behaviors. Asian males are often neglected as potential romantic partners. A major aim of the current work was to assess if racial bias against Asian males in romantic situations are lessened with increased facial masculinity. Asian males were evaluated highly across several dimensions if they possessed high masculine facial characteristics. Medium masculine White and Black males were evaluated as the most attractive and dateable in their respective racial groups. Additionally, low masculine White and Black males were evaluated as better choices for resource and family-related attributions in their respective racial groups.

*Keywords:* female mate preference, facial masculinity, race, stereotypes, Asian males, judgments



### The Effect of Race and Masculinity Cues on Female Mate Preference

It is reasonable to believe that resources are of key importance for mate preference in females. Evolutionary theorists have noted that females strongly value economic resources of a potential mate (Buss, 1989; Hill, 1945; Hudson, 1969; Kenrick, Sadalla, Groth, & Trost, 2001; Li, Bailey, Kenrick, & Linsenmeier, 2002; McGinnis, 1958; Sadalla, Kenrick, & Vershure, 1987; Sprecher, Sullivan, & Hatfield, 1994). Unfortunately, the research fails to account for how variations in masculinity and race affect preference. For example, dating studies have concluded that Asian males are the lowest preferred and contacted group (Feliciano, Robnett, & Komaie, 2009; Fisman, Iyengar, Kamenica, & Simonson, 2008; Hitsch, Hortacsu, & Ariely, 2006; Hitsch, Hortacsu, & Ariely, 2010; Robnett & Feliciano, 2011). Asian males are often demonstrated to have high earning and education levels in the United States, but are also the lowest preferred romantic partner (Massey & Denton, 1992; Robnett & Feliciano, 2011). This is a stark contrast to the mate-preference theories that state that females desire the most resourceful mate. The current work aims to investigate why Asian males are viewed negatively as dating partners. I reason that Asian males are neglected as dating partners due to the perception of low masculinity. Facial masculinity levels of White, Black, and Asian males are manipulated and inserted into faux online dating profiles to further examine female mate preference and to assess if racial bias is reduced in Asian males when high masculine characteristics are displayed.

### **Attributions of Asian Males**

Females are highly selective in choosing partners due to the amount of time invested during gestation and child rearing compared to males (Buss, 1989). It has been heralded that a male with higher resources, compared to one with lower resources, would be more successful in rearing offspring. For these reasons, it is presumed that a female would want to maximize the viability and reproductive potential of her offspring by being selective and vying for mates with high resources or resource potential. Females thus place high value on education, career, and industriousness in potential mates and are able to scrutinize and evaluate these qualities quite well (Betzig, 1989; Buss, 1989).

Asian males are a group that is often demonstrated to have high education and income levels (Fu, 2008; Massey & Denton, 1992; United States Department of Labor, 2010). Regardless of their ascribed resource level, Asian males are ostracized and rejected the most during romantic encounters in both online and offline environments (Leong & Schneller, 1997; Feliciano et al., 2009; Fisman et al., 2008; Hitsch et al., 2006; Hitsch et al., 2010; Robnett & Feliciano, 2011). Compared to their female counterparts, Asian males enjoy less success in dating and marrying racial out-groups (Jacobs & Labov, 2002; Levin, Taylor, & Caudle, 2007; Passel, Wang, & Taylor, 2010; Qian & Lichter, 2007). There are many theories to explain this demographic group's relative lack of success in romantic relationships compared to their female counterparts and other males. One example is the perpetual foreigner theory that casts Asians as inherently foreign and non-American no matter how many generations Asian individuals have lived in the United States (Devos & Banaji, 2005; Lee, Wong, & Alvarez, 2009; Wong, Owen, Tran, Collins, & Higgins, 2011), but an extremely strong avenue of research centers on the

emasculation of Asian males in the western world (Chan, 1998; Chen, 1999; Chua & Fujino, 1999; Espiritu, 1997; Fong, 1998; Kim, 1986; Mok, 1998). Scholars argue that the cultural and media portrayal of the masculinity of Asian males is less than ideal (Collins, 2004; Espiritu, 1997). This negative portrayal of their masculinity level undoubtedly has the power to influence mate preference.

Masculinity is likely an important attribute that females still use to make inferences in romantic contexts. I argue that we are not in a world in which females forego masculinity and evaluate the best mate solely on resources. For example, females can use trait masculinity to evaluate a male's personality in a potential romantic relationship. Additionally, facial masculinity is an honest phenotypic cue related to a male's health and genotypic success (Kruger, 2006). If masculinity attributions truly affect dating preferences, I expect to find females to express stronger preference for Asian males when stronger facial masculinity cues are displayed.

### **Facial Masculinity and Female Mate Preference**

Researchers suggest that masculinity judgments of the face are important in mate preference (Johnston, Hageman, Franklin, Fink, & Grammer, 2001; Thornhill & Gangestad, 1999; Penton-Voak et al., 1999). The face contains honest health and genetic related cues that males cannot fake. Additionally, females, compared to males, are more attentive to facial characteristics (Rehman & Herlitz, 2006; Rehman & Herlitz, 2007). With females naturally more attentive to the face, an implicit judgment of masculinity and its relation to immunocompetence, genetic fitness, and the ability to compete for resources may influence mate preference.

When puberty arises, males develop prominent chins and cheekbones due to increased circulatory androgens (Bullock & Montgomerie, 2000; Cunningham, Barbee, & Pike 1990; Enlow & Hans, 1996; Franklin & Johnston, 2000; Grammer & Thornhill, 1994; Penton-Voak & Chen, 2004; Scheib, Gangestad, & Thornhill, 1999). Masculine features are thought to reflect a greater ability to deal with the immunosuppressive effects of testosterone, thus reflecting an individual's immunocompetence, the ability to compete with other males for mates and resources, and reproductive success (Andersson, 1994; Folstad & Karter, 1992; Thornhill & Gangstad, 1999). For example, in a study investigating health problems, males with high masculine facial characteristics were found to have lower health problems (Rhodes, Chan, Zebrowitz, & Simmons, 2003). Researchers also suggest that faces that display high masculinity levels are likely to possess high social status and social dominance (Kruger, 2006). For instance, the facial dominance of male cadets at the United States Military Academy at West Point predicted their military ranks at graduation and the rank they would eventually receive in the military (Mazur, Mazur, & Keating, 1984; Mueller & Mazur, 1997). Health and social status are likely important characteristics that females would want in a potential mate.

Of all males, Asian males are often interpreted to have the lowest physical masculinity (Jackson, Lewandowski, Ingram, & Hodge, 1997; "Secondary Sexual Characteristics," 1981; Song et al., 2002; Xia et al., 1996), whereas Black males are often interpreted as the highest masculine group (Jackson et al., 1997). I argue that the likelihood of judgments of low masculinity is highly plausible for Asian males in initial romantic interactions. Additionally, I believe that the judgment of low masculinity infers that Asian males are low on important traits such as genetic fitness. If an Asian male were to

display high masculine facial features, the negative attributions of possessing low masculinity would likely lessen. This might also result in the ability to attract more mates. In contrast, judgments of Black male faces compared to White, Asian, and racially mixed male faces are attributed as stronger and more mature, masculine and dominant (Jackson et al., 1997; Wade, Irvine, & Cooper, 2004). On the other hand, faces with stronger Black ancestry compared to those with weaker Black ancestry were deemed socially incompetent (Wade et al., 2004).

Wade et al. (2004) proposed that Black males are perhaps better choices at a genetic level of parental investment because they are perceived as high masculine. With regards to resources, the researchers suggest that females may feel uncomfortable initiating a relationship with a Black male on this dimension. The socioeconomic status of Black males is lower in comparison to other race and gender combinations (Issacs, 2007; United States Bureau of the Census, 1992; United States Bureau of the Census, 2010). Black males, compared to White males and Black females, are also less likely to hold a college or advanced degree (United States Bureau of the Census, 2002). Additionally, Wade et al. (2004) revealed that Black males in their study were not rated as the most attractive. Instead, White males were rated as the most attractive. The researchers argue that this is a result of the interplay of race and resources. In related research, Frieze, Olson, & Russell (1991) revealed a relationship between facial attractiveness and resources. For example, males who were judged as attractive had better starting salaries in the workplace and increased income as time progressed compared to males judged as unattractive.

