

Does perceived mismatch in attractiveness between members of a romantic couple activate mating-motivated perception?

by

Chantele Joordens
B.Sc. (Hons), University of New Brunswick, 2010

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of the Requirements for the Degree of

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Abstract

Equitable romantic relationships are relationships in which partners perceive that they are giving benefits to their partner that equal the benefits they receive from their partner (e.g., Walster, Traupmann, & Walster, 1978), and such relationships promote commitment (Rusbult, 1980). But do equity considerations influence observers' impressions of a romantic couple? In the present study, I tested this possibility by examining observers' impressions of romantic partners who were mismatched in physical attractiveness (i.e., one partner will be more physically attractive than the other). In this situation, heterosexual observers instinctually categorize the opposite-sex member of the couple as a potential mate and the same-sex member of the couple as a competitor for the potential mate's affection (e.g., Buss & Dedden, 1990; Fisher & Cox, 2009). Furthermore, observers also conclude that a potential mate who is more attractive than his or her current partner (i.e., the competitor) is not committed to his or her current relationship (Stinson & Reddoch, unpublished data). Thus, when evaluating a romantic couple, I hypothesize that observers' will demonstrate mating-motivated biased perceptions of potential mates and competitors when the mate is more attractive than the competitor, because such more-attractive potential mates will be perceived as romantically "available." Participants viewed photos of dating couples who matched in attractiveness, or viewed photos of dating couples where the mate was more attractive or less attractive than the competitor. Participants then rated the potential mates' and competitors' status-resources (SR; Fletcher et al., 1999).

Results supported my theory of mating-motivated person-perception: Observers derogated the SRs of competitors who were paired with a more attractive (and romantically available) potential mate.

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Introduction

While Andrew was sitting in his local coffee shop, enjoying the newspaper and a cup of tea, he happened to glance up and notice a couple walk through the door. Each member of the couple matched, or were equal to each other, in physical attractiveness, and without another thought he returned to his paper. A few minutes later the door chimed again and he glanced up to see a second couple enter. This duo, however, was not matched in attractiveness – the man was short, balding, and frumpy, whereas the woman was tall, slender, and well dressed. Unlike with the previous couple, his attention was captured while he pondered the sustainability of this particular inequitable romantic relationship. Depending on a multitude of personal, contextual, and instinctual factors which will be discussed shortly, he may find himself motivated to form an especially negative impression of the man, while simultaneously forming an especially positive impression of the woman. Specifically, Andrew might describe the man as unintelligent, perhaps unpopular among his peers, and low in earning potential. Conversely, he might describe the woman as especially intelligent, social, popular, and wealthy. Why might he do this? My hypotheses are based on the evolutionary notion that, for heterosexual individuals, any opposite-sex person is a potential *mate*, whereas any other same-sex individual vying for the potential mate's affections is a *competitor* (e.g., Buss & Dedden, 1990; Fisher & Cox, 2009). Thus, when Andrew evaluates the mismatched romantic couple, he is evaluating a potential mate (the woman) and a potential competitor (the man). If he observes that the dating couple is mismatched in physical attractiveness, I suggest that this activates an innate mating-motivation that causes him to boost the traits of the more-attractive potential mate while simultaneously derogating the traits of the less-attractive competitor. Each of these tactics – boosting the traits of a more-attractive potential mate and derogating the traits of a less-attractive competitor for that

mate – reflect common mating strategies; that is, strategies people use to win a potential mate and best a competitor for that mate. Thus, by examining mating-motivated perception my research examines the perceptual precursors of actual mating behavior.

Equity Determines the Success of Relationship

Equity theory proposes that romantic relationships work best when partners receive benefits equaling their own investment into the relationship (e.g., Walster, Traupmann, & Walster, 1978). Such a balanced relationship is said to be equitable. When a partner receives more benefits than they give to the relationship, that partner is said to be over-benefitted. Likewise, when a partner receives fewer benefits than they give to the relationship, that partner is said to be under-benefitted. Returning to the opening scenario, Andrew perceives the balding and frumpy man as over-benefitted because in terms of physical attractiveness he is receiving more benefits from his current relationship than he is contributing. Alternatively, Andrew perceives the tall, slender woman as under-benefitted because in terms of physical attractiveness she is receiving fewer benefits from her current relationship than she is contributing. Benefits given and received reflect what each individual brings to the table, so to speak, in terms of overall mate value (Walster, Berscheid, & Walster, 1973). A person's mate value is made up of social (e.g., having a large friend network), parental (e.g., wanting to have children), and personal (e.g., being attractive) factors that, as a whole, can be used as a bargaining tool when attempting to acquire a mate (Fisher, Cox, Bennett, & Gavric, 2008). If we envision a person's mate value as a form of currency, people attempt to spend their own mate value to acquire the best possible mate they can "afford" (Emerson, 1976). The economics of the mating marketplace results in matings where partners tend to match in terms of the level of benefits they give and receive. In other words, relationships that tend to form are equitable relationships.

Relationship equity can be established in two ways. *Character-specific assortment* (Buss & Barnes, 1986) means that one type of benefit is given in exchange for an equal measure of that same benefit. For example, “partners in established relationships tend to have similar levels of physical attractiveness; that is, their looks are well-matched” (Miller, Perlman, & Brehm, 2007, pp. 92). This suggests that partner’s trade good looks to create equitable relationships (Buss and Barnes, 1986). Correlations between the objective attractiveness of dating, engaged, and married couples support character-specific assortment (Critelli & Waid, 1980; Murstein, 1972; Shepherd & Ellis, 1972). Moreover, character-specific matching is stable throughout the lifespan and across cultures (Price & Vandenburg, 1979), as well as present in a variety of dating contexts (Harrison & Saeed, 1977). If we refer back to our opening example, Andrew would likely judge the first couple who enter the coffee shop as being equally compensated in terms of benefiting from one another’s level of attractiveness, because the couple is ‘matched’ in physical attractiveness. The matching rule has largely been examined for physical attractiveness (e.g., Critelli & Waid, 1980; Murstein, 1972; Shepherd & Ellis, 1972), yet matching has been found to occur with other traits as well, such as educational attainment (Stevens, Owens, & Schaefer, 1990).

Equity can also be established through *cross-character assortment* (Buss & Barnes, 1986). Social exchange theory posits an ‘economic analysis’ in the context of social situations, whereby equally valued, but different, commodities are traded (Emerson, 1976; Kirsner, Figueredo and Jacobs, 2003). Referring again to the opening example, whereas the first couple to walk through the coffee shop door exemplify matching through character-specific assortment (i.e., attractiveness for attractiveness), the second couple might exemplify social exchange theory in action - the trade of a surplus on one trait (i.e., her attractiveness) for the partner’s surplus on

another trait (i.e., his social status and wealth). This trade of differing characteristics exemplifies cross-character assortment (Buss & Barnes, 1986). Traditionally, social exchange theory has been largely evidenced through the trade of a male's capacity to invest in offspring for a female's capacity to produce the most genetically fit offspring (Gangestad, 1993).

Whether equity is established via character-specific assortment or cross-character assortment does not matter, as long as one's investments into the relationship are balanced by the benefits received from the relationship (e.g., Walster et al., 1978). Such equity considerations affect the dynamics of established relationships (e.g., Hatfield et al., 2008; Stafford & Canary, 2006; Walster et al., 1973; Walster, et al., 1978). For example, satisfaction is higher in more equitable relationships: Studies of remarriages have found that men and women who felt deprived in their former marriages presently felt either equitably treated or slightly over-benefitted in their current, satisfying marriages (Buunk & Mutsaers, 1999). In contrast, when relationships are inequitable, individuals feel negative emotions such as guilt, shame, anger, or resentment (Hatfield et al., 2008; Stafford & Canary, 2006; Walster & Berscheid, 1973; Walster et al., 1978). Furthermore, partners attempt to correct inequity through either a restoration of equity or by leaving the relationship altogether (Hatfield et al., 2008). In terms of equity restoration, the under-benefitted partner may claim greater dominance in the relationship to compensate for lower benefits in other domains (e.g., Critelli & Waid, 1980). Individuals also may increase or decrease some other desirable relationship commodity, such as reported 'love' for their partner (Critelli & Waid, 1980), or they may employ relational maintenance strategies, such as exhibiting cheerfulness and support within their relationship, discussing important aspects of the relationship openly, or emphasizing their commitment to their current partner (Stafford & Canary, 2006).

Given the prevalence of the concept of equity as an “exchange rule” in a diverse array of social relationships (Emerson, 1976), the importance of equity for the long-term satisfaction and stability of romantic relationships (e.g., Buunk & Mutsaers, 1999), and given people’s ability to judge equity within their own relationships (e.g., Critelli & Waid, 1980), it makes intuitive sense that observers might be able to perceive and judge the equity of others’ relationships as well.

Observers Perceive Inequity and Draw Conclusions About Commitment

Evaluations of equity are generally made by the individuals involved in the relationship, who weigh their benefits given against their benefits received (e.g., Walster et al., 1978), and make appropriate adjustments if inequity exists (e.g., Hatfield et al., 2008). However, are people outside of the relationship able to judge equity in others’ relationships? Furthermore, do their evaluations of inequitable relationships influence their perceptions of the individuals involved?

Research examining people’s mate-value assessments, of themselves and others, suggests that people regularly assess the characteristics of potential mates and competitors in their immediate environment to evaluate their own value as a marriage partner (Bredow, Huston, & Glenn, 2011). Also, appraisals of one’s own mate value, and appraisals of the mate value of possible partners and competitors, are essential to economic exchange models of character assortment (Kirsner et al., 2003). Specifically, individuals use their own mate value as a template against which to compare potential mates and competitors for these mates in their environment, so as to choose the most appropriate mate that will provide them with sufficient benefits as well as not be tempted by better-suited competitors (Kirsner, et al., 2003). Moreover, gender-specific, biologically-related research suggests that people possess an innate, adaptive cognitive mechanism that aids them in evaluating others’ mate values, thus leading to successful mating (Bailey, Durante, & Geary, 2011; Beaulieu, 2007). Specifically, Beaulieu (2007) asserts that

during peak ovulation women allocate more resources to accurate assessment of their own mate value, which in turn affects their mate-selection standards. Likewise, men are more sensitive to subtle differences in attractiveness of women who are similar to them in mate value, rather than those with higher or lower mate values (Bailey et al., 2011). Therefore, it seems that people assess their own mate value and the mate values of possible mates and competitors, and they also make comparisons between these three assessments (Bailey et al., 2011; Beaulieu, 2007; Kirsner, et al., 2003). If people are so adept at judging characteristics of potential mates and competitors, it is reasonable to propose that people also evaluate the individual characteristics of members of a dating couple to determine the equity of a given relationship.

Research supports this proposal. Studies of person perception suggest that men are judged most favorably when they are presented as the boyfriend of an attractive confederate, and judged least favorably when they are presented as the boyfriend of an unattractive confederate (Sigall & Landy, 1973). Furthermore, Bar-Tal and Saxe (1974) demonstrated that mismatch in attractiveness within married couples predicted evaluations of the couple on other traits related to mate value. Creating four types of ostensibly married couples using high school year book photos (i.e., two types of couples were equally attractive or equally unattractive, and two types had one partner who was attractive and the other was unattractive), with four examples of couples in each conditions, participants were run in groups and randomly assigned to one of the 16 possible combinations to assess the mate value of each member of the couple. Specifically, men rating mismatched couples where the husband was less attractive than the wife rated the husband higher in mate value. Alternatively, women rating mismatched couples where the wife was less attractive than the husband rated the wife lower in mate value. Thus, it appears that

observers are able to identify other people's inequitable relationships, with these evaluations of inequity subsequently affecting their perceptions of the mate values of the individual partners.

Therefore, if we return to the story that opened this thesis, Andrew will observe and judge the individual observable traits of the romantic couples who come into the coffee shop, and subsequently evaluate the equity of the couples. For the couple mismatched in attractiveness, perhaps he will think the woman is a "ten", and her partner is a "six", thereby concluding that the relationship is inequitable in terms of physical attractiveness. However, research from my supervisor's lab suggests that Andrew's assessment of the couple will not stop there. He will also use the perceived equity, or inequity, of the couple to draw conclusions about the couple's commitment to one another (Stinson & Reddoch, unpublished data). For example, in one study, participants viewed photos of couples who were matched or mismatched in physical attractiveness, and then rated each partner's commitment to the relationship. Participants rated targets that were matched in attractiveness with their romantic partner as similar in commitment to targets that were less attractive than their romantic partner, but rated targets that were more attractive than their romantic partner as lower in commitment than either of the other two groups. Therefore, when evaluating the commitment of the mismatched coffee-shop couple, Andrew is likely to believe the woman is less committed to the relationship than the man, because she is more attractive than him.

Why might Andrew draw these conclusions about the couple's commitment? Rusbult's Investment Model of commitment (1980, 1998) suggests that commitment depends on the outcomes that one receives in a relationship, which is the difference between relationship rewards and costs. Matching in physical attractiveness suggests that both individuals are receiving the same out of the relationship that they are investing into the relationship, at least on

the variable of attractiveness. In such equitable relationships, partners are both satisfied and committed (e.g., Floyd & Wasner, 1994). People who are over-benefitted – such that their current partner is much more physically attractive than themselves – should also be satisfied and committed because they receive more benefits than costs from the relationship. In contrast, people who are under-benefitted – such that their current partner is much less physically attractive than themselves – should be unsatisfied and uncommitted because they receive fewer benefits from the relationship than they give to the relationship. Given the evidence provided by Stinson and Reddoch (unpublished data), not only does Rusbult's investment model predict actual functioning of relationships, but people are aware of the model and use its predictions to explain other people's relationships. Thus, observers who perceive inequity in attractiveness in a romantic couple will assume low commitment on behalf of the more attractive partner. If this more attractive and uncommitted partner is the opposite sex of the observer, this results in a situation where that potential mate may be available and willing to pay the cost of mate-switching to establish an alternate, more equitable relationship (Bailey et al., 2011). Therefore, I propose that evaluations of inequitable romantic relationships prompt innate mating-motivated perception of mates and competitors in the immediate environment.

Perceived Inequity Prompts Mating-Motivated Perception of Mates and Competitors

Mismatched, inequitable romantic relationships suggest a relationship in trouble (e.g., Hatfield et al., 2008; Walster et al., 1978). The more attractive partner, receiving fewer benefits than she gives, is likely unhappy with her current situation and is uncommitted to her current partner (White, 1980). The partner receiving more benefits than he gives is aware that he may not possess sufficient qualities to retain his partner, while the partner receiving fewer benefits than she gives may feel deprived (Buunk & Mutsaers, 1999), angry, distressed, and resentful

(e.g., Hatfield et al., 2008; Walster et al., 1978). Moreover, observers are aware of this reality, perceiving that partners receiving fewer benefits than they give are less committed to their relationships than partners receiving benefits equal to those they give, or partners receiving more benefits than they give (Stinson & Reddoch, unpublished data). Hence, mismatched couples may indicate to observers that poaching attempts of the under-benefitted partner may be successful. Reflecting this potential relationship instability, mismatched couples in which a potential mate is more attractive, or under-benefitted, may provoke mating strategies in observers that can affect perceptions of romantic dyads.

The activation of the mating motive affects person perception in a variety of ways. Maner and colleagues (2007) investigated the effects of arousal priming on attentional adhesion to members of the opposite sex who varied in physical attractiveness. Using sexual arousal as a motivator to activate a “mate-search” prime, the researchers found that participants took longer to shift their attention away from an attractive, opposite-sex target. Moreover, in a second study where participants were asked to imagine situations designed to evoke a jealousy motivator, it was found that a “mate guard” prime induced attentional adhesion to physically attractive members of the same sex. Maner and colleagues (2007) suggest that the aforementioned studies provide evidence for instinctual mechanisms that promote evolutionary adaptive romantic relationships. Further evolutionary support for mating-motivated perception of attractive, opposite-sex others is demonstrated through studies of person perception, such that being associated with attractive others increases people’s favorable evaluations of those same-sex targets being judged (Sigall & Landy, 1973). Moreover, people seem to be privy to this phenomenon, such that individuals understand how others will view them depending on the physical attractiveness of their associates (Sigall & Landy, 1973).

Based on these evolutionary accounts, it makes intuitive sense that people's perceptions of others are influenced by mating motives. Thus, I advance that inequitable relationships capture observers' attention because they do not make "sense" – in contrast to sensible, matched relationships (Bar-Tal & Saxe, 1976). Much like Maner and colleagues (2007) primed "mate searching" with sexual arousal, I believe that mating-motivated person-perception is primed by perceived inequity in a romantic dyad. I specifically examine motivated perceptions of others' status and resources as a function of matching in physical attractiveness. Physical attractiveness and status are two important determinants of people's mate value (Buss & Dedden, 1990; Schmitt & Buss, 2001), and are desired in an ideal romantic partner (Fletcher et al., 1999). These two dimensions are called *Vitality-Attractiveness* (e.g., physical attractiveness) and *Status-Resources* (e.g., income, intelligence, popularity, social status; Fletcher et al., 1999). I assert that mating-motivated person-perception reflects a mate-poaching motivation. Mating-motivated person-perception will prompt observers to boost the Status-Resources (SRs) of potential mates who are more physically attractive than their romantic partner and derogate the SRs of competitors who are less physically attractive than their romantic partner. Boosting the SRs of mates who are more physically attractive than their romantic partner likely reflects a mate-poaching tactic judged to be effective for women, referred to as "ego-boosting" (Schmitt & Buss, 2001). Alternatively, derogating the SRs of competitors who are less physically attractive than their romantic partner likely reflects an efficacious mate-poaching tactic for both men and women, referred to as "derogation of competitors" (Schmitt & Buss, 2001). Boosting and derogating the SRs of mates and competitors, respectively, effectively creates an even larger discrepancy between the mate values of a potential mate and the primary competitor for that potential mate, his or her current romantic partner. For example, if Andrew conveys his boosting

and derogating opinions to the attractive woman from the coffee shop, a woman who is already giving more benefits to her partner than she receives in the domain of physical attractiveness, Andrew's perceptual biases could further destabilize the relationship and facilitate mate-poaching. Thus, mating-motivated person-perception may be a precursor to actual mate-poaching attempts.

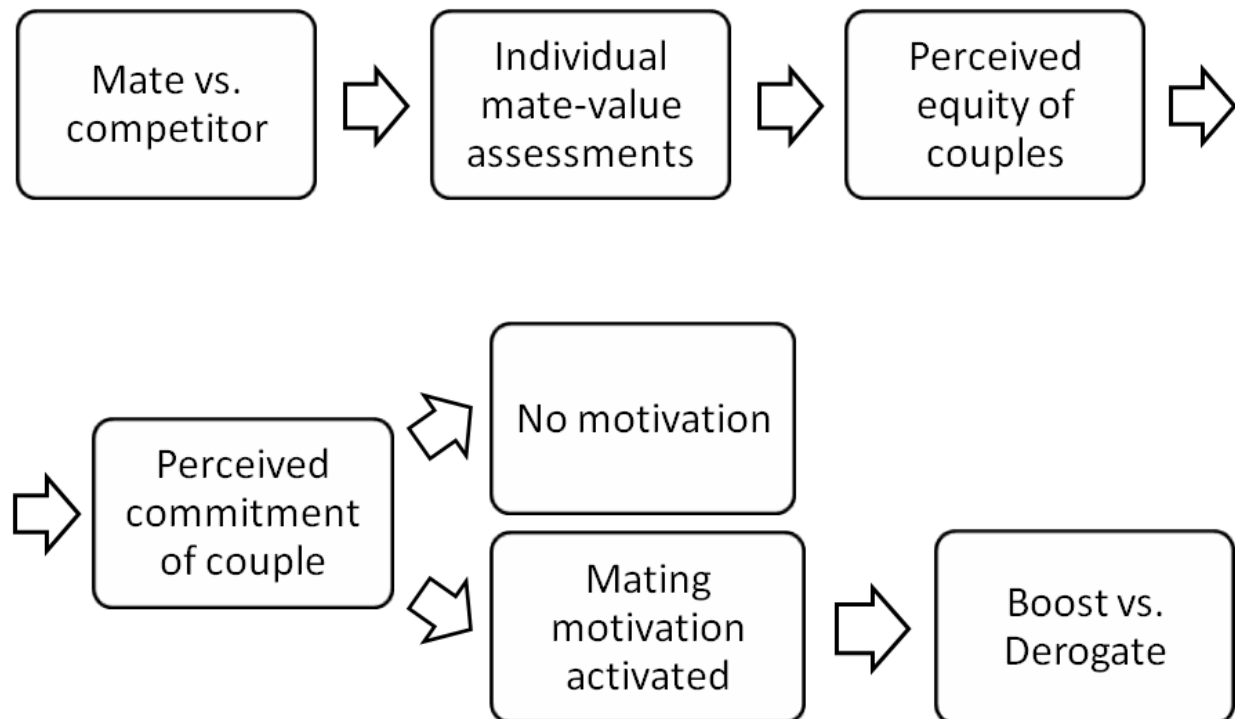


Figure 1. Individual steps in overall model leading to mating-motivated perception.

The Present Research

The present research tests my hypotheses concerning mating-motivated perception by presenting participants with one of three types of romantic dyads: Dyads matched in attractiveness (termed “matched”; see Figure 1 as example), dyads where the potential mate is less attractive than the competitor (termed “mate-less-attractive”; see figures 2 and 3 for examples of what male and female participants saw, respectively), and dyads where the potential mate is more attractive than the competitor (termed “mate-more-attractive”; see figures 5 and 6

for examples of what male and female participants saw, respectively). In the *matched condition* (see Figure 1), both targets are equally physically attractive, suggesting an equitable and committed relationship (Rusbult, 1980; Stinson & Reddoch, unpublished data), so I do not predict any type of mating-motivated perception in this condition.



Figure 2. Mate and competitor are equal to each other in attractiveness (i.e., both are ‘4’s) if attractiveness is made scalar

In the *mate-less-attractive condition* (see Figures 2 and 3), the mate is less attractive than the competitor, suggesting an inequitable and unstable relationship. However, a less-attractive mate is highly committed to his or her relationship, and so there is no instinctual motivation to try and poach such a committed individual, and thus no motivation to boost a potential mate or derogate a competitor.



Figure 3. Male participants - Mate is less attractive (i.e., ‘3’) than competitor (i.e., ‘6’; mate-less-attractive condition)



Figure 4. Female participants - Mate is less attractive (i.e., '3') than competitor (i.e., '6'; mate-less-attractive condition)

I predict that the perceptual biases will be evident in the *mate-more-attractive condition*, where the mate is more attractive than the competitor (see Figures 4 and 5). This condition suggests an inequitable and unstable relationship. A more attractive mate is not committed to his or her relationship, and so there is an instinctual motivation to try and poach such an individual.



Figure 5. Male participants - Mate is more attractive (i.e., '7') than competitor (i.e., '4'; mate-more-attractive condition)



Figure 6. Female participants - Mate is more attractive (i.e., ‘7’) than competitor (i.e., ‘4’; mate-more-attractive condition)

Thus, I predict that participants will decrease their SR ratings of the competitor in the mate-more-attractive condition as a form of derogation (a common mating strategy; Buss & Dedden, 1990). Furthermore, I predict that this *derogation bias* will be stronger for men than for women. Women are more sensitive than men to feelings of inequity (Buunk & Mutsaers, 1999). Thus more attractive female potential mates might be perceived by men to be highly likely to seek substitute relationships with an alternative partner. I also predict that participants will increase their SR ratings of the more attractive potential mate as a form of “ego-boosting” (a known mating strategy; Schmitt & Buss, 2001). Furthermore, this *boosting bias* has been found to be more useful for female poachers than for male poachers (Schmitt & Buss, 2001), therefore I expect women to show the boosting bias to a greater extent than men.