Unfortunately, there is a caveat to the theory of attractiveness and resources. Asian males, as a group, are rated as possessing a high amount of resources (Fu, 2008; Robnett

& Feliciano, 2011; Massey & Denton, 1992). If attractiveness is linked to resources, Asian males should be rated more attractive and have more success in dating than depicted in the research. This is not the case. Asian males are ranked as the least attractive and are rejected the most compared to all other racial groups, regardless of their ascribed resource levels (Fisman et al., 2008; Robnett & Feliciano, 2011). It is likely that the lack of success for Asian males in dating is related to perceptions of low masculinity or emasculation. It is possible that those who judge Asian males as low masculine infer low genetic fitness or dominance. Low masculine judgments may also relate to low social status, but this would be paradoxical because Asian males possess high education levels. In summary, I surmise that Asian males are stereotyped to be lacking in genetic fitness qualities while possessing strong resources. On the other hand, I believe that Black males are stereotyped to be lacking in resources while possessing strong genetic fitness. Lastly, I believe that White males are likely to lie somewhere between both groups on the dimensions of genetic fitness and resources.

With the overwhelming research relating masculinity with health benefits and greater immune system functioning in potential offspring, one would expect that females would ostensibly favor masculine males. Instead, the research on masculine facial preference in females appears to be quite mixed (DeBruine et al., 2006; Penton-Voak, Jacobson, & Trivers, 2004; Rhodes, Chan, Zebrowitz, & Simmons, 2003), especially in comparison to the work on preference for resources. Additionally, there are presumed costs to copulating with a highly masculine male. For example, males with high levels of testosterone, compared to males with lower levels of testosterone, spend less time with their partners and offspring, are less committed, and are more likely to cheat (Booth &

Dabbs, 1993; Gray, Kahlenberg, Barrett, Lipson, & Ellison, 2002; Thornhill & Gangstad, 1999). In addition, behavior attributes for high testosterone males include unpredictable, volatile or aggressive behavior (Gallop & Frederick, 2010). It is even suggested that various personality attributions derived from perceptions of facial dimensions can be quite accurate (Penton-Voak, Pound, Little, & Perrett, 2006). For these reasons it is likely that a female will rate a male with an excessive amount of masculinity negatively and find him undesirable.

### **The Current Work**

With the mixed findings on facial masculinity preference and the strong culmination of evolutionary work on females favoring resources, it is quite puzzling that the Asian male who is highly resourceful and not overtly masculine is often neglected. All indications suggest that masculinity is still important in judgments related to romantic interactions and that masculinity has to be at an optimal level. It is plausible that attractiveness and preference rely on a continuum of masculinity. I posit that the continuum contains a lower and higher threshold. Beyond these thresholds, males become undesirable. When a male exceeds the higher masculine threshold, possessing an excessive amount of masculinity, a female may reason that this particular male possesses the negative personality characteristics that are associated with having an overabundance of physical masculinity. If a male is below the lower threshold, the female may believe that the male is lacking in genetic fitness. I presume that the average Asian male is closer to the lower threshold and the average Black male is closer to the higher threshold. Additionally, I believe the average White male to be in the middle of this masculinity continuum. Finally, it is likely that masculinity has to be at an optimal amount for a male

to be perceived as attractive. Figure 1 illustrates the masculinity continuum and where I believe the average White, Black and Asian males lie.

It is apparent that the interaction of masculinity and race is an important part in female mate preference that many have not fully investigated. Investigating this is likely to elucidate the intricacies of female mate preference. Increases in facial masculinity in Asian males will presumably increase the favorability of Asian males in dating. It is likely that the high masculine Asian male will be evaluated as the most attractive Asian male. Black males are judged to be the most masculine naturally. I presume that they are very close to the high masculine threshold of unattractiveness, and that they are likely evaluated the best when they do not possess a high masculine face.

### **Study 1**

The first study was a pilot designed to derive nine photos to match on masculinity ratings for future studies and to explore the interaction of race and facial masculinity on judgments of attractiveness, masculinity, and age. Facial masculinity traits of 27 White, Black, and Asian males were manipulated into low, medium, and high masculinity conditions. Photographs were selected from online databases, volunteers, and Google image search. The manipulation created 81 faces. Participants rated the faces on attractiveness, masculinity, and perceived age.

Similar to previous research findings, I hypothesized that Asian males would be rated lowest on masculinity, age, and attractiveness. The average Asian male is perceived as the lowest in masculinity when compared to White and Black males (Jackson et al., 1997). In Study 1, I expected Asian males to experience continuous increases in attractiveness with increases in masculinity. I posit that Asian males have the most to



gain in mate value with increased masculinity because they are closest to the lower masculine threshold of unattractiveness.

In contrast, I believed that the average White and Black males would be judged as possessing adequate masculinity levels when perceived by females. It is important to note that I believe that these two groups are closer to the high masculine threshold of unattractiveness in comparison to Asian males. For this reason, I expected a peak in perceived attractiveness in the medium masculine condition and a reduction in perceived attractiveness in the high masculine condition for White and Black males. Lastly, I hypothesized that Black males, compared to White males, would have a larger reduction in perceived attractiveness in the high masculine condition because they are closer to the higher masculine threshold of unattractiveness.

## **Method**

**Participants.** Forty-four University of North Florida female students participated in a study investigating the perception of male faces. Participants received extra credit or course credit for their time.

**Stimuli and Procedure.** Twenty-seven photographs of faces were selected for the experiment (see Appendix A). Sixteen were randomly selected from free online databases. Five images were selected from Google image search at random. A lack of suitable transformable White and Asian male faces on the free online databases and Google image search resulted in randomly selecting two White male and two Asian male photographs from the Face Research Lab Website, <http://www.faceresearch.org/demos/average>. Due to the lack of Asian male photographs suitable for transformation found from all sources, two Asian males volunteered

photographs for manipulation after permission was requested. Facial masculinity was manipulated with a web-based transformation tool from the Face Research Lab website, [www.faceresearch.org/demos/transform](http://www.faceresearch.org/demos/transform) (DeBruine et al., 2006; DeBruine, Jones, Smith & Little, 2010). High and low masculine versions for each of the 27 source images selected were created. The original photo was utilized for the medium masculinity condition. After all transformations were complete, a total of 81 images comprised the stimulus set (see Appendix B).

To transform the faces three types of images were used: the source image, a male average face and a female average face. The Face Research Lab transformation tool provided the male and female averaged faces. The averaged faces were a composition of numerous faces. For each race condition, the average face used corresponded to the race of the individual in the source image. For example, I manipulated the masculinity of the Black male by utilizing the averages of Black male and female faces. To create the masculinized and feminized versions of the source image, I utilized the slider the transformation tool provided. Setting the slider to +50% created a masculinized version of the source image, and setting the slider at -50% created a feminized version.

**Procedure.** The study conformed to a 3 (Race – White, Black, and Asian) x 3 (Masculinity – low, medium, and high) within-subjects design. The participants viewed low, medium, and high masculine versions of the original 27 faces in a pre-randomized PowerPoint one by one. Utilizing a rating sheet, participants rated each face on the dimensions of perceived attractiveness, masculinity, and age. Perceived attractiveness was rated on a 7-point scale (1 = *Very Unattractive*, 7 = *Very Attractive*). Perceived masculinity was also rated on a 7-point scale (1 = *Very Non-Masculine*, 7 = *Very*

*Masculine*). For judgments of age, participants wrote down how old they perceived the individual to be. After rating a face, participants moved to the next face by pressing the right arrow key. The study was concluded after all 81 faces were rated.