Hypotheses. Reflecting the derogation bias, ratings of competitors’ SRs in the mate-more-attractive condition will be significantly less than the ratings of the competitors’ SRs in the matched and mate-less-attractive conditions (H1). Also reflecting the derogation bias, in the mate-more-attractive condition, participants will rate competitors lower in SRs than potential mates (H2). These derogation biases will be stronger for men than for women (H3). Reflecting the boosting bias, in the mate-more-attractive condition, ratings of potential mates’ SRs will be

significantly higher than the ratings of the potential mates' SRs in the matched and mate-less-attractive conditions (H4), and this boosting bias will be stronger for women than for men (H5).

STUDY 1

The purpose of Study 1 was to obtain physical attractiveness ratings of photographs of men and women, which could then be used as experimental stimuli in Study 2.

Method

A brief initial study was conducted to select the photographic stimuli for Study 1. The pictures were drawn from a pool of 471 photographs of first year undergraduates from the University of Waterloo, who had given their permission for their photos to be used in future research. Each photograph depicted a student from mid-waist to top of the head, who was face-on to the camera and unsmiling. These 471 photos were rated by eight independent raters using a 7-point Likert-type scale ($1 = \textit{not at all attractive}$, $4 = \textit{somewhat attractive}$, $7 = \textit{extremely attractive}$). Based on the mean ratings of attractiveness, these 471 photos were separated into three equal groups where 157 photos were categorized as *least attractive* ($M = 2.21$, $SD = 0.59$), 157 as *moderately attractive* ($M = 3.16$, $SD = 0.21$), and 157 as *most attractive* ($M = 4.26$, $SD = 0.50$). Of the original 471 photographs, 90 photos (45 men and 45 women) were randomly selected to be rated by participants in the present study. Thirty (15 female, 15 male) of these photos were selected from the least attractive photos, 30 (15 female, 15 male) were selected from the moderately attractive photos, and 30 (15 female, 15 male) were selected from the most attractive photos. This sample size of 90 photos was chosen because it was the average number of photos that the independent raters could rate in five minutes without experiencing boredom or fatigue; a rating time of five minutes was deemed appropriate for my convenience sampling method.

Participants

Ninety-eight students at the University of Victoria (46 Women, 52 Men; $M_{\text{Age}} = 22.7$, $SD = 7.07$) participated. Participants were a convenience sample drawn from the University Center (a common area on campus) where interested students were asked to voluntarily participate in a five minute study entitled, "Impressions of Others." Participants received a chocolate bar or pack of gum as compensation for their time.

Procedure

After signing the consent form (see Appendix F), students sat down at private booths (See Appendix G for experimenter script) to view a series of 90 photographs on a computer screen. They rated the physical attractiveness of each of the photos using a 7-point Likert-type scale ($1 = \textit{not at all attractive}$, $4 = \textit{somewhat attractive}$, $7 = \textit{extremely attractive}$; see Appendix D). When they had finished rating the 90 photographs, they completed a demographic questionnaire assessing gender, ethnicity, current relationship status, and other potentially relevant variables (see Appendix E). Finally, participants were debriefed, compensated, and thanked for their participation (see Appendix H for feedback form).

Results

The means and standard deviations of each photo in the least attractive, moderately attractive, and most attractive groups are presented in Appendices A to C; means and standard deviations of attractiveness ratings for each attractiveness group are reported in Table 1.

Table 1

Study 1 - Mean attractiveness ratings and standard deviations for each of the three matching conditions (on a 1-7 Likert scale)

	Mean	Mean Standard Deviation
Least attractive	3.07	1.25
Moderately attractive	3.62	1.32
Most attractive	4.31	1.28

Based on these results, 30 Caucasian photos from the larger sample of 90 photos were chosen and paired into 15 heterosexual couples to be used as stimuli for Study 2. Caucasian photos, rather than photos depicting individuals of diverse ethnicities, were selected to limit variance in participants' perceptions of physical attractiveness as well as their SRs as a function of ethnicity. Thus, three types of heterosexual couples were formed, spanning a range of physical attractiveness (i.e., low, moderate, high): Five couples were created where the man and woman were equally physically attractive, five couples were created where the woman was more attractive than the man by approximately one point on the seven-point scale, and five couples were created where the man was more attractive than the woman by approximately one point on the seven-point scale. I chose a one-point difference in attractiveness ratings for the two mismatched types because it was the maximum difference attainable given the relatively small range of attractiveness ratings (range = 1.89 - 5.44) and given my desire to sample five couples of each type. Moreover, I selected the five couples of each type so that both members of one couple were from the bottom third of the distribution of attractiveness scores, three were from the middle third, and one was from the upper third of the distribution of attractiveness scores.

Hence, the experimental stimuli for Study 2 were fifteen heterosexual couples that varied in their relative attractiveness both within couples and between couples (see Table 2 for means and standard deviations of each individual photograph selected).

Table 2

Mean attractiveness ratings and SDs for each member of the 15 couples used as experimental stimuli in Study 2 (1-7 scale)

Matched					Female > Male					Male > Female																			
Low	Middle		High	Low	Middle		High	Low	Middle		High																		
$MM =$ 2.34	$MM_L =$ 2.94	$M_{MM} =$ 3.38	$M_{MH} =$ 4.21	$M_M =$ 4.43	$M_M =$ 1.89	$M_{ML} =$ 2.19	$M_{MM} =$ 2.87	$M_{MH} =$ 3.89	$M_M =$ 4.06	$M_M =$ 3.50	$M_{ML} =$ 3.87	$M_{MM} =$ 4.15	$M_{MH} =$ 4.32	$M_M =$ 4.61															
$SD =$ 1.13	$SD =$ 1.22	$SD =$ 1.26	$SD =$ 1.31	$SD =$ 1.20	$SD =$ 1.16	$SD =$ 1.17	$SD =$ 1.33	$SD =$ 1.53	$SD =$ 1.19	$SD =$ 1.43	$SD =$ 1.29	$SD =$ 1.51	$SD =$ 1.34	$SD =$ 1.45															
$MF =$ 2.79	$MF_L =$ 3.01	$M_{FM} =$ 3.40	$M_{FH} =$ 4.25	$M_F =$ 4.71	$M_F =$ 2.86	$M_{FL} =$ 3.22	$M_{FM} =$ 3.77	$M_{FH} =$ 4.79	$M_F =$ 5.20	$M_F =$ 2.50	$M_{FL} =$ 2.94	$M_{FM} =$ 3.17	$M_{FH} =$ 3.47	$M_F =$ 3.81															
$SD =$ 1.19	$SD =$ 1.40	$SD =$ 1.12	$SD =$ 1.24	$SD =$ 1.19	$SD =$ 1.20	$SD =$ 1.30	$SD =$ 1.17	$SD =$ 1.31	$SD =$ 1.20	$SD =$ 1.37	$SD =$ 1.22	$SD =$ 1.39	$SD =$ 1.35	$SD =$ 1.34															
$MM_{Target} Avg. = 3.46$					$MF_{Target} Avg. = 3.63$					$MM_{Target} Avg. = 2.98$					$MF_{Target} Avg. = 3.97$					$MM_{Target} Avg. = 4.09$					$MF_{Target} Avg. = 3.17$				
$SD_{AVG} = 1.22$					$SD_{AVG} = 1.23$					$SD_{AVG} = 1.28$					$SD_{AVG} = 1.24$					$SD_{AVG} = 1.40$					$SD_{AVG} = 1.57$				

Note. *M* = Mean; *M* = Male; *F* = Female; *L* = Low; *M* = Middle; *H* = High

STUDY 2

Study 2 sought to investigate mating-motivated person-perception. In this study I test five hypotheses. Ratings of competitors' SRs in the mate-more-attractive condition will be significantly less than the ratings of the competitors' SRs in the matched and mate-less-attractive conditions (H1). In addition, in the mate-more-attractive condition, participants will rate competitors lower in SRs than potential mates (H2), and this derogation bias will be stronger for men than for women (H3). Reflecting the boosting bias, in the mate-more-attractive condition once again, ratings of mates' SRs will be significantly higher than the ratings of the mates' SRs in the matched and mate-less-attractive conditions (H4), and this boosting bias will be stronger for women than for men (H5).

Method

Participants

One-hundred-and-thirty-four people (74 women, 60 men; $M_{age} = 23.5$, $SD = 7.08$) participated in Study 2. Participants were a convenience sample drawn from the University Centre (a common area on campus) at the University of Victoria, who received a chocolate bar as compensation for their time.

Procedure

Interested students participated in a five-minute study entitled, "Impressions of Others - 2" (see Appendix J for experimenter script). After signing the consent form (see Appendix F) participants sat down at private booths with a laptop computer and viewed a series of five photographs of couples, all of whom ostensibly had been dating for two years. As they viewed the couples' photos, participants focused on one *target individual* within the romantic dyad. The target individual varied according to two, between-participants independent variables: *mate-*

competitor variable and *matching condition*. To operationalize the mate-competitor variable, the target was either the male or the female member of each couple, and so participants either rated targets who were *potential mates* (i.e., male participants rated the female targets; female participants rated the male targets) or they rated targets who were *potential competitors* (i.e., male participants rated the male targets; female participants rated the female target; see Figure 7 for experimental depiction of mate-competitor variable).

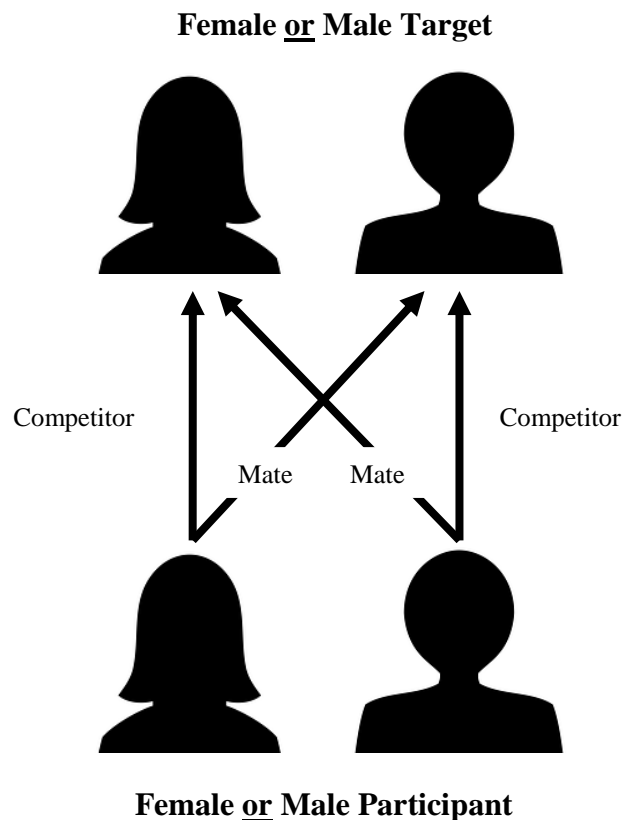


Figure 7. Depiction of mate-competitor variable (i.e., participants rating people who are the opposite-sex of themselves are deemed *mates*, and those who are the same-sex of themselves are deemed *competitors*)

To operationalize the matching condition variable, participants were randomly assigned to view one of three types of couples that varied in equity: the mate matched the competitor in physical attractiveness (*matched condition*), the mate was less physically attractive than the

competitor (*mate-less-attractive condition*), or the mate was more physically attractive than the competitor (*mate-more-attractive condition*). When viewing each couple, participants rated targets on a series of characteristics using a seven-point Likert-type scale ($1 = \textit{not at all}$, $7 = \textit{extremely}$): physically attractive, income, popularity, social status, and intelligence. Ratings were averaged to create a reliable ($\alpha = .84$) *Status-Resources* (SRs) variable. Participants also rated how well matched they thought the couple was, again using a seven-point Likert-type scale ($1 = \textit{not at all}$, $7 = \textit{extremely}$). After rating all five targets, they completed the same demographics questionnaire that was used in Study 1 (see Appendix K). Finally, they were debriefed, compensated, and thanked for their participation (see Appendix H for feedback form).

Results

Data for one female participant in the mate-more-attractive condition was excluded due to the use of a response set (e.g., responding ‘6’ for every question). Moreover, four individuals with an age above 40 years were excluded, because photographic stimuli were of students in their early twenties and I wanted to limit variance in responses due to age.

Manipulation Check

Participant gender, matching condition, and mate-competitor condition were entered into a between-participants univariate ANOVA predicting physical attractiveness ($M = 3.37$, $SD = 0.86$). A main effect of participant gender approached significance, $F(1, 117) = 3.76$, $p = .055$, such that men ($M = 3.28$, $SD = 0.73$) rated the photos lower in attractiveness than did women ($M = 3.49$, $SD = 0.97$). There was also a significant two-way interaction between matching condition and mate-competitor condition, $F(2, 117) = 10.44$, $p = .000$. This two-way interaction, as well as the means and standard deviations of attractiveness ratings for each experimental condition, are presented in Figure 8. As intended, mates were rated equal to competitors in the matched

condition, $F(1, 117) = 2.68, p = .104$, whereas mates were rated lower in attractiveness than competitors in the mate-less-attractive condition, $F(1, 117) = 12.41, p = .004$, but higher than competitors in attractiveness in the mate-more-attractive condition, $F(1, 117) = 7.75, p = .006$. Gender did not moderate this interaction (see Figures 9 and 10 for means and standard deviations of attractiveness ratings as a function of gender and experimental conditions).

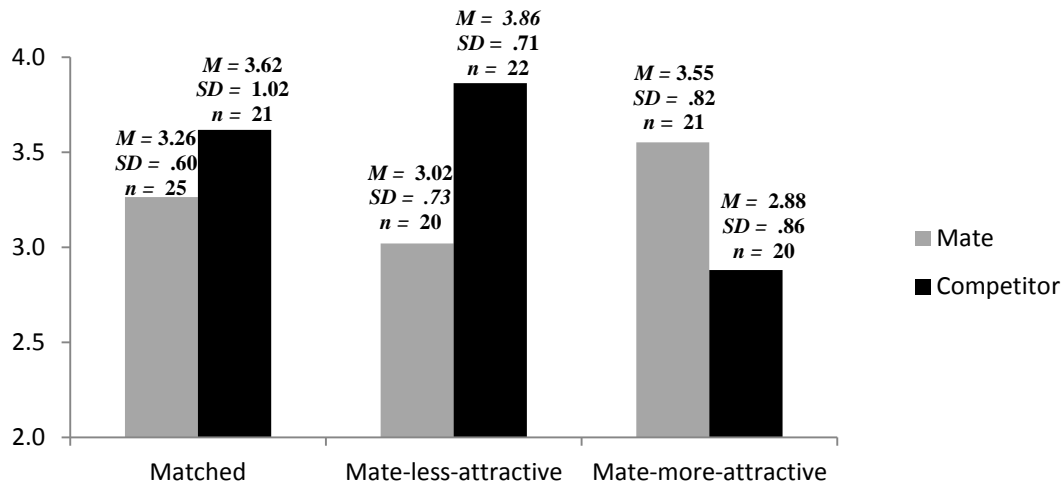


Figure 8. Study 2 - Mean attractiveness ratings as a function of matching condition and mate-competitor condition.

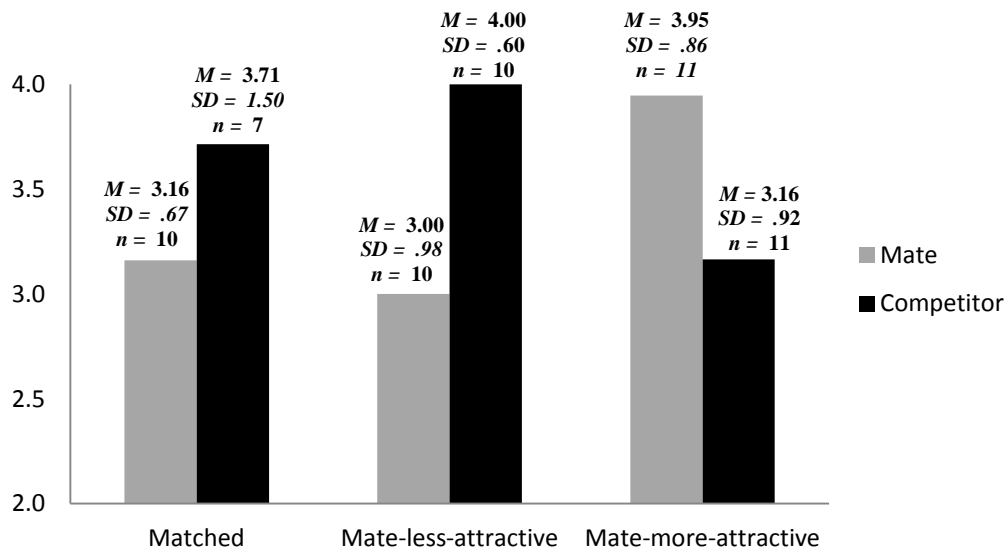


Figure 9. Female Participants - Mean attractiveness ratings and standard deviations as a function of matching condition and mate-competitor condition

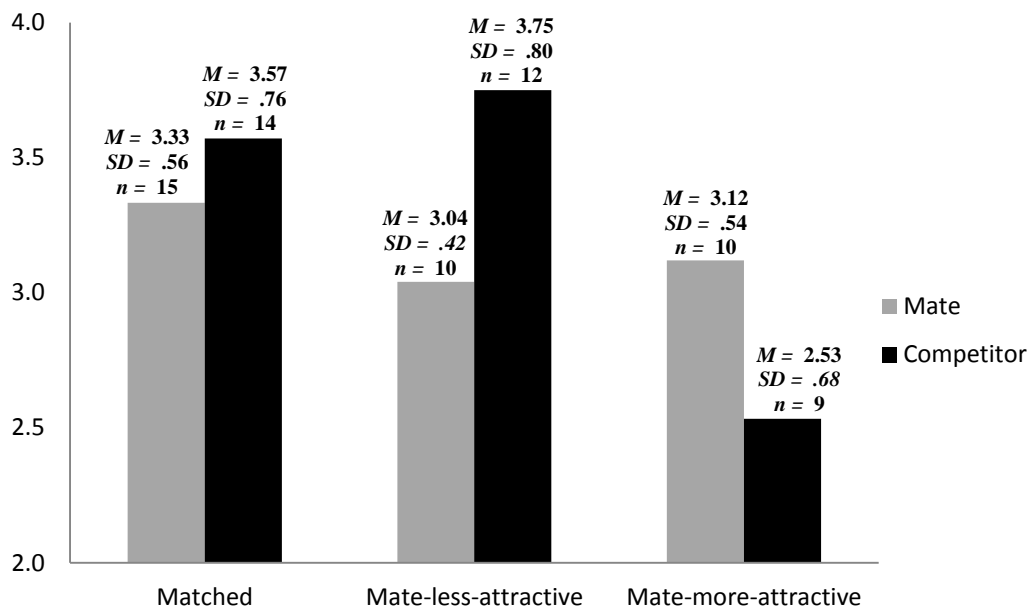


Figure 10. Male Participants - Mean attractiveness ratings and standard deviations as a function of matching condition and mate-competitor condition

Mating-Motivated Perception Hypotheses

To test my five main hypotheses, participant gender, matching condition, and mate-competitor condition once again were entered into a between-participants univariate ANOVA predicting SRs ($M = 3.94$, $SD = 0.63$)¹. There were a significant main effect of participant gender, $F(1, 117) = 4.04$, $p = .047$ such that men ($M = 3.86$, $SD = 0.60$) rated the photos lower in SRs than did women ($M = 4.03$, $SD = 0.66$). There was a significant two-way interaction between mate-competitor condition and matching condition, $F(2, 117) = 7.43$, $p = .001$. This two-way interaction, as well as the means and standard deviations of SR ratings for each experimental condition, are presented in Figure 11. Simple-effects testing revealed that competitors were rated lower than mates in SRs in the mate-more-attractive condition, $F(1, 117) = 14.35$, $p < .001$. However, mates and competitors did not differ in the matched condition, $F(1,$

¹ Attractiveness ratings and status-resource ratings were not compared to each other. Analyses would have involved a series of repeated measures ANOVAs with multiple simple effects. However, since the hypothesis did not include any predictions relative to this comparison, these analyses were not conducted.

117) = 1.42, $p = .236$, or the mate-less-attractive condition, $F(1,117) = .356$, $p = .552$. Simple-effects testing also revealed that the matching-condition effect for mates was not significant, $F(2, 117) = 1.21$, $p = .303$. However, there was a significant matching condition effect for competitors, $F(2, 117) = 7.43$, $p = .001$. Ratings of competitors in the matched condition differed from the mate-more-attractive condition, $F(2, 117) = 7.43$, $p = .001$. Specifically, competitors in the mate-more-attractive condition were rated as having significantly lower status-resources than in the matched condition. Moreover, ratings of competitors in the mate-more-attractive and mate-less-attractive conditions differed significantly from each other, $F(2, 117) = 7.43$, $p = .002$, with competitors in the mate-more attractive condition having much lower status-resources than in the mate-less-attractive condition. Finally, ratings of competitors in the matched condition did not differ from the mate-less-attractive condition, $F(2, 117) = 7.43$, $p = .656$. Gender did not moderate this interaction (but please see Figures 12 and 13 for means and standard deviations of SR ratings as a function of gender and experimental conditions). A second significant two-way interaction between mate-competitor condition and participant gender also emerged, $F(1, 117) = 5.21$, $p = .024$. This two-way interaction, as well as the means and standard deviations of SR ratings as a function of mate-competitor condition and participant gender are presented in Figure 14.

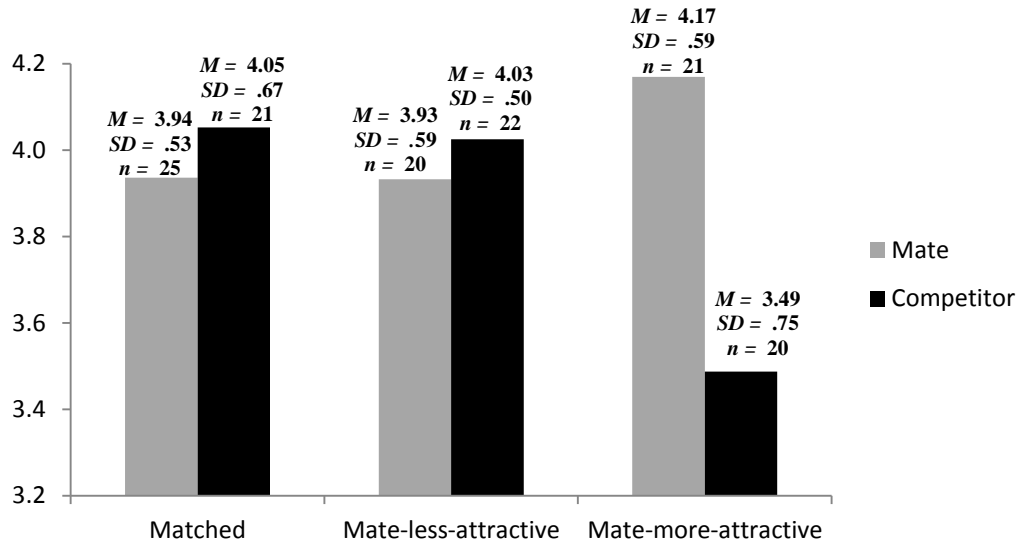


Figure 11. Study 2 - Mean status-Resource ratings and standard deviations as a function of matching condition and mate-competitor condition