## Results

First, a 3 (Race – White, Black, and Asian) x 3 (Masculinity – low, medium, and high) repeated measures Analysis of Variance (ANOVA) to investigate judgments of attractiveness was conducted. Means and standard deviations (SD) can be found in Table 1. There was a significant main effect for Race ( $F(2, 574) = 25.96, p < .001, \eta_p^2 = .08$ ). White males were rated as the most attractive, followed by Black males and Asian males. A significant main effect for Masculinity was found ( $F(2, 574) = 20.39, p < .001, \eta_p^2 = .07$ ). The medium masculine males were deemed the most attractive, followed by the high masculine males, and the low masculine males. Finally, there was a significant interaction of Race x Masculinity ( $F(4, 1148) = 3.81, p = .002, \eta_p^2 = .01$ ). As expected, the high masculine Asian males were deemed the most attractive type of Asian male. Also as expected, the Asian males increased in perceived attractiveness as masculinity increased from low to medium to high. Contrary to my expectation, middle masculine White males were not deemed the most attractive of the White males. Instead, high masculine White males were deemed the most attractive in the White male group. Regardless of this result, the differences between groups were minimal. For Black males, medium masculine Black males were rated the most attractive. To further investigate the significant results, paired samples *t*-tests were conducted. First, high masculine White males were rated more attractive than high masculine Asian males ( $t(377) = 6.76, p <$

.001,  $d = .33$ ). Second, high masculine Asian males and medium masculine Black males did not differ significantly.

A second analysis was conducted as a manipulation check that investigated judgments of masculinity. See Table 2 for means and SD. A second 3 (Race – White, Black, and Asian) x 3 (Masculinity – low, medium, and high) repeated measures ANOVA was used to analyze judgments of masculinity. There was a significant main effect for Race ( $F(2, 720) = 341.38, p < .001, \eta_p^2 = .58$ ) with Black males rated as the most masculine, followed by White and Asian males. There was also a significant main effect for Masculinity ( $F(2, 720) = 84.55, p < .001, \eta_p^2 = .35$ ). High masculine males were rated as most masculine, followed by the medium masculine and low masculine males. Lastly, a significant Race x Masculinity interaction was present ( $F(2, 1440) = 6.42, p < .001, \eta_p^2 = .06$ ). The high masculine Asian, Black, and White males were rated highest in perceived masculinity for their respective racial groups. Paired samples  $t$ -tests were conducted to further investigate the results. High masculine White males were judged as more masculine than high masculine Asian males ( $t(377) = 14.14, p < .001, d = .73$ ). Second, high masculine Black males were also judged more masculine than high masculine Asian males ( $t(376) = 16.94, p < .001, d = .87$ ).

A third set of analyses investigated judgments of age. Means and SD can be found on Table 3. A 3 (Race – White, Black, and Asian) x 3 (Masculinity – low, medium, and high) repeated measures ANOVA was used to analyze judgments of age. A significant main effect was found for Race ( $F(2, 770) = 64.73, p < .001, \eta_p^2 = .14$ ). Black males were judged as the oldest, followed by White and Asian males. There was also a significant main effect for Masculinity ( $F(2, 770) = 138.01, p < .001, \eta_p^2 = .26$ ). High

masculine males were judged as the oldest, followed by medium and low masculine males. A significant Race x Masculinity interaction ( $F(2, 1540) = 3.63, p < .01, \eta_p^2 = .01$ ) was also present. It was revealed that the high masculine faces were rated highest in age for their respective racial groups. Black males were judged as the oldest looking group across all masculinity conditions. Low masculine Asian males were judged older than White males in the low masculinity condition. In the high masculinity condition, Asian males were judged as younger than the White males. Paired samples *t*-tests were conducted to further investigate the results. High masculine White males were judged as older than high masculine Asian males ( $t(403) = 9.22, p < .001, d = .46$ ). Second, high masculine Black males were judged as older than high masculine Asian males ( $t(404) = 2.82, p < .01, d = .14$ ).

## **Discussion**

It is apparent that masculinity levels of the pictures vary significantly across races. By controlling for masculinity across racial groups, I presume that racial bias against Asian males will lessen further when high masculine facial characteristics are displayed. To control for masculinity, I selected nine photos to insert in faux online dating profiles for participants to judge on various dimensions related to mate choice.

## **Study 2**

Current studies that examine romantic preference and race often use non-experimental paradigms, utilizing trends and extrapolating conclusions from messaging behaviors of online dating participants (see Robnett & Feliciano, 2011). The current study utilized an experimental paradigm to assess how masculinity and race moderate preference levels in females when viewing faux online dating profiles. Fiore, Shaw Taylor, Mendelsohn, &

Hearst (2008) argued photos are the most influential predictor in attractiveness in an online dating realm. To further understand mate preference, it is important to further explore why and how these judgments of facial features form. Researchers suggest that initial impressions based on phenotypical traits such as facial dimensions can provide information on whether to approach, avoid, or judge potential partners quickly and with great accuracy (Macapagal, Rupp, & Heiman, 2011).

I believe facial masculinity and race play a strong role on various judgments related to mate choice. Study 2 conformed to a 3 (Race – White, Black, and Asian) x 3 (Masculinity – low, medium, and high) within-subjects design. I selected nine photos from Study 1, one of each masculinity level and race, matched them on masculinity, and inserted them into faux online dating profiles. Participants rated the individuals in the photos on numerous dimensions such as dateability and attractiveness.

With the photographs matched on masculinity, I expected racial bias against Asian males to be further reduced. Additionally, this provided a stronger ability to ascertain how variation in masculinity across races truly affects judgments. Additionally, I posit that Asian males, compared to White and Black males, have the most to gain in mate value when facial masculinity is increased to a high masculine level. Thus, I believed that participants would find the most dateable and attractive Asian male to be the one with the highest masculinity level. I also expected Black and White males to not experience the same positive benefits as Asian males would likely experience when displaying high masculine facial characteristics. In the high masculine condition, I hypothesized that attractiveness and dateability would drop for White and Black males. It is presumed that White and Black males already possess adequate masculinity levels, and increases in

masculinity may reach a threshold that females may find unattractive or overbearing. Additionally, I expected Asian males, compared to White and Black males, to be rated favorably for resource, parenting and family-related judgments. For Black males, I expected favorable judgments related to masculine personality characteristics.

### **Method**

**Participants.** One hundred and thirty-seven University of North Florida female students participated (93 White, 20 Black, 6 Hispanic, 9 Asian, 6 Multiracial, and 6 other; age range from 18 – 60, mean age = 23.09, SD = 6.92) and completed this study for extra credit or course credit for their time.

**Stimuli and Procedure.** From the faces used in Study 1, nine faces were selected, and three faces were selected for each race. Of the three faces, one represented each masculinity level. Additionally, photos were matched on masculinity ratings. See Table 4 for the masculinity rating and SD of each face that was used for the current study. Although there were differences in overall masculinity by race, the difference between masculinity levels was the same across races. Perfect masculinity matching was not possible due to discrepancies in masculinity ratings across races in Study 1. I used an alternative method to match the photographs on masculinity. Masculinity ratings in Study 1 were rated using a 7-point rating scale with 1 = *Very Non-Masculine* and 7 = *Very Masculine*. For all race conditions, the difference between the high masculinity and medium masculinity ratings was approximately equal to .65, whereas the difference between medium masculinity and low masculinity was approximately equal to 1.24. The profiles were viewed on Medialab and shown at random to the participants.

Each face was inserted in a faux online dating profile for a website named date-or-not.com and displayed on MediaLab (see Appendix C). Participants were told that they were rating profiles taken from an online dating site in beta testing. For each profile, participants rated the individual on how likely they would date the individual (shown as ‘dateability’ on the profile) and attractiveness (shown as ‘hotness’ on the profile). Both used 7-point scales. Dateability was asked as ‘I would go on a date with this individual.’ and rated on a 7-point scale (1 = *Strongly Disagree*, 7 = *Strongly Agree*). Attractiveness was asked as ‘How attractive is this individual?’ and rated on a 7-point scale (1 = *Very Unattractive*, 7 = *Very Attractive*). Participants clicked on the number corresponding to their answer.