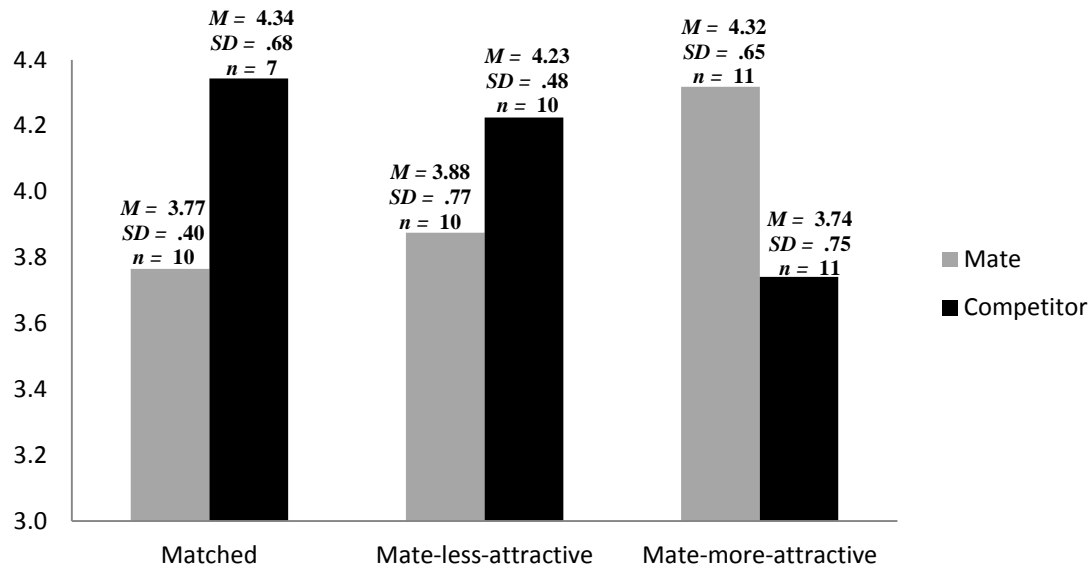


Figure 12. Female Participants - Mean status-resource ratings and standard deviations as a function of matching condition and mate-competitor condition

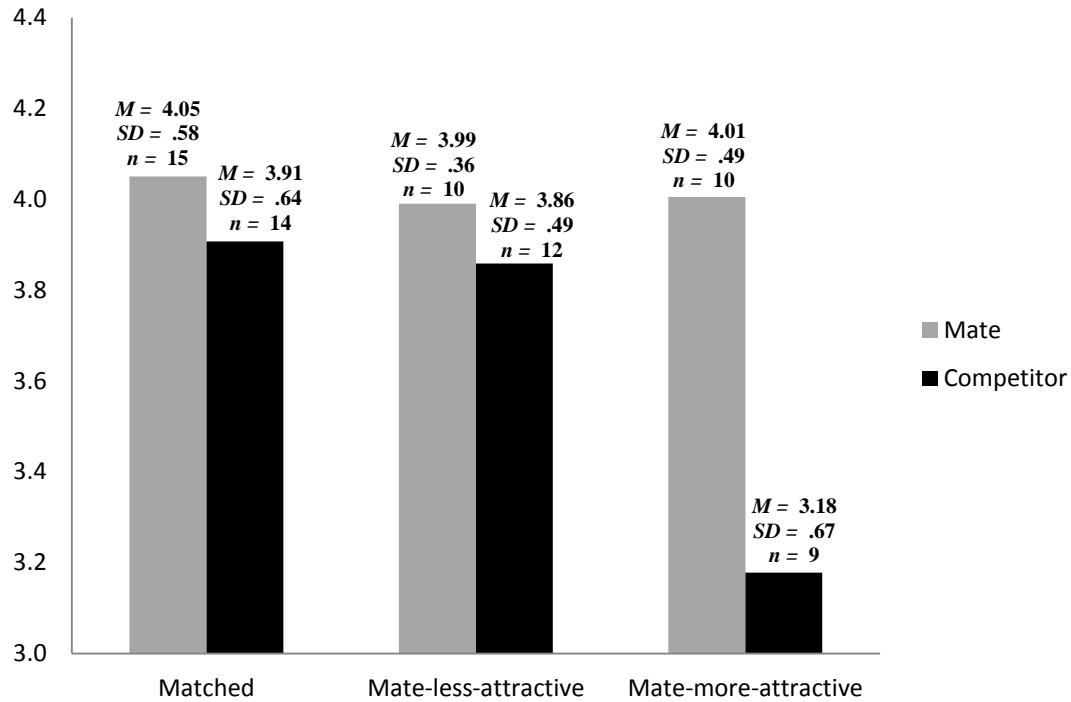


Figure 13. Male Participants - Mean status-resource ratings as a function of matching condition and mate-competitor condition

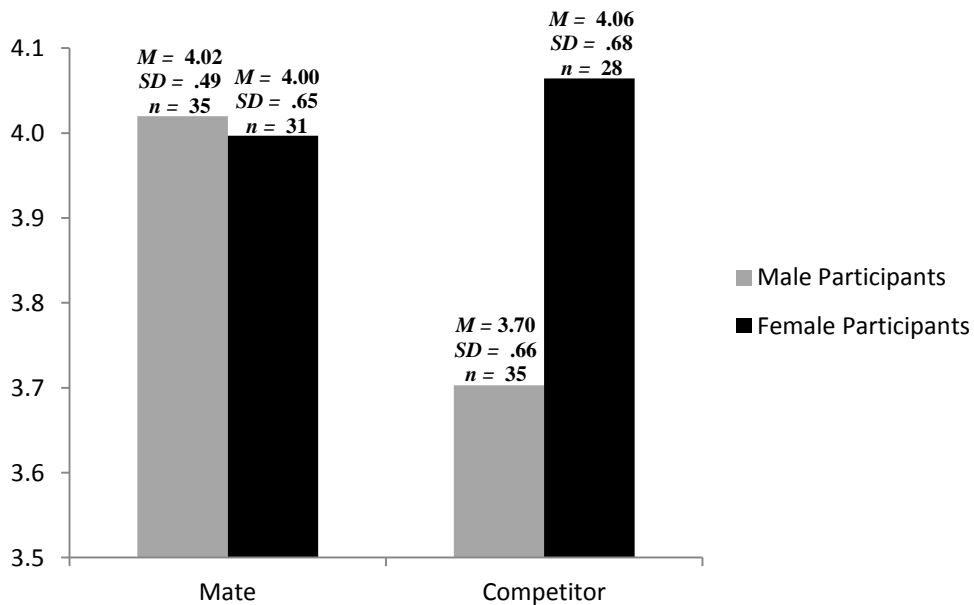


Figure 14. Study 2 – Mean status-resource ratings and standard deviations as a function of mate-competitor condition and participant gender

Simple effects revealed that mates were not rated differently by male and female participants, $F(1, 117) = .039, p = .884$, but competitors were rated lower by male participants than by female participants, $F(1, 117) = 8.89, p = .003$. In addition, male participants' rated competitors lower in SRs than mates, $F(1, 117) = 6.52, p = .012$, whereas female participants rated mates and competitors equal to one another, $F(1, 117) = .562, p = .455$.

Discussion

In a series of two studies, I tested the prediction that presenting people with romantic couples mismatched in physical attractiveness triggers mating-motivated perceptual biases, producing derogation and boosting biases. Specifically, I was interested in testing five hypotheses. First, I tested the hypothesis that ratings of competitors' SRs in the mate-more-attractive condition would be significantly less than the ratings of the competitors' SRs in the matched and mate-less-attractive conditions (H1). Referring back to Andrew's coffee shop experience where he saw two couples enter (i.e., one couple was matched in physical attractiveness and the other couple represented a mate-more-attractive condition), the present results suggest that Andrew would form a derogation bias and perceive the relatively unattractive man's SRs to be lower than the SRs of the man who had an equally attractive romantic partner.

Second, I tested the hypothesis that in the mate-more-attractive condition, participants would rate competitors lower in SRs than potential mates (H2), and this derogation bias would be stronger for men than for women (H3). Thus, with respect to the couple who was mismatched in physical attractiveness, Andrew would once again lower his ratings of the man's SRs in comparison to the attractive woman's SRs, and he would do this more strongly than would a woman in his position, who was judging an attractive man with an unattractive female partner.

Finally, reflecting a boosting bias, I proposed that ratings of mates' SRs in the mate-more-attractive condition would be significantly higher than the ratings of the mate's SRs in the matched and mate-less-attractive conditions (H4), and this boosting bias would be stronger for women than for men (H5), as "ego-boosting" is generally a poaching tactic deemed effective for women (Schmitt & Buss, 2001). For Andrew, this means that he would boost his ratings of the perceived SRs for the attractive woman paired with the unattractive man, relative to his SR ratings for the woman who was paired with an equally attractive romantic partner. A woman in Andrew's position, however, judging the perceived SRs of a handsome man paired with a homely woman, would boost her SR ratings for this man even more so than Andrew would for an attractive woman.

The results supported my first two hypotheses: Ratings of competitors' SRs in the mate-more-attractive condition were significantly lower than ratings of the competitors' SRs in the matched and mate-less-attractive conditions (H1), and participants rated competitors lower in SRs than potential mates in the mate-more-attractive condition (H2). Thus it seems that people are sensitive to the relative attractiveness between dating partners, and will bias perceptions in a manner consistent with mate-poaching motivations when a couple is mismatched.

My third, fourth, and fifth hypotheses were not supported. The derogation effects were not stronger for men than for women in the mate-more-attractive condition (H3). This hypothesis would have been supported by a three-way interaction between matching condition, participant gender and mate-competitor condition. In the mate-more-attractive condition, male participant's ratings of competitor's SRs are lower than female participant's ratings of competitor's SRs ($M_{\text{Male}} = 3.18$, $SD = .67$; $M_{\text{Female}} = 3.74$, $SD = .75$) however this difference was not sufficient to yield a significant result (see Figures 12 & 13). Furthermore, people did not boost mates in the

mate-more-attractive condition relative to the matched and mate-less-attractive condition (H4), which would have been evident by a two-way interaction between mate-competitor condition and matching condition, with simple effects highlighting the difference between mates' increased SR ratings in the mate-more-attractive condition in comparison to mates' lower SR ratings in the matched and mate-less-attractive conditions. Referring to Figures 12 and 13, however, some support for Hypothesis 5, is apparent: that women would boost mates more so than men in the mate-more-attractive condition. This hypothesis would have been supported by a three-way interaction between matching condition, participant gender and mate-competitor condition. The difference in ratings of mates between the matched and mate-more-attractive conditions appears larger for women ($M_{\text{Matched}} = 3.77, SD = .40$ versus $M_{\text{Mate-More-Attractive}} = 4.32, SD = .65$) than for men ($M_{\text{Matched}} = 4.05, SD = .58$ versus $M_{\text{Mate-More-Attractive}} = 4.01, SD = .49$), thereby reflecting a boosting bias, but this difference was not sufficient to yield a significant result.

Moreover, in addition to the patterns of means that are consistent with my third hypothesis (i.e., that derogation of the competitor in the mate-more-attractive condition would be stronger for male participants than female participants), results did yield a significant interaction between mate-competitor condition and participant gender (see Figure 14). Particularly, male participants rated competitors' SRs significantly lower than mates' SRs, and lower than women rated competitors' SRs. This main-effect is consistent with prior research showing that men use derogation of a competitor's resources as a mating strategy more than women do (Buss & Dedden, 1990). Previous research has suggested that men are likely to derogate their competitor's financial resources, their achievements and their physical strength (Buss & Dedden, 1990). I found that male participants derogated competitors regardless of experimental matching condition, thereby reflecting a derogation bias. Perhaps because the present study's dependent

variable encompassed characteristics relevant to status and resources, men recognized importance in derogating their competitors in every experimental condition.