Additional judgments were made on how suited the individual would be for long-term and short-term relationships, how well the individual would provide, earning potential, likelihood of being a college graduate, faithfulness in a relationship, ambitiousness, intelligence, responsibility, kindness, health, emotional stability, dominance, independence, protectiveness, aggressiveness, assertiveness, and confidence. A total of 20 judgments were made for each profile (see Appendix D). Additionally, all judgments used in the current work conformed to judgments and criteria often used in the study of mate preference (Buunk, Dijkstra, Fetchenhauer, & Kenrick, 2002; Kenrick et al., 1990; Li et al., 2002; Li & Kenrick, 2006; Simpson & Gangestad, 1992)

## Results

**Dateability and Attractiveness Judgments.** A 3 (Race – White, Black, and Asian) x 3 (Masculinity – low, medium, and high) repeated measures ANOVA was conducted to analyze judgments of dateability. Mean dateability ratings and SD can be seen in Table 5.



A significant main effect for Race was found ( $F(2, 272) = 6.30, p = .003, \eta_p^2 = .04$ ) with White males being the most dateable, followed by Black and Asian males. There was also a significant main effect for Masculinity ( $F(2, 272) = 82.00, p < .001, \eta_p^2 = .38$ ). The medium masculine faces were rated as the most dateable, followed by the high masculine faces and low masculine faces. Importantly, a significant interaction of Race x Masculinity ( $F(4, 544) = 32.79, p < .001, \eta_p^2 = .19$ ) qualified the main effects. As expected, dateability ratings of Asian males peaked in the high masculine condition. The ratings of White and Black males peaked in the medium masculinity condition. Though dateability ratings of White males peaked in the medium masculinity condition, they did not experience a sharp decline in dateability in the high Masculinity condition as the Black Males.

Paired samples *t*-tests were conducted to further investigate the results. As expected, the high masculine Asian male did not differ significantly from the medium masculine Black or White male on judgments of dateability. For Black and White males, I expected significant differences between medium and high masculinity conditions. This was only partially correct. For the Black males, the medium masculine Black male compared to the high masculine Black male was rated significantly higher on dateability ( $t(136) = 8.06, p < .001, d = .69$ ). For the White males, no significant difference was found between the medium masculine and high masculine White males.

A 3 (Race – White, Black, and Asian) x 3 (Masculinity – low, medium, and high) repeated measures ANOVA analyzed judgments of attractiveness. Mean attractiveness ratings and SD can be seen in Table 6. A significant main effect of Race was revealed ( $F(2, 272) = 7.91, p = .001, \eta_p^2 = .06$ ) with White males rated as the most attractive,

followed by Black and Asian males. There was also a significant main effect for Masculinity ( $F(2, 272) = 125.25, p < .001, \eta_p^2 = .48$ ). The medium masculine faces were rated as the most attractive, followed by the high masculine faces and the low masculine faces. Lastly, a significant interaction of Race x Masculinity was present ( $F(4, 544) = 54.5, p < .001, \eta_p^2 = .29$ ). Similar to dateability judgments, attractiveness ratings of Asian males peaked in the high masculinity condition, whereas the ratings of Black and White males peaked in the medium masculinity condition and fell in the high masculine condition. It appears that high masculine Asian males and medium masculine Black and White males possess the optimal masculinity to be favored most in a romantic context. Figure 2 illustrates these three groups on the masculinity continuum.

Paired samples *t*-tests were conducted to further investigate the results. As expected, the high masculine Asian and medium masculine White males did not differ significantly. Additionally, the high masculine Asian and medium masculine Black males did not differ significantly. For Black and White males, I expected significant differences between medium and high masculinity conditions. This was correct. For Black males, the medium masculine Black male compared to the high masculine Black male was rated significantly higher on attractiveness ( $t(136) = 10.79, p < .001, d = .92$ ). For the White males, the medium masculine White male was rated significantly more attractive than the high masculine White male ( $t(136) = 2.36, p < .01, d = .22$ ).

**Masculine Personality Judgments.** Judgments were also made on masculine characteristics (confidence, dominance, independence, protectiveness, aggressiveness, and assertiveness). These judgments were averaged into the masculine personality composite score. Means and SD of masculine personality ratings can be seen in Table 7.

A 3 (Race – White, Black, and Asian) x 3 (Masculinity – low, medium, and high) repeated measures ANOVA was used to investigate masculine personality judgments. There was a significant main effect of Race ( $F(2, 200) = 82.26, p < .001, \eta_p^2 = .45$ ) with Black males rated as possessing the high ratings on masculine personality judgments followed by Asian and White males. There was also a significant main effect of Masculinity ( $F(2, 200) = 91.99, p < .001, \eta_p^2 = .48$ ). High masculine faces were rated as possessing the highest masculine personality ratings followed by medium and low masculine faces. Lastly, a significant Race x Masculinity interaction was present ( $F(4, 400) = 5.76, p < .001, \eta_p^2 = .05$ ). Black males were rated the highest across all masculinity conditions on masculine personality. The Asian male was rated lower than the White male in the low masculinity condition, but higher than the White males in the medium and high masculinity conditions.

I followed up the significant results with paired samples *t*-test analyses. Black males were rated as significantly higher on the masculine personality composite score across all masculinity conditions (see Table 8). Additionally, though the low masculine Asian male was ranked as possessing lowest masculine personality scores, this was not significantly different from the low masculine White male's ratings. Interestingly, the Asian male was rated higher than the White male in the medium masculinity ( $t(100) = 3.59, p < .01, d = .36$ ) and high masculinity conditions ( $t(100) = 2.66, p < .01, d = .26$ ).

**Resource Related Judgments.** Additional judgments were made on how well the individual would provide, his earning potential, likelihood of being a college graduate, faithfulness in a relationship, ambition, intelligence, responsibility, kindness, health, and emotional stability. Three resource related composite scores were created from these

judgments: resource level (earning potential, likelihood of being a college graduate, ambition, and intelligence), parenting behavior (how well the individual would provide, responsibility, emotional stability, and kindness), and parent/family potential (parenting behavior, resource level, health, and faithfulness). Three 3 (Race – White, Black, and Asian) x 3 (Masculinity – low, medium, and high) repeated measures ANOVA's were conducted to investigate each of the three composite scores.

First, I investigated resource level judgments. Means and SD can be found in Table 9. There was a significant main effect of Race ( $F(2, 272) = 71.80, p < .001, \eta_p^2 = .35$ ), with Asian males being rated as the most resourceful followed by Whites and Black males. There was a significant main effect of Masculinity ( $F(2, 272) = 45.18, p < .001, \eta_p^2 = .25$ ). The low masculine males were rated as possessing the most resources followed by the medium masculine and high masculine males. Finally there was a significant interaction of Race x Masculinity ( $F(4, 544) = 22.90, p < .001, \eta_p^2 = .14$ ). Asian males in all masculinity conditions were rated as the most resourceful. Additionally, as masculinity increased from the low masculinity condition to higher masculinity conditions, Asian males varied slightly in resources. In contrast, White and Black males steadily declined. Paired samples *t*-tests analyses further investigated the significant interaction (see Table 10). In the low masculinity condition, Black and Asian males did not differ significantly, but the Asian male was rated as possessing more resources than the White male. In the medium masculinity condition, the Asian male was rated as possessing more resources than the Black and White males. In the high masculinity condition, the Asian male was rated as having more resources than the Black and White males.

Next, I investigated judgments of parenting behavior. Means and SD can be found in Table 11. There was a significant main effect of Race ( $F(2, 272) = 20.41, p < .001, \eta_p^2 = .13$ ). Asian males were rated as the possessing the best parenting behavior followed by Black males and White males. There was a significant main effect of Masculinity ( $F(2, 272) = 34.00, p < .001, \eta_p^2 = .20$ ). The low masculine males were rated the as possessing the best parenting behavior followed by the medium masculine males and high masculine males. Finally there was a significant interaction of Race x Masculinity ( $F(4, 544) = 24.89, p < .001, \eta_p^2 = .15$ ). The low masculine Black male was rated as possessing the best parenting behavior. Though the Black male was rated the highest in the low masculinity condition, Asian males were rated as possessing the best parenting behavior in the medium and high masculinity conditions. Paired samples *t*-tests analyses further investigated the significant interaction (see Table 12). The low masculine Black male was rated as possessing better parenting behavior compared to the low masculine White and Asian males. As masculinity increased, Asian males were regarded as possessing better parenting behaviors. The Asian male was rated significantly higher than the Black male and White male in the medium masculinity condition. Lastly, the high masculine Asian male was rated significantly higher than the high masculine Black and White males.