Furthermore, although I did not perform any analyses comparing target physical attractiveness and target status-resource ratings, it is beneficial to note one particular comparison between attractiveness and SR ratings of targets in the mate-less-attractive condition: Mates' SR ratings were higher ($M = 3.93$; $SD = .59$) than mates' physical attractiveness ratings ($M = 3.02$; $SD = .73$; see Figures 8 and 11). In contrast, ratings of attractiveness and SRs for competitors in all conditions and ratings of attractiveness and SRs for mates in the other two conditions were very similar. The boosting of mates' SRs relative to their attractiveness in the mate-less-attractive condition may indicate that participants were adjusting mates' SRs to compensate for mates' lesser attractiveness compared to their romantic partner (the competitor). By increasing the less attractive mate's SRs, participants were matching the overall mate values of the seemingly mismatched partners. Future research should explore this possibility, and tease apart whether my results reflect boosting of SRs for less-attractive mates, or derogation of competitors of more-attractive mates.

Implications for Poaching Theory

Poaching, in the context of romantic relationships, can be defined as encroaching on another person's mate (Schmitt & Buss, 2001). As redefined by Davies, Shackelford, and Hass (2007), a "poach can only be considered a legitimate poach" when the poacher is aware that the individual is involved in an exclusive relationship, and all three parties (i.e., poacher, poachee, and poached from) agree upon the distinction of the relationship as a monogamous one. Past research in the field of mate poaching has focused on investigating specific poaching tactics (Buss & Dedden, 1990; Schmitt & Buss, 1996; 2001), on pinpointing personality characteristics

associated with increased poaching attempts (Jonason, Li, & Buss, 2010), and on experimentally priming mate-searching or mate-guarding to increase attentional adhesion to physically attractive others (Maner et al., 2007). In contrast, the present research sought to investigate mating-motivated person-perception with the aim to suggest it as a precursor to behavioural mate-poaching attempts.

Derogation of a competitor's SRs when a potential mate is more attractive than their current partner, and therefore under-benefitted on the dimension of physical attractiveness, makes adaptive sense. Mate-poaching effectiveness is affected by a couple's commitment level (Schmitt & Buss, 2001). Lower commitment to the current relationship (e.g., long-distance, near dissolution) is predictive of poaching success. Also, felt inequity affects current commitment via relationship satisfaction (Floyd & Wasner, 1994), with under-benefitted partners reporting the least satisfaction (Stafford & Canary, 2006). Thus, when a relationship is inequitable, a relationship is unstable not only because of intra-dyadic factors (Walster et al., 1978) like dominance shifts within the relationship (Critelli & Waid, 1980), an imbalance of felt "love" by partners (Critelli & Waid, 1980), or dissatisfaction on behalf of the under-benefitted partner (Stafford & Canary, 2006), but also due to extra-dyadic factors like the presence of many opposite-sex friends (White, 1980). Furthermore, Stinson and Reddoch (unpublished data) demonstrated that observers are aware of the instability associated with relationship inequity: highly attractive potential mates paired with unattractive competitors are viewed as uncommitted to their current partner. Therefore, in the present research participants in the mate-more-attractive condition likely perceived that the relationship was unstable because the more attractive mate was uncommitted to his or her current relationship. So, participants may have recognized that poaching attempts would be successful in the mate-more-attractive condition, causing a

derogation bias of potential competitors. Although actual poaching behaviors were not assessed in the present research, mating-motivated perception like that observed in the present research is a probable precursor to such behavior.

The present findings support the hypothesis that humans possess adaptive mating-motivated perceptual biases (Fox, Russo, Bowles, & Dutton, 2001; Maner et al., 2007). Research on the adhesion of attention to physically attractive members of the opposite sex and one's own sex using mate-search or mate-guard primes (Maner et al., 2007), respectively, suggests that we may be equipped with an instinctual poaching mechanism. Further research by Fox and colleagues (2001) using threatening stimuli and visual disengagement proposes that this innate mechanism may be evolutionarily adaptive in an attentional sense, acting automatically and perhaps below conscious awareness. The present study's findings support the proposal of this adaptive perceptual mechanism, specifically in the context of mating motivations. Matched couples signal to others high commitment, because both are receiving equal benefits from being involved in the relationship. When couples do not match physically, not only are they potentially distressed but others around them may notice this inequity and be innately motivated to perceive certain characteristics of the members of the couple differently than they would if the couple matched. If the mismatched couple comprises a more attractive mate and a less attractive competitor, suggesting low commitment of this more attractive mate, it makes evolutionary sense to be instinctually motivated to derogate characteristics of the competitor. This perceptual derogation bias may not be intentional, but rather innately engrained and adaptively produced when appropriate circumstances arise. Thus, by illustrating that mating-motivated perception is naturally triggered when people are faced with mismatched romantic couples, without requiring

overt “mate-search” primes (Maner et al., 2007), the present research further corroborates the existence of an instinctual perceptual mechanism (Fox et al., 2001; Maner et al., 2007).

The current results also extend research to do with romantic relationships, equity theory, evolutionary psychology, and motivated cognition. With respect to romantic relationship literature and equity theory, it seems that it truly is most beneficial to match your partner in terms of mate value for both individuals involved in the relationship as well as to ward off attention from extra-pair invaders. The present study found that mismatched attractiveness between partners seemed to garner attention from outsiders when the targeted mate was more attractive than their current partner, resulting in decreased SR ratings for the competitor. If in fact this innate mating-motivated perception by outsiders does act as a precursor to future poaching behaviour, both individuals would benefit from establishing equitable romantic relationships from the beginning to avoid negative consequences in the long-term.

Many studies have investigated the processes and cognitions that exist within inequitable relationships (e.g., Buunk & Mutsaers, 1999; Stafford & Canary, 2006). However, fewer studies have investigated the extra-dyadic processes prompted by inequitable relationships. It has been established that romantic couples who are matched (either character-specific or cross-character) are the most satisfied (Buunk & Mutsaers, 1999), and that many inequitable relationships eventually lead to relationship dissolution, as evidenced by studies of felt equity in former and current marriages (Buunk & Mutsaers, 1999). However, we do not know specifically *why* or *how* this dissolution occurs. Perhaps it is that the more attractive partner is searching for potential mates who can offer him or her more in terms of a romantic relationship. Alternatively, perhaps it is that external poaching attempts actually occur more often with regard to this mismatched couple, because this inequitable relationship prompts attentional adhesion (Maner et al., 2007) by

outsiders, subsequently triggering mating-motivated perception and derogation of a competitor. The present findings support the latter hypothesis, because participants adhered to and derogated competitors in the mate-more-attractive condition, thereby suggesting that behavioral poaching actions could follow. Dissolution of a relationship is much more likely if it is constantly the object of external poaching attempts. For example, let us return to the opening scenario of Andrew in the coffee shop adhering to the attractive woman with her relatively unattractive partner. Andrew likely notices this discrepancy in physical attractiveness between partners and judges the woman to be uncommitted to her partner, thereby substantiating an inequitable relationship. Andrew then decides that perhaps she is looking for a more suitable mate, and perhaps that could be himself. He subsequently strikes up a flirtatious conversation with the woman when she passes by his table, while her partner waits patiently for their coffee. Multiple flirtatious interactions, or poaching attempts, such as Andrew just committed, are much more likely to lead to dissolution of a relationship than would no poaching attempts whatsoever, as the equitable, matched couple would elicit.

Of course, inequity based on a mismatch in physical attractiveness between dating partners does not guarantee that a relationship will dissolve. As I discussed in the introduction to this thesis, a person's overall mate value is composed of many different factors, and physical attractiveness is only one of these many factors. Thus, assessments of felt relationship equity made by each partner are generally based on a range of different components, and so a mismatch in physical attractiveness does not necessarily mean that relationship will not work out.

Finally, online dating sites such as eHarmony and Match.com could take note of the current findings. Matching couples based on factors that contribute to mate value, like physical attractiveness, could be very important for supporting the longevity of a relationship. Although

many dating websites currently match individuals based on core characteristics of their personality (eharmony.ca, n.d.), they do not match couples based on objective physical attractiveness (G. Gonzaga, SPSP Close Relationships pre-conference, Jan 17, 2013). This oversight could mean that online dating couples formed via such websites that do not match in attractiveness may be susceptible to constant poaching attempts from outside sources, thereby creating stress and likely leading to eventual dissolution of the relationship.

Contradicting Results: Explained

Bar-Tal and Saxe (1974) investigated how observer's ratings of the social desirability of individuals would be affected if these individuals were a part of a marital couple who substantially differed from each other in their relative physical attractiveness. Specifically, participants were shown images of supposedly married couples, ranging in physical attractiveness both within and between couples. Researchers were interested in extending work by Sigall and Landy (1973) on the physical attractiveness stereotype by examining how mismatched attractiveness between couples would affect participant's ratings of traits related to mate value, such as life success, socioeconomic background, and general personality characteristics. Results revealed main effects in accord with the "what is beautiful is good" stereotype (Dion, Berscheid, & Walster, 1972) such that attractive men and women were rated as having higher mate value than unattractive men and women. Significant three-way interactions revealed gender differences such that men rating mismatched couples where the husband was less physically attractive than his wife perceived the target man as having the highest income, occupational status and professional success. Alternatively, women rating mismatched couples where the wife was less physically attractive than her husband perceived the target woman as having the lowest income, occupational status, and professional success.

According to the logic that has been asserted throughout this paper, Bar-Tal and Saxe's (1974) results are contradictory to what I have found. Specifically, I would have assumed that in their study, the presentation of the mismatched couple would activate mating-motivated perception for both male and female participants. Men would decrease the social desirability ratings of their male competitor, in line with a derogation bias, and increase the ratings of their potential female mate, in line with a boosting bias. Likewise, women would decrease the social desirability ratings of their female competitor and increase the ratings of their potential male mate. However, Bar-Tal and Saxe (1974) actually found that women were engaging in motivated perception by derogating the social desirability ratings of their same-sex competitor when they were paired with a more attractive mate. Alternatively, when men are presented with a more attractive targeted mate, they did not derogate the social desirability of their competitor. Not only are they not derogating, they seem to be boosting their competitor's ratings. I believe that because the couples were presented as married couples, in other words as highly committed to one another, men did not recognize any evolutionary advantage to poaching attempts such as derogation, and therefore the mating-motivated perceptual bias was deactivated. Thus, I believe that perceived commitment played a large part in influencing how participants viewed the mate value of the individual marriage partners. Had the married couples been presented as dating couples, as in my research, the results may have been more similar to the present study. Furthermore, I believe that perceived commitment may act as a mediator in my study, such that it explains the relation between mismatched attractiveness of dating partners and SR ratings: When individuals are presented with dating couples who are mismatched in physical attractiveness, this signifies low commitment of the more attractive member of the duo; if the more attractive member is a potential mate, this prompts a derogation bias such that individuals subsequently

decreasing competitor's SR ratings. Thus, perceived commitment may be the crucial mediating factor that links the seemingly unrelated fields of relationship equity and mating-motivated perception.

Of course, making comparisons between the present research and research conducted almost 40 years ago should be done with caution. Our society has changed considerably over four decades. Women now enjoy much higher social status and have access to many more resources. Gender roles and expectations have changed greatly in that time as well, for both genders. Thus, it is difficult to compare SR, commitment, and equity judgements made today to similar judgements made forty years ago. I do believe that it is elucidating to compare my findings to those of Bar-Tal and Saxe (1974), and I believe that the present research has extended on their findings by taking a mating-motivated perspective rather than an attractiveness stereotype perspective. But the broader social context must still be acknowledged when considering our two sets of findings.

Limitations

One limitation of this study was the stimuli used in Study 1. The 90 photographs of students, chosen from the larger 471, ranged in ethnicity (69 Caucasian, 6 Asian, 3 African American, 7 East Indian, 5 Other). Whereas I did select 30 photographs of Caucasians for Study 2 to limit ethnicity-induced variability in ratings of attractiveness and SRs, the data obtained from the pilot ratings may have been affected by the interracial nature of the sample. Participants' ethnicity may have interacted with target ethnicity to predict attractiveness, and contrast effects from rating one ethnicity after another so quickly may also have exacerbated such a potential interaction. So the attractiveness ratings used to match targets in Study 2 may

have been imprecise. Future studies should examine ethnicity effects on attractiveness ratings, and also present matched couples of varied ethnicities.