Finally, I investigated judgments of parent/family potential. See Table 13 for means and SD. There was a significant main effect of Race ( $F(2, 272) = 39.02, p < .001, \eta_p^2 = .22$ ). Asian males were rated as possessing the highest parent/family potential ratings followed by White and Black males. There was a significant main effect of Masculinity ( $F(2, 272) = 27.72, p < .001, \eta_p^2 = .17$ ). The low masculine males were perceived as possessing the highest parent/family potential ratings followed by the medium masculine

and high masculine males. Finally there was a significant interaction of Race x Masculinity ( $F(4, 544) = 24.06, p < .001, \eta_p^2 = .15$ ). The low masculine Black male was rated as having the best parenting/family potential ratings, but as masculinity increased, Asian males were regarded as having the best parenting/family potential ratings. Paired samples *t*-tests followed up the significant interaction (see Table 14). In the low masculinity condition, the Black male was rated the highest, but this did not differ significantly with Asian male ratings. In the low masculinity condition, the Black male was rated as significantly higher than the White male in parenting/family potential. In the medium masculinity condition, the Asian male was rated as significantly higher than the Black male and White male. Finally, in the high masculinity condition, the Asian male was rated significantly higher than the Black male and White male.

**Long-Term and Short-Term Relationship Suitability.** Participants rated the suitability of the males displayed for short-term and long-term relationships. Means and SD can be viewed on Table 15 and Table 16. The first analysis was a 3 (Race – White, Black, and Asian) x 3 (Masculinity – low, medium, and high) x 2 (Relationship Suitability - long-term and short-term suitability). There was a marginally significant main effect of Race ( $F(2, 272) = 2.63, p = .074, \eta_p^2 = .02$ ). There was a significant main effect of Masculinity ( $F(2, 272) = 14.11, p < .001, \eta_p^2 = .09$ ). There was a marginally significant main effect of Relationship Suitability ( $F(1, 136) = 3.18, p = .077, \eta_p^2 = .02$ ). A significant Race x Masculinity interaction was present ( $F(4, 544) = 16.94, p < .001, \eta_p^2 = .11$ ). A significant Race x Relationship Suitability interaction was present ( $F(2, 272) = 7.52, p < .01, \eta_p^2 = .05$ ). A significant Masculinity x Relationship Suitability interaction was present ( $F(2, 272) = 14.76, p < .001, \eta_p^2 = .10$ ). Importantly, there was a

significant Race x Masculinity x Relationship Suitability interaction that qualified all lower level two-way interactions and main effects ( $F(4, 544) = 6.29, p < .001, \eta_p^2 = .04$ ).

It appears that judgments for different types of relationships moderate how females judge different males. When judging for short-term relationships, White and Asian males continued to increase in relationships suitability ratings as masculinity increased, peaking in the high masculinity condition. In contrast, short-term suitability for Black males peaked in the medium masculinity condition. Judgments for long-term relationships revealed that White males were favored most if they possessed medium masculinity, Black males were favored most if they possessed low masculinity, and Asian males were favored the most if they possessed medium or high masculinity.

To further investigate the significant interaction, paired samples *t*-tests were conducted. Statistical results can be found on Table 17. First, I investigated judgments of White males. The high masculine White male was deemed as more suitable for short-term relationships compared to long-term relationships. Next, I investigated judgments of Black males. The low masculine Black male received higher relationship suitability ratings when participants were judging for a long-term relationship compared to a short-term relationship. The medium masculine Black male received higher relationship suitability ratings when participants were judging for a short-term relationship compared to a long-term relationship. The high masculine Black male received higher relationship suitability ratings when participants were judging for a short-term relationship compared to a long-term relationship. Finally, I investigated judgments of Asian males. In the medium masculinity condition, the Asian male received higher relationship suitability ratings in long-term suitability judgments compared to a short-term suitability judgments.

Next, a 3 (Race – White, Black, and Asian) x 3 (Masculinity – low, medium, and high) repeated measures ANOVA was performed to investigate judgments of short-term relationship suitability. There was a main effect of Race ( $F(2, 272) = 6.70, p < .01, \eta_p^2 = .05$ ). White males were rated as the best suited for short-term relationships, followed by Black males and Asian males. A main effect of Masculinity was also present ( $F(2, 272) = 18.68, p < .001, \eta_p^2 = .12$ ). Medium masculine males were rated as the best suited for short-term relationships, followed by high masculine males and low masculine males. Finally, there was a significant Race x Masculinity interaction ( $F(4, 544) = 11.52, p < .001, \eta_p^2 = .08$ ). Both White and Asian males increased in short-term relationship suitability with each successive masculinity increase from the low masculinity condition. Black males increased in short-term suitability from low masculinity to medium masculinity, but fell in short-term suitability in the high masculinity condition. Figure 3 illustrates where the highest rated males fall on the masculinity continuum. Further analyses revealed that the high masculine White male was rated significantly better for short-term relationships compared to the high masculine Asian male ( $t(136) = 8.94, p < .001, d = .17$ ). Though the high masculine Asian male was rated as the best Asian male for short-term relationships, I argue that the high masculine Asian male will likely not be chosen over a high masculine White male for a short-term relationship.

Finally, I ran a 3 (Race – White, Black, and Asian) x 3 (Masculinity – low, medium, and high) repeated measures ANOVA to investigate judgments of long-term relationship suitability. First, there was no main effect of Race, but there was a main effect of Masculinity ( $F(2, 272) = 9.93, p < .001, \eta_p^2 = .12$ ). Males who possessed medium masculinity were rated as the best suited for long-term relationships, followed by low



masculine, and finally high masculine males. Lastly, a significant Race x Masculinity interaction was found ( $F(4, 544) = 16.25, p < .001, \eta_p^2 = .11$ ). As expected, the low masculine Black male was judged as the Black male most suitable for long-term relationships. It is intriguing that the low masculine Black male possessed the highest long-term suitability rating compared to all masculinity and race combinations. Black males decreased in long-term relationship suitability as masculinity increased. Figure 4 illustrates the masculinity continuum and where the highest rated males on long-term suitability lie. The Black males in the low and medium masculinity conditions did not differ significantly, but the Black males in the low and high masculinity conditions did ( $t(136) = 6.65, p < .001, d = .57$ ). For Asian and White males, the medium masculine Asian male and medium masculine White male were judged as the most suitable for long-term relationships in their respective racial conditions. Interestingly, the long-term suitability judgment for the medium masculine and high masculine Asian males were approximately equal. Long-term relationship suitability ratings for White males peaked in the medium masculinity condition. Further analyses revealed that the low masculine Black male, medium masculine Black male, medium masculinity Asian male, high masculine Asian male, and medium masculine White male did not differ from each other significantly. These groups are likely to be evaluated more equitable for individuals wanting a long-term relationship.

### **Discussion**

I conclude that dateability and attractiveness of a high masculine Asian male is approximately equal to that of a Black or White male with medium masculinity. I presume that these three groups possess the optimal amount of masculinity to be

perceived as attractive and dateable. When a female judges a hopeful suitor, it appears that these three types of males would likely be evaluated more fairly. Additionally, if an Asian male displays high masculine characteristics, it will likely assist in offsetting predetermined judgments of low masculinity. Unfortunately for Asian males with low or medium facial masculinity, altering one's facial structure is difficult without the help of a cosmetic surgeon. Regardless, I am hopeful that medium masculine Asian males will be evaluated similarly to medium masculine White and Black males with increased contact and as time progresses. This would be a sign that racial biases are lessening.

In addition, I posit that attractiveness and dateability rely on a continuum. On that continuum are two thresholds, a high threshold and a low threshold. Exceeding the high threshold or not exceeding the low threshold would result in negative evaluations of a male in a romantic context. I surmise that Black males, compared to White males, are closer to the high threshold that females find unattractive. Asian males are likely closer to the lower threshold.

Additionally, perceptions of Asian males are likely stemmed from schemas built from both stereotypes and actual physicality. For example, schemas may be built around the fact that Asian males are rarely depicted as romantic love interests in movies or television. Further work should be used to analyze which influences perceptions of Asian males more in regards to dateability and attractiveness and how to further combat negative judgments. Furthermore, future work should take into consideration the cultural definition of beauty. Perhaps in the United States, the average Asian male simply does not meet beauty requirements set by current cultural norms of beauty.

It is also very intriguing that the least desired male according to many previous works (Feliciano et al., 2009; Fisman et al., 2008; Hitsch et al., 2006; Hitsch et al., 2010; Robnett & Feliciano, 2011) was perceived as the most resourceful and best suited in rearing a family in the current study. This dichotomy can only further necessitate that masculinity level is indeed important in romantic relationship initiation and judgments that many have overlooked. Also interesting are the positive attributions that low masculine Black males receive in realms of family-orientedness and resources. I conclude that females perceive Black males as more suited for family life, long-term relationships, and a career when they possess low masculinity levels. Similarly, Black CEOs are rated more positively when they are baby-faced, and thus perceived as nonthreatening, warm, trustworthy, and possessing higher earning potential (Livingston & Pearce, 2009). It appears that possessing low masculinity disarms stereotyped notions of Black males as being aggressive or possessing low resources.

The findings in Study 2 also revealed that there are differences across race when it comes to judgments of suitability for long-term or short-term relationships. The results partially mirror previous findings in evolutionary theories where high masculine males are better suited for short-term relationships. It appears that high masculine Black males possess an overabundant amount of masculinity and thus short-term relationship suitability ratings decrease. High masculine White and Asian males do not experience this effect. It is likely that high masculine White and Asian males have the most desired amount of masculinity for short-term relationships for their own racial group. For females interested solely in short-term relationships, it is likely they would choose a high masculine White male over a high masculine Asian male.

For long-term relationship suitability, low masculine Black males, medium masculine White males, medium masculine Asian males and high masculine Asian males appear to be the most suited for long-term relationships. I surmise that low masculine White and Asian males possess too little masculinity to be desirable for long-term relationships. It is interesting to note that the high masculine Asian male was rated favorably for both long-term and short-term relationships.

### **General Discussion**

It is intriguing that attributions of resource level, attractiveness, and many other judgments are derived from variations in masculinity level and race. It is likely that judgments based on masculinity helped human ancestors in choosing the best mates. If a female wanted to ensure that her potential offspring were to possess excellent health and protection, she would choose a male that possessed high masculine facial characteristics. Choosing the best mate based on genetic fitness was likely easier when societies were more homogenous. In heterogeneous societies this may be more difficult because it appears that average facial masculinity varies by race as suggested in Study 1.

In Study 2, Asian males were evaluated the best when they were highly masculine. It appears that a high masculine Asian male is the most desirable type of Asian male. Racial biases against Asian males decrease when they possess high masculine facial traits. This may differ cross-culturally in eastern and western societies and should be further investigated. For example, Perrett et al. (1998) states that attractiveness cues are learned from the dominant culture via local exemplars. It is also possible that the influence of Western media may affect beauty across cultures. For resource and family-oriented attributions, Asian males were well received in all masculinity conditions. White and

Black males were evaluated highly on attractiveness and as the best potential dates when they possessed medium masculine characteristics. In addition, White and Black males were evaluated as possessing great resources and were rated high in family-related attributions when they possessed low masculine characteristics.

Buss & Shackelford (2008) suggest that females will want to secure the best combination of desirable qualities in a mate such as good gene indicators, good indicators of investment, good parenting indicators and good partner indicators. It appears that a high masculine Asian male meets all of these requirements. Medium masculine White and Black males meet the good gene indicator requirements, but their low masculine variants are judged better choices in the realms of parenting and investment.

Alternatively, Gangestad & Simpson (2000) suggest that females make trade-offs in mating. They may choose to focus on good fitness indicators or good resource indicators. Low masculine Black and White males will likely attract mates who seek good resources. On the other hand, medium, and high masculine White males and high masculine Black males are likely to attract mates who seek good gene indicators.

Limitations to consider from the current work are selection bias by the researcher when choosing photographs, the disparity of masculinity ratings between groups in Study 1, and the inability to perfectly match the photographs on masculinity ratings in Study 2. Interpretations about the racial groups referred to in this work should be made with some caution. In Study 1, Asian males were rated lower in masculinity compared to the White and Black males. This was one factor in the inability to perfectly match photographs for Study 2. Ideally, the ratings for the masculinity of Asian males would be closer to the masculinity ratings of the White and Black males. Additionally, mean attractiveness

ratings across races were on relatively low in both studies. This may have affected overall judgments related to mate preference. Lastly, it is also possible that an Asian male may be rated negatively if he possessed an inordinate amount of masculinity just as the White and Black males were. Unfortunately, this could not be tested because of the lack of an Asian male that was truly high in masculinity in Study 2. Future research will hopefully ameliorate these issues. A suggestion for future researchers is to use a larger and more physically diverse stimulus set for all races compared to what was used in Study 1. This will hopefully assist in masculinity matching by providing more photographs to create a matching set of stimuli.

Future research should also investigate male judgments of females and how these judgments vary across feminine facial characteristics and race. It is likely that the stereotypes of Black females vary across degrees of femininity. It is possible that negative stereotyping of Black females would lessen as femininity increases. In addition, replication of this study using a non-college sample will also likely garner compelling results. It is likely that the participants in this study may evaluate the males displayed in the study as closer in resource potential because college-educated individuals tend to interact with other college-educated individuals. Lastly, the second study in this work used a stimulus set of nine photographs to generalize to males of various races. It is possible that some satisficing occurred. Future work should use a larger stimulus set to enhance the external and ecological validity of the results.

Table 1

*Means and Standard Deviations for Attractiveness in Study 1*

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	Low Masculinity	Medium Masculinity	High Masculinity
Group	<i>M (SD)</i>	<i>M (SD)</i>	<i>M (SD)</i>
White	2.78 (1.61)	3.34 (1.67)	3.38 (1.71)
Black	2.47 (1.45)	2.95 (1.57)	2.76 (1.57)
Asian	2.57 (1.57)	2.63 (1.60)	2.72 (1.69)

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Table 2

*Means and Standard Deviations for Masculinity in Study 1*

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	Low Masculinity	Medium Masculinity	High Masculinity
Group	<i>M (SD)</i>	<i>M (SD)</i>	<i>M (SD)</i>
White	3.67 (1.65)	4.30 (1.59)	4.71 (1.56)
Black	4.33 (1.72)	4.96 (1.64)	5.11 (1.60)
Asian	3.01 (1.70)	3.20 (1.69)	3.57 (1.66)

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Table 3

*Means and Standard Deviations for Age in Study 1*

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	Low Masculinity	Medium Masculinity	High Masculinity
Group	<i>M (SD)</i>	<i>M (SD)</i>	<i>M (SD)</i>
White	21.53 (3.92)	22.55 (3.82)	24.18 (4.32)
Black	22.91 (4.76)	24.17 (4.77)	26.25 (4.79)
Asian	21.70 (4.80)	23.54 (5.00)	23.47 (4.92)

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Table 4

*Means and Standard Deviations of Masculinity Ratings of Individual Faces in Study 2*

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	Low Masculinity	Medium Masculinity	High Masculinity
Group	<i>M (SD)</i>	<i>M (SD)</i>	<i>M (SD)</i>
White	3.14 (1.44)	4.40 (1.29)	5.02 (1.50)
Black	3.88 (1.42)	5.10 (1.46)	5.74 (1.84)
Asian	2.12 (1.29)	3.36 (1.48)	4.02 (1.51)

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Table 5

*Means and Standard Deviations of Dateability ratings in Study 2*

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	Low Masculinity	Medium Masculinity	High Masculinity
Group	<i>M (SD)</i>	<i>M (SD)</i>	<i>M (SD)</i>
White	1.96 (1.36)	3.28 (1.79)	3.16 (1.72)
Black	2.30 (1.45)	3.11 (1.81)	1.99 (1.30)
Asian	1.51 (0.97)	2.57 (1.64)	3.24 (1.80)