A second limitation relevant to Study 1 is that the attractiveness analyses for the initial 90 photos were based on responses from all 98 participants, who ranged in age from 17 to 65, which is why the standard deviation value is so large (i.e., 7.07). Three participants were above the age of forty (i.e., 48, 56, and 65), and should have been excluded due to their age being so much greater than the age of the individuals in the photographs. Thus, these three participants' ratings may have skewed the average attractiveness ratings of the 30 photos that were chosen for Study 2, and so in future study iterations the age of participants relative to the age of the people being rated, should be controlled.

A third limitation is that my participants were all heterosexual. Although I expect similar findings for homosexual individuals, if I replicated the study with that population my experimental design would need to be adjusted. Specifically, I would pilot pictures of homosexual individuals and have homosexual participants rate the attractiveness of these photos, because sexual orientation can be quickly and accurately judged from facial photographs (Rule, Ambady, Adams, & Macrae, 2008; Rule, Ambady, & Hallett, 2009). Following this, I would create romantic couples varying in matching in attractiveness. In this design, mates versus competitors could not be assigned based on sex, so this variable would be left out of my analyses. I expect that participants would boost the SRs of more-attractive targets and derogate the SRs of less-attractive targets.

A fourth limitation of the present research was that current relationship status and relationship length were not taken into account. Those two questions were actually included in the demographic questionnaire at the end of the study, however the computers malfunctioned and

ended the program before these questions could be posed to participants. Future research should address this limitation. Relationship status, relationship length, and commitment level need to be taken into consideration because these factors could moderate my results. Studies have shown that over time in relationships, evaluation of alternative partners becomes more negative (Johnson & Rusbult, 1989). When confronted with highly attractive potential partners, participants who were in Johnson and Rusbult's (1989) study that were highly committed to their relationship were less attracted to alternatives, expressed less desire to date alternatives, and had less desire to approach or be approached by them. Thus, had I been able to control for relationship status and length there may have been a stark contrast between participants who were single versus those who were involved in highly committed relationships, as they may not have adhered to the attractive targeted mates. Furthermore, according to Parker and Burkley (2009), single women are more interested in pursuing an attached target (i.e., mate poach) than a single target. The reason single women display this behaviour may parallel Johnson and Rusbult's (1989) findings of commitment mediating evaluations of attractive, opposite-sex targets. Particularly, because single women have no felt commitment towards a current partner, they may be inclined to evaluate the attached target more positively than partnered women would.

Future Research

Certain qualities of targeted relationships have an impact on the effectiveness of poaching attraction tactics. In general, when the targeted mate is in a dating relationship, a long-distance relationship or a relationship that is about to end, poaching is more likely to be effective (Schmitt & Buss, 2001). With respect to the present study, the potential mate's high physical attractiveness suggested low commitment on their behalf, and so observers would take this as a

sign that any poaching attempts on their part would be more likely to be effective. Specifically, derogating the SRs of competitors in this condition would be deemed an appropriate mate-poaching tactic. Future studies could instead hold perceived commitment level of both partners constant, to see if this would produce the same derogation bias in the mate-more-attractive condition, as well as the effect of male participants derogating competitors more so than mates, and in comparison to female participants.

Presently, our lab is conducting a study that involves presenting photos of romantic couples that are matched in attractiveness and manipulating the perceived commitment level of one of the members of the couple (i.e., either the male or female member, depending on condition). By measuring participants' SR ratings of the couple, we will be able to garner more information as to whether commitment level acts as a mediator between mismatch in attractiveness and perceptions of SRs. I expect that by holding physical attractiveness constant (i.e., presenting partners who are matched in attractiveness) and then manipulating the ostensible commitment of the dating partners, participants will derogate the SRs of the partners of uncommitted individuals, a result that parallels my findings.

In the present research, actual poaching behaviors were not assessed. Whereas men and women did evidence a derogation bias and tend to perceptually derogate the SRs of competitors in the mate-more-attractive condition, one could argue that these perceptions would not translate into behavior. Speed-dating studies have revealed that the mate-selection characteristics desired in a romantic partner *prior* to a dating event are not predictive of the qualities possessed by the actual dates people choose (Eastwick & Finkel, 2008). With respect to my research, this finding suggests that derogating a less attractive competitor's SRs may not translate into actual poaching behaviors. However, research into motivated cognition suggests that motives do predict

behavior. (Aspden, Ingledeu, & Parkinson, 2012; Grant & Mayer, 2009). Moreover, experiments related to non-conscious activation of goals reveal behavioral pursuit of these related goals (Bargh, Gollwitzer, Lee-Chai, Barndollar, & Trotschel, 2001). Thus, viewing couples who are mismatched in attractiveness may activate a non-conscious mating-goal that leads to the SR ratings observed in my research as well as behaviors aimed at mate poaching. Future studies should include a behavioral measure of poaching actions to confirm that perceptions of mismatch predict consequent poaching behavior. One suggested method to test this hypothesis is to code the behavior of single participants interacting with a romantically involved, attractive confederate. Are participants more warm and friendly when they interact with an attractive confederate thought to have a very unattractive romantic partner? Are they less warm and friendly when they are interacting with an attractive confederate thought to have a very attractive romantic partner? Furthermore, if current commitment level is in fact explaining the relation between mismatched couples and subsequent SR ratings, by measuring the behavioral warmth from a participant when they are presented with a confederate and their equally attractive romantic partner (manipulating commitment level of confederate), then I predict the following: In the former case, when the participant is interacting with an attractive female confederate thought to have an unattractive partner, male participants will behave much more warm and friendly towards the attractive confederate, because participants will assume low commitment on her behalf. These assumptions of low commitment will induce poaching behaviors, such as acting kindly towards her. In the latter case, when the participant is interacting with an attractive female confederate thought to have a very attractive partner, male participants will behave less warm and friendly towards the attractive confederate, because participants will assume high commitment on her behalf. These assumptions of high commitment will disengage

the mating system, thereby not inducing poaching behaviors, as any actual poaching attempts would likely be unsuccessful when directed at a committed potential mate. Whereas my study looked at derogation of a competitor as a mate-poaching tactic, this proposed study would look at the other well-established mate-poaching tactic of displaying attraction (Schmitt & Buss, 2001).

Personality characteristics also should be taken into consideration in future research. Jonason and colleagues (2010) found that possessing narcissism, Machiavellianism, and psychopathy predicted poaching as well as being poached oneself. In terms of mating-motivated person-perception, it may be the individuals who possess these characteristics that are reinforcing the derogation bias in the present study. Furthermore, possessing the traits of being adulterous, unreliable, and erotophilic are suggestive of being a mate poacher, whereas possessing the traits of extraversion and openness result in attracting poaching attempts (Schmitt & Buss, 2001). Therefore it may be the case that certain personality characteristics are predictive of engaging in mating-motivated person-perception, and furthermore subsequent poaching attempts.

Another characteristic that could play a role in derogation behaviors and should be controlled for in future studies is level of jealousy of the participant. Previous research has found that chronically jealous people rate attractive same-sex targets negatively following mate-guard primes (Maner, Miller, Rouby, & Gailliot, 2009). Thus, it may be that trait-jealous participants are more apt to derogate the SRs of their same-sex competitors, and so jealousy should be accounted for in any future iterations of the present study.

Future research could also assess self-perceived mate value and specifically self-perceived attractiveness. Men are more attentive to variation in attractiveness among women in romantic relationships when those women are of slightly lower mate value than the observing

men themselves (Bailey et al., 2011). Presumably, such women are more likely to incur the cost of switching mates than are more attractive women, so men should attend to them as potential poaching-targets. Because self-perceived mate value of participants may interact with the assumed mate value of the persons in the photographs, this characteristic would be beneficial to note. I predict that those participants who maintained a high overall mate value would be more apt to attend to the physically attractive target, as well as more prone to derogate the competitor's SR ratings. Given their relative high standing in comparison to the current same-sex competitor in the photograph, the more attractive mate would likely be willing to pay the cost of mate switching.

Also, perceived dominance of the competitor may have an effect on SR ratings. When women are presented as the partner of a dominant male, male participants shift their attention to women of even lower mate value, because these women with dominant partners are implicitly eliminated as potential mates (Bailey et al., 2011). Thus, experimentally varying the dominance of the competitor might result in less perceptual derogation of SRs, especially for men. The present study found that men tend to derogate competitors' SR ratings regardless of experimental condition; however presenting a more dominant competitor in future studies may dampen this effect.

Another factor that may play a role in poaching behaviors, mate-guarding, and intrasexual vigilance is socio-sexual orientation. Attentional adhesion to physically attractive members of the opposite sex (i.e., potential mates) invoked through mate-search primes has been found for participants with an unrestricted socio-sexual orientation but not among sexually restricted participants (Maner et al., 2007). Furthermore, participants in Maner and colleagues (2007) study who scored high on intrasexual vigilance paid more attention to attractive

competitors, suggesting that including a scale measuring intrasexual vigilance could be beneficial for future studies, because it may be a quality that is correlated with tendency to engage in mating-motivated perception. Thus, measuring the socio-sexual orientation and intrasexual vigilance of participants may serve to narrow the results much like measuring certain personality traits would: Instead of implying that all men and women succumb to a derogation bias when they are confronted with more attractive mates, it may instead be only those who are high in socio-sexual orientation and intrasexual vigilance that are reducing competitors' SR ratings.

Finally, anxiousness may contribute to predicting vigilance (and therefore mating-motivated perception) among participants, such that highly anxious people - being especially vigilant to signs of threat in their environment - attend carefully to cues indicating possible threat, and take longer to disengage their attention from these threatening cues (Fox et al., 2001). In contrast, no bias is observed for non-anxious individuals. Thus, highly state-anxious individuals – measured at the time of participation – may be the ones who are adhering to these less attractive competitors, seeing them as a threat to potential mating attempts and therefore drastically derogating their SRs as a way to reduce the threat.

Obviously there are many avenues that future research could delve into. It seems as though the current study's findings are just the tip of the iceberg, suggesting motivated person-perception – with its roots in equity theory, commitment level, and evolutionary mate selection theories – as a precursor to future poaching behavior.

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Appendix A

Photo ID	Mean Attractiveness Rating	Std. Deviation
Least Attractive – Photo 1	2.79	1.211
Least Attractive – Photo 2	2.76	1.226
Least Attractive – Photo 3	2.19	1.172
Least Attractive – Photo 4	3.17	1.184
Least Attractive – Photo 5	2.34	1.125
Least Attractive – Photo 6	1.89	1.157
Least Attractive – Photo 7	2.50	1.368
Least Attractive – Photo 8	2.38	1.207
Least Attractive – Photo 9	2.87	1.254
Least Attractive – Photo 10	2.87	1.332
Least Attractive – Photo 11	3.40	1.209
Least Attractive – Photo 12	3.87	1.294
Least Attractive – Photo 13	3.95	1.186
Least Attractive – Photo 14	2.79	1.194
Least Attractive – Photo 15	3.38	1.264
Least Attractive – Photo 16	3.47	1.346
Least Attractive – Photo 17	3.40	1.297
Least Attractive – Photo 18	3.77	1.165
Least Attractive – Photo 19	3.56	1.252
Least Attractive – Photo 20	4.08	1.163
Least Attractive – Photo 21	3.40	1.304
Least Attractive – Photo 22	3.42	1.275
Least Attractive – Photo 23	2.71	1.194
Least Attractive – Photo 24	2.84	1.302
Least Attractive – Photo 25	3.37	1.419
Least Attractive – Photo 26	2.86	1.200
Least Attractive – Photo 27	3.01	1.389
Least Attractive – Photo 28	3.18	1.284
Least Attractive – Photo 29	2.94	1.215
Least Attractive – Photo 30	3.05	1.252

Physical attractiveness means and standard deviations for the 30 ‘least attractive’ photos used in Study 1.