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Table 6

*Means and Standard Deviations of Attractiveness Ratings in Study 2*

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	Low Masculinity	Medium Masculinity	High Masculinity
Group	<i>M (SD)</i>	<i>M (SD)</i>	<i>M (SD)</i>
White	2.18 (1.27)	3.82(1.55)	3.48 (1.55)
Black	2.79 (1.45)	4.00 (1.64)	2.53 (1.52)
Asian	1.77 (1.09)	2.93 (1.51)	3.74 (1.57)

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Table 7

*Means and Standard Deviations of Masculine Personality Ratings in Study 2*

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	Low Masculinity	Medium Masculinity	High Masculinity
Group	<i>M (SD)</i>	<i>M (SD)</i>	<i>M (SD)</i>
White	3.67 (0.70)	4.03 (0.78)	4.25 (0.77)
Black	4.15 (0.66)	4.88 (0.66)	5.13 (0.74)
Asian	3.53 (0.77)	4.36 (0.61)	4.50 (0.64)

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Table 8

*Masculine Personality Judgment Comparisons in Study 2*


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Comparison – paired samples <i>t</i> -test	<i>Result</i>
Low Masculine Black & Low Masculine White	$t(100) = 5.68, p < .001, d = .56$
Low Masculine Black & Low Masculine Asian	$t(100) = 6.91, p < .001, d = .68$
Medium Masculine Black & Medium Masculine White	$t(100) = 8.41, p < .001, d = .84$
Medium Masculine Black & Medium Masculine Asian	$t(100) = 7.17, p < .001, d = .71$
High Masculine Black & High Masculine White	$t(100) = 9.48, p < .001, d = .94$
High Masculine Black & High Masculine Asian	$t(100) = 6.66, p < .001, d = .66$

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Table 9

*Means and Standard Deviations for Resource Level Ratings in Study 2*

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	Low Masculinity	Medium Masculinity	High Masculinity
Group	<i>M (SD)</i>	<i>M (SD)</i>	<i>M (SD)</i>
White	4.41 (0.79)	4.24 (0.79)	3.75 (0.92)
Black	4.48 (0.84)	4.07 (0.81)	3.55 (0.96)
Asian	4.61 (1.09)	4.97 (0.94)	4.75 (0.98)

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Table 10

*Resource Level Judgment Comparisons in Study 2*


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Comparison – paired samples <i>t</i> -test	<i>Result</i>
Low Masculine Black & Low Masculine White	$t(136) = 2.00, p = .05, d = .17$
Medium Masculine Asian & Medium Masculine White	$t(136) = 7.94, p < .001, d = .68$
Medium Masculine Asian & Medium Masculine Black	$t(136) = 9.36, p < .001, d = .80$
High Masculine Asian & High Masculine White	$t(136) = 9.93, p < .001, d = .85$
High Masculine Asian & High Masculine Black	$t(136) = 11.17, p < .001, d = .95$

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Table 11

*Means and Standard Deviations for Parenting Behavior Ratings in Study 2*

	Low Masculinity	Medium Masculinity	High Masculinity
Group	<i>M (SD)</i>	<i>M (SD)</i>	<i>M (SD)</i>
White	4.41 (0.61)	4.31 (0.68)	3.98 (0.68)
Black	4.68 (0.72)	4.28 (0.69)	3.79 (0.80)
Asian	4.42 (0.79)	4.62 (0.80)	4.52 (0.67)

Table 12

*Parenting Behavior Judgment Comparisons in Study 2*


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Comparison – paired samples <i>t</i> -test	<i>Result</i>
Low Masculine Black & Low Masculine White	$t(136) = 3.04, p < .01, d = .34$
Low Masculine Black & Low Masculine Asian	$t(136) = 3.98, p < .001, d = .26$
Medium Masculine Asian & Medium Masculine White	$t(136) = 3.84, p < .001, d = .33$
Medium Masculine Asian & Medium Masculine Black	$t(136) = 4.30, p < .001, d = .37$
High Masculine Asian & High Masculine White	$t(136) = 7.15, p < .001, d = .61$
High Masculine Asian & High Masculine Black	$t(136) = 8.54, p < .001, d = .73$

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Table 13

*Means and Standard Deviations for Parent/Family Potential Ratings in Study 2*

	Low Masculinity	Medium Masculinity	High Masculinity
Group	<i>M (SD)</i>	<i>M (SD)</i>	<i>M (SD)</i>
White	4.50 (0.63)	4.45 (0.55)	4.12 (0.66)
Black	4.66 (0.65)	4.42 (0.61)	3.99 (0.76)
Asian	4.58 (0.79)	4.82 (0.77)	4.74 (0.65)

Table 14

*Parent/Family Potential Judgment Comparisons in Study 2*

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Comparison – paired samples <i>t</i> -test	<i>Result</i>
Low Masculine Black & Low Masculine White	$t(136) = 2.70, p < .01, d = .23$
Medium Masculine Asian & Medium Masculine White	$t(136) = 5.17, p < .001, d = .44$
Medium Masculine Asian & Medium Masculine Black	$t(136) = 5.25, p < .001, d = .45$
High Masculine Asian & High Masculine White	$t(136) = 8.94, p < .001, d = .76$
High Masculine Asian & High Masculine Black	$t(136) = 10.06, p < .001, d = .85$

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Table 15

*Means and Standard Deviations for Short-Term Suitability in Study 2*

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	Low Masculinity	Medium Masculinity	High Masculinity
Group	<i>M (SD)</i>	<i>M (SD)</i>	<i>M (SD)</i>
White	2.93 (1.54)	3.31 (1.42)	3.66 (1.34)
Black	3.34 (1.36)	3.72 (1.37)	3.08 (1.56)
Asian	3.12 (1.51)	3.78 (1.37)	3.96 (1.57)

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Table 16

*Means and Standard Deviations for Long-Term Suitability in Study 2*

	Low Masculinity	Medium Masculinity	High Masculinity
Group	<i>M (SD)</i>	<i>M (SD)</i>	<i>M (SD)</i>
White	3.23 (1.58)	3.66 (1.53)	3.22 (1.41)
Black	3.68 (1.50)	3.44 (1.33)	2.77 (1.43)
Asian	2.97 (1.55)	3.59 (1.31)	3.58 (1.35)

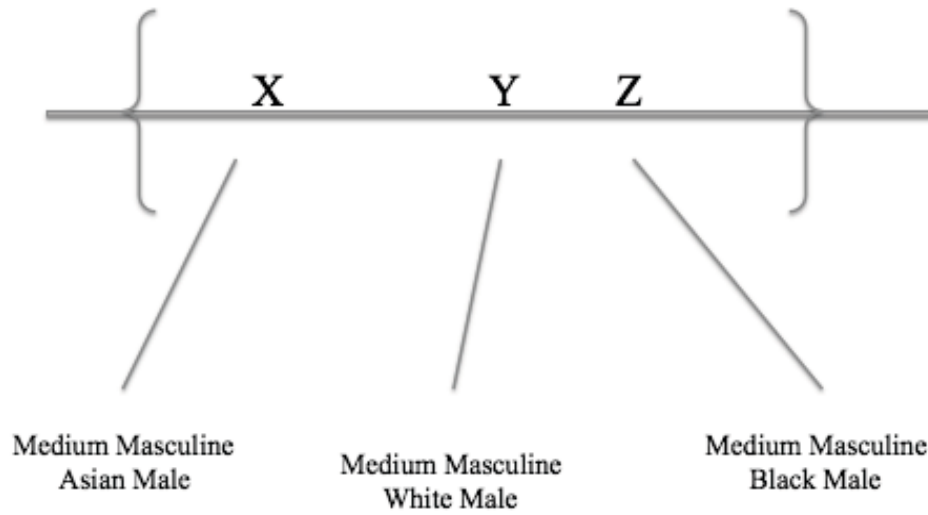
Table 17

*Paired Samples t-test Results for 3 (Race – White, Black, Asian) x 3 (Facial Masculinity –Low, Medium, High) x 2 (Relationship Suitability – Long-Term, Short-Term) Analysis*

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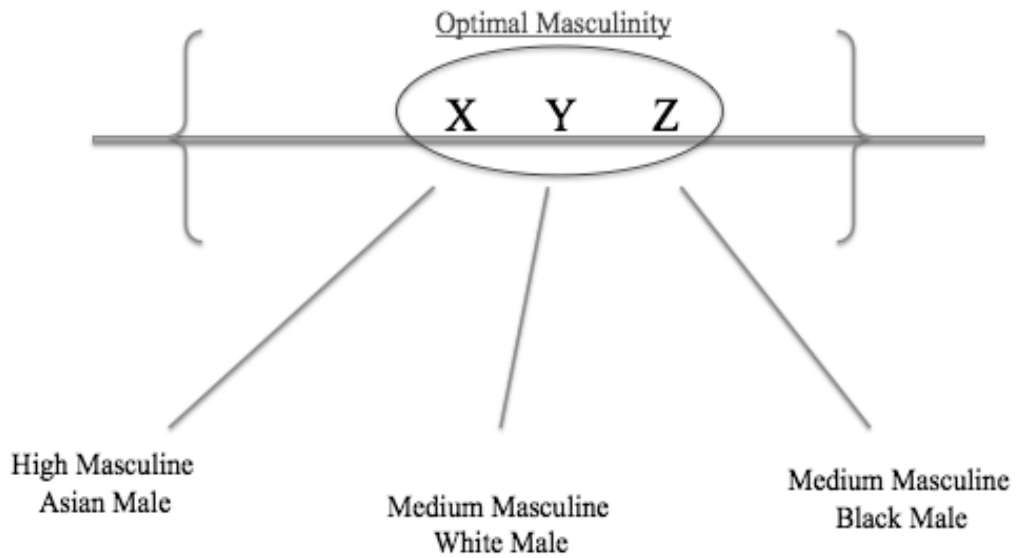
Comparison – paired samples <i>t</i> -test	<i>Result</i>
<hr/>	
High Masculine White Short-Term &	
High Masculine White Long-Term	$t(136) = 5.12, p < .001, d = .44$
Low Masculine Black Short-Term &	
Low Masculine Black Long-Term	$t(136) = 5.12, p < .01, d = .26$
Medium Masculine Black Short-Term &	
Medium Masculine Black Long-Term	$t(136) = 2.79, p < .01, d = .24$
High Masculine Black Short-Term &	
High Masculine Black Long-Term	$t(136) = 2.99, p < .01, d = .26$
Medium Masculine Asian Short-Term &	
Medium Masculine Asian Long-Term	$t(136) = 2.84, p < .01, d = .24$

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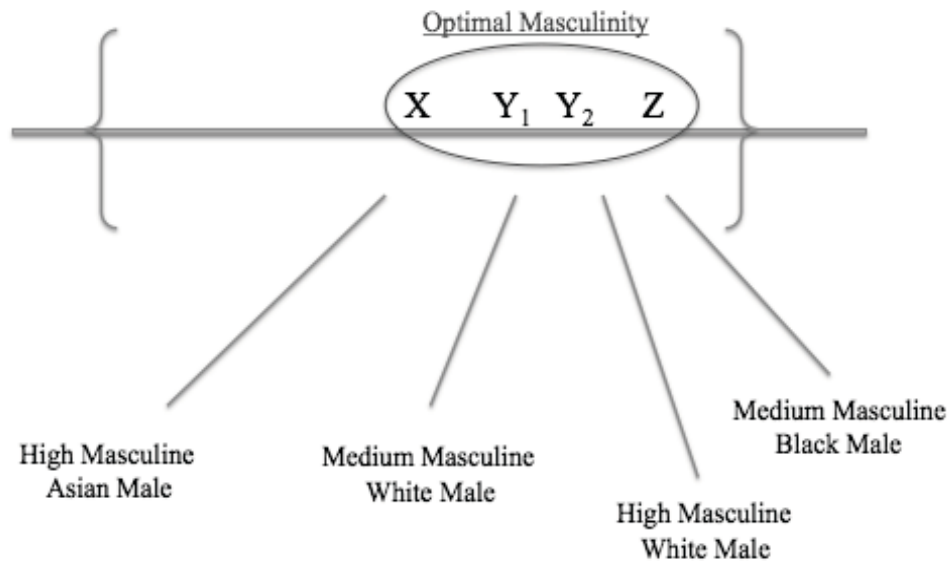


*Figure 1* Medium masculine White, Black, and Asian males displayed on the masculinity continuum. Brackets represent thresholds of unattractiveness. Graphical estimates on the masculinity continuum are inferred by masculinity ratings of the faces in Table 4.

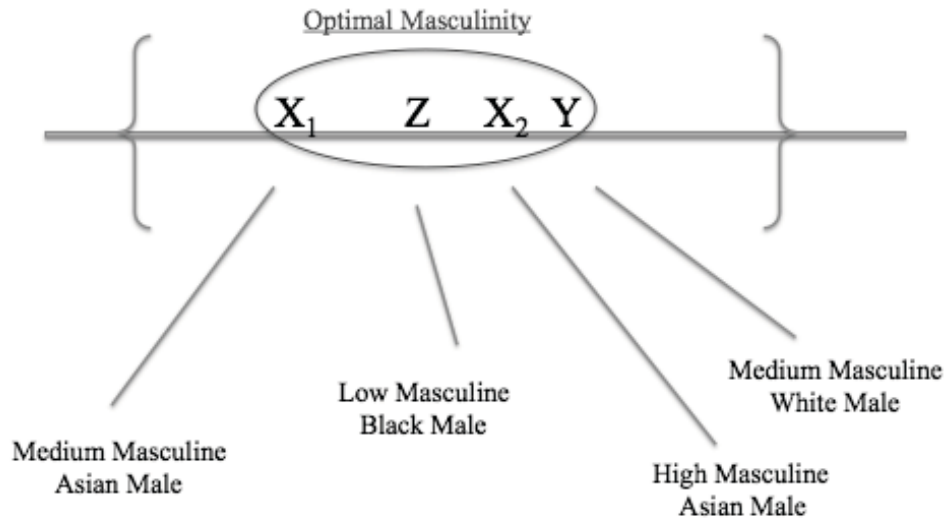




*Figure 2* Highest rated males in relation to dateability and attractiveness ratings on the masculinity continuum. Brackets represent thresholds of unattractiveness. Graphical estimates on the masculinity continuum are inferred by masculinity ratings of the faces in Table 4.



*Figure 3* Highest rated males on short-term suitability on the masculinity continuum. Brackets represent thresholds of unattractiveness. Graphical estimates on the masculinity continuum are inferred by masculinity ratings of the faces in Table 4.



*Figure 4* Highest rated males on long-term suitability on the masculinity continuum. Brackets represent thresholds of unattractiveness. Graphical estimates on the masculinity continuum are inferred by masculinity ratings of the faces in Table 4.

Appendix A: Original Stimuli for Study 1

**Graphic redacted. Paper copy available upon request to home institution.**

Appendix B: Manipulated Stimuli for Study 1

**Graphic redacted. Paper copy available upon request to home institution.**

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Note: Starting from left to right, this is the exact order that faces were displayed in Study 1.

Appendix C: Faux Online Dating Profiles for Study 2

**Graphic redacted. Paper copy available upon request to  
home institution.**

Appendix D: Judgment Items for Study 2

The following were rated with a 7-point scale with 1 = *Strongly Disagree* and 7 = *Strongly Agree*.

- I would go on a date with this individual.
- This individual would be great for a long-term relationship.
- This individual would be great for a short-term relationship.
- This individual would be a bad provider.
- This individual possesses good earning potential in the job market.
- This individual is likely to be a college graduate.
- This individual would not be faithful in a relationship.
- This individual is ambitious.
- This individual is intelligent.
- This is a responsible individual.
- This individual appears healthy.
- This individual appears emotionally stable.
- This individual is self-confident.
- This individual is not dominant.
- This individual is independent.
- This individual would protect those he cares about.
- This individual is not aggressive.
- This individual is assertive.

The following was rated with a 7-point scale with 1 = *Very Unattractive* and 7 = *Very Attractive*.

- How attractive is this individual pictured?

The following was rated with a 7-point scale with 1 = *Very Unkind* and 7 = *Very Kind*.

- How kind is this individual?

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