Appendix B

Photo ID	Mean Attractiveness Rating	Std. Deviation
Mod Attractive – Photo 31	3.46	1.323
Mod Attractive – Photo 32	3.26	1.246
Mod Attractive – Photo 33	4.30	1.237
Mod Attractive – Photo 34	3.07	1.219
Mod Attractive – Photo 35	2.95	1.186
Mod Attractive – Photo 36	3.50	1.285
Mod Attractive – Photo 37	3.89	1.529
Mod Attractive – Photo 38	3.58	1.336
Mod Attractive – Photo 39	4.22	1.354
Mod Attractive – Photo 40	3.65	1.204
Mod Attractive – Photo 41	3.27	1.421
Mod Attractive – Photo 42	4.14	1.249
Mod Attractive – Photo 43	3.62	1.318
Mod Attractive – Photo 44	4.15	1.431
Mod Attractive – Photo 45	3.67	1.327
Mod Attractive – Photo 46	3.68	1.414
Mod Attractive – Photo 47	4.18	1.144
Mod Attractive – Photo 48	3.81	1.138
Mod Attractive – Photo 49	3.54	1.285
Mod Attractive – Photo 50	3.17	1.393
Mod Attractive – Photo 51	3.22	1.301
Mod Attractive – Photo 52	3.84	1.468
Mod Attractive – Photo 53	3.51	1.397
Mod Attractive – Photo 54	3.90	1.473
Mod Attractive – Photo 55	3.99	1.300
Mod Attractive – Photo 56	3.38	1.303
Mod Attractive – Photo 57	3.50	1.501
Mod Attractive – Photo 58	3.40	1.123
Mod Attractive – Photo 59	3.58	1.478
Mod Attractive – Photo 60	3.25	1.260

Physical attractiveness means and standard deviations for the 30 ‘moderately attractive’ photos used in Study 1.

Appendix C

Photo ID	Mean Attractiveness Rating	Std. Deviation
Most Attractive – Photo 61	4.85	1.252
Most Attractive – Photo 62	3.85	1.203
Most Attractive – Photo 63	3.84	1.271
Most Attractive – Photo 64	4.21	1.306
Most Attractive – Photo 65	4.61	1.449
Most Attractive – Photo 66	5.20	1.200
Most Attractive – Photo 67	4.43	1.203
Most Attractive – Photo 68	4.06	1.190
Most Attractive – Photo 69	3.63	1.325
Most Attractive – Photo 70	3.62	1.427
Most Attractive – Photo 71	4.15	1.513
Most Attractive – Photo 72	3.74	1.262
Most Attractive – Photo 73	4.67	1.234
Most Attractive – Photo 74	5.44	1.268
Most Attractive – Photo 75	4.25	1.244
Most Attractive – Photo 76	4.98	1.166
Most Attractive – Photo 77	4.87	1.270
Most Attractive – Photo 78	4.59	1.258
Most Attractive – Photo 79	5.05	1.228
Most Attractive – Photo 80	3.50	1.433
Most Attractive – Photo 81	4.83	1.273
Most Attractive – Photo 82	4.32	1.341
Most Attractive – Photo 83	3.19	1.271
Most Attractive – Photo 84	3.33	1.350
Most Attractive – Photo 85	2.90	1.212
Most Attractive – Photo 86	3.81	1.339
Most Attractive – Photo 87	5.18	1.268
Most Attractive – Photo 88	4.82	1.212
Most Attractive – Photo 89	4.71	1.194
Most Attractive – Photo 90	4.79	1.306

Physical attractiveness means and standard deviations for the 30 ‘most attractive’ photos used in the Study 1

Appendix D

Please rate the **WOMAN** on the following traits:

Trait	Rating of the <u>woman</u>	(circle the number that represents your response)						
		1	2	3	4	5	6	7
		not at all			somewhat			extremely
Physically Attractive		1	2	3	4	5	6	7

Please rate the **MAN** on the following traits:

Trait	Rating of the <u>man</u>	(circle the number that represents your response)						
		1	2	3	4	5	6	7
		not at all			somewhat			extremely
Physically Attractive		1	2	3	4	5	6	7

Appendix E

Background information.

In psychology research it is important to collect some basic demographic information about participants. Results will only be reported in aggregate form. You may decline to answer these questions if you wish.

1) How much do you agree with the following statement: **“I have high self-esteem”**

1	2	3	4	5	6	7
Strongly disagree	Disagree	Slightly disagree	Neutral	Slightly agree	Agree	Strongly agree

1) What is your age? _____years

2) What is your gender? (circle one) Male Female

3) What is your ethnicity? (circle one)

Aboriginal/First nations	Hispanic
African/Black	Middle Eastern
Asian	Caucasian/White
East Indian	Not listed: _____

4) Were you born in Canada? (circle one) Yes No

4) How many years have you lived in Canada? _____years

5) Is English your first language? (circle one) Yes No

6) Are you currently involved in a serious dating relationship (circle one): Yes or No

If **YES** how long have you been involved in your current relationship? _____(months)

What is the current status of this relationship? (check all that apply)

Casual dating _____	Exclusive dating _____
Engaged _____	Living together _____
Married _____	Long distance _____
Dating this person and others _____	

THANK YOU!

Appendix F

Impressions of Others Information and Consent Letter

Project: Impressions of Others
Faculty Investigator: Dr. Danu Stinson, Assistant Professor, Psychology Department
Contact Information: dstinson@uvic.ca; 250-721-6281

You are invited to participate in a study entitled “Impressions of Others” that is being conducted by Dr. Danu Stinson, a faculty member in the Department of Psychology at the University of Victoria. You may contact her if you have further questions by using the contact information provided above. This research is being funded by the Social Sciences and Humanities Council of Canada.

The purpose of this research is to understand how people form impressions of others. If you agree to voluntarily participate in this research, **your participation will include looking at photographs of various people and then answering some questions about your impressions of them.** Participation in this study will take approximately 5 minutes of your time. In appreciation for your time you may choose to receive either a chocolate bar or a pack of gum.

Participating in this research involves no known or anticipated risks and offers the benefits of learning about the process of research and furthering our knowledge of psychology. Your participation in this research must be completely voluntary. If you decide to participate, you may withdraw at any time without any explanation and without reprisal. If you withdraw from the study your data will not be used. Although you may be known to be a study participant either by the researcher or by others around you at the time you participate, your confidentiality and the confidentiality of the data will be protected: Your name will not be associated with your data in any way, and your data will be stored inside a locked cabinet or on password protected computers in a secure area of the psychology building.

It is anticipated that the results of this study will be shared with others in the following ways: Scholarly journals or books, presentations at scholarly meetings, the internet, and the media. Data from this study will be disposed of by shredding paper records or deleting data files five years after publication.

You may verify the ethical approval of this study, or raise any concerns you might have, by contacting the Human Research Ethics Office at the University of Victoria (250-472-4545 or ethics@uvic.ca). Your signature below indicates that you understand the above conditions of participation in this study and that you have had the opportunity to have your questions answered by the researchers.

Appendix G

Experimenter Script – Study 1.

“Thank you for participating in this short five minute study entitled, ‘Impressions of Others’. In a moment, you will be shown a series of photographs on a computer screen and will be asked to rate each photograph according to the physical attractiveness of the individual in the photograph. Please rate them on a 1 to 7 scale, with 1 implying ‘not at all attractive’ and 7 implying ‘extremely attractive’. You will enter your rating by hitting the keys 1 through 7 on the keyboard. When you have finished your ratings, a demographics questionnaire will ask you such background information as your gender, ethnicity, etc. Please fill that out as well. When you have finished please let me know and I will give you your compensation. Do you have any questions? You may begin.”

Appendix H

Impressions of Others Feedback Letter

Project: Impressions of Others

Faculty Investigator: Dr. Danu Stinson, Assistant Professor, Psychology Department

Contact Information: dstinson@uvic.ca; 250-721-6281

Thank you for participating in this study! In this study, we were interested in your impressions of others, in particular, impressions of either a man, a woman, or a couple. Furthermore, we were interested in investigating whether differing relative levels of attractiveness between members of a romantic couple would affect people's perceptions of the characteristics that the individuals in the romantic couple possess. We were also interested in whether differing relative levels of social status and intelligence between members of a romantic couple would similarly affect people's perceptions. We hypothesized that mismatch in attractiveness or social status between members of a couple would cause participants to adjust their perceptions of other traits possessed by the individuals in the romantic couple, in order to maintain equity or balance between members of a couple in terms of their overall desired traits and qualities.

If you are interested in receiving more information regarding the results of this study, or if you have any questions or concerns, please contact us at either the phone number or email address listed at the top of the page. If you would like a summary of the results, please let us know now by providing us with your email address. When the study is completed, we will send it to you. As with all University of Victoria projects involving human participants, this project was reviewed by, and received ethics clearance through, the Human Research Ethics Office. Should you have any comments or concerns resulting from your participation in this study, please contact the Human Research Ethics Office at 250-472-4545 or ethics@uvic.ca.

Appendix I

On a scale of 1-7 (1=least attractive, 7=most attractive) how physically attractive do you think the man/woman is?

On a scale of 1-7 (1=low income, 7=high income) what do you think the income of the man/woman is?

On a scale of 1-7(1=low intelligence, 7=high intelligence) how intelligent do you think that man/woman is?

On a scale of 1-7(1=low popularity, 7=high popularity) how popular do you think that man/woman is?

On a scale of 1-7 (1=low social status, 7=high social status) what do you think the social status of the man/woman is?

On a scale of 1-7(1=not matched at all, 7=very well matched) how well do you think this couple matches in attractiveness?

Appendix J

Experimenter Script – Study 2.

“Thank you for participating in this short five minutes study entitled, ‘Impressions of Others - 2’.

In a moment, you will be shown a series of photographs of 15 couples who have each been dating for approximately two years. These photos will be displayed on a computer screen, and you will be asked to rate one member of the couple (either male or female) according to certain characteristics. You will rate them on a 1 to 7 scale, with 1 implying ‘not at all’ and 7 implying ‘extremely’. You will enter your rating by hitting the keys 1 through 7 on the keyboard. When you have finished your ratings, a demographics questionnaire will ask you such background information as your gender, ethnicity, etc. Please fill that out as well. When you have finished please let me know and I will give you your compensation. Do you have any questions? You may begin.”

Appendix K

How much do you agree with the following statement: "I have high self-esteem"

1. Strongly disagree
2. Disagree
3. Slightly disagree
4. Neutral
5. Slightly agree
6. Agree
7. Strongly agree

Please select a key from 1 to 7.

If you would prefer not to respond, hit the spacebar.

What is your age in years?

If you would prefer not to respond, type in 999.

What is your gender?

0. Female
1. Male

Please select a key from 0 to 1.

If you would prefer not to respond, hit the spacebar.

What is your ethnicity?

1. Aboriginal/First Nations
2. African/Black
3. Asian
4. East Indian
5. Hispanic
6. Caucasian/White
7. Other

Please select a key from 1 to 7.

If you would prefer not to respond, hit the spacebar.

Were you born in Canada?

1. Yes
2. No

Please select a key from 1 to 2.

If you would prefer not to respond, hit the spacebar.

How many years have you lived in Canada?

If you would prefer not to respond, type in 999

Is English your first language?

1. Yes
2. No

Please select a key from 1 to 2.

If you would prefer not to respond, hit the spacebar.

Are you currently involved in a serious relationship?

1. Yes
2. No

Please select from 1 or 2.

If you would prefer not to respond, hit the spacebar.

How long have you been involved in your current relationship (in months)?

What is the current status of your relationship?

1. casual dating
2. dating this person and others
3. exclusive dating
4. engaged
5. married
6. living together
7. long distance

Please enter all the numbers that apply separating them by a comma.

The study is now over.

Thank you for completing it.

Please inform the experimenter that you are finished.