

# Evaluating the Physical Attractiveness of Oneself and One's Romantic Partner

## Individual and Relationship Correlates of the Love-Is-Blind Bias

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**Abstract.** The present study sought to extend recent work by examining individual and relationship variables that predict the love-is-blind bias, that is, a tendency to perceive one's romantic partner as more attractive than oneself. A sample of 113 men and 143 women completed a battery of tests that included various demographic, individual difference, and relationship-related measures. Results provided support for a love-is-blind bias, in that both women and men rated their romantic partners as significantly more attractive than themselves on overall attractiveness and the attractiveness of various body components. Results also showed that the Big Five personality factor of Extraversion, self-esteem, relationship satisfaction, and romantic love were positively correlated with the love-is-blind bias, whereas relationship length and playful love were negatively correlated with the bias. The results of this study are considered in relation to previous work on positive partner illusions.

**Keywords:** love-is-blind bias, positive illusions, self-rated attractiveness, physical attractiveness, partner perceptions

In the past several decades, psychologists have shown that our everyday experiences of social interactions are based, at least in part, on perceptions and cognitions that deviate from reality (e.g., Alicke, 1985; Lipkus, Martz, Panter, Drigotas, & Feaganes, 1993; Showers, 1992). One such deviation is positive illusions – misconceptions or misunderstandings (rather than “errors” in the strict sense) that are self-enhancing in some way (Taylor & Brown, 1988). Positive illusions may be protective for the individual that possesses them because they act as self-esteem buffers in the face of threats posed by negative information (see Taylor, Lerner, Sherman, Sage, & McDowell, 2003). In the present paper, we examine one specific type of positive illusion, namely the “love-is-blind bias” in perceived physical attractiveness of a romantic partner, which refers to a tendency to view one's romantic partner as being more physically attractive than oneself (Swami, Furnham, Georgiades, & Pang, 2007). More specifically, we investigated whether there are any individual and relationship correlates of the love-is-blind bias.

### Positive Illusions in Romantic Relationships

Although some research exists to show that individuals typically self-enhance in relation to others, positive illusions may also serve to differentiate intimates from other persons (Brown, 1986; Taylor, & Koivumaki, 1976). Thus, a number of studies have reported that individuals tend to evaluate themselves more positively than they evaluate their intimates, and their intimates more positively than strangers or the average person (Campbell, 1986; Hall & Taylor, 1976; Vallone, Griffin, Lin, & Ross, 1990; van Lange, 1991). In short, self-enhancement is less pronounced in close relationships than in more distant relationships (Kenny, 1994), possibly as a means of reducing partner derogation and associated negative effects on the self and the relationship.

However, romantic relationships are extremely complex, as they involve a range of perceptions of the self and partner, as well as comparisons with others (e.g., Rusbult & Buunk, 1993; Rusbult, van Lange, Wildschut, Yovetich, & Verette, 2000; van Lange, Rusbult, Semin-Goossens, Goerts, & Stal-

pers, 1999). In general, individuals tend to hold a greater number of positive beliefs and fewer negative beliefs about their own relationships in comparison with others' relationships (Buunk & van Yperen, 1991; van Lange & Rusbult, 1995). For instance, surveys have reported that up to 80% of spouses describe their marriages in very positive terms (Lee, Seccombe, & Sheehan, 1991), while underestimating their chances of divorce in comparison with other couples (Fowers, Lyons, Montel, & Shaked, 2001).

The study of cognitive biases may be particularly informative in romantic relationships, as they are often based on positive illusions that help foster better relationships (Martz et al., 1998; Murray & Holmes, 1997) and enhance the perceived image of the other person in the relationship (Byrne, 1971; Murstein, 1972). For instance, one study showed that individuals in dating and married relationships projected images of what they considered to be their ideal partner onto their current partners, thus, imbuing them with all kinds of idealized qualities (McNulty, O'Mara, & Karney, 2008; Murray, Holmes, & Griffin, 1996a). Even when confronted with their partners' faults, such as an attraction to someone else (Simpson, Ickes, & Blackstone, 1995), individuals tend to deny the importance of those faults (Murray & Holmes, 1993, 1994). Such positive illusions may serve to enhance an individual's sense of security in the relationship and stabilize the long-term pair bond (Murray, 1999). Indeed, previous work has shown that positive illusions about a partner are associated with greater relationship satisfaction and less conflict in dating and marital relationships (Murray & Holmes, 1997). Moreover, positive illusions concerning nonphysical partner traits appear to have a positive effect on relationship satisfaction both in the short- (Miller, Niehuis, & Huston, 2006) and long-term (Murray & Holmes, 1997; see also Murray et al., 1996a; Murray, Holmes, & Griffin, 1996b).

One particular form of positive partner illusions is what has been termed the "love-is-blind bias" (see Swami & Furnham, 2008a) in perceived partner physical attractiveness. Perhaps because of the infancy of research in this area, the love-is-blind bias has been operationalized in different ways (Barelds-Dijkstra & Barelds, 2008; Swami et al., 2007), but in general it refers to a tendency to perceive one's partner as being more attractive than objective reality. This focus on perceptions of physical attractiveness within romantic relationships is not misplaced: Physical attractiveness plays an influential role both in the formation and maintenance of romantic relationships (see Swami & Furnham, 2008b). In terms of the latter, for instance, studies have shown that perceptions' of partner physical attractiveness are associated with relationship indicators such as commitment, intimacy, satisfaction, and passion (Yela & Sangrador, 2001; see also McNulty, Neff, & Karney, 2008).

## The Present Study

In the present study, we sought to examine the love-is-blind bias in ratings of partner physical attractiveness in compar-

ison with ratings of the self. This work stems from a study by Swami et al. (2007), who asked participants to provide ratings of overall physical attractiveness and the attractiveness of various body parts for themselves and their opposite-sex romantic partners (Swami et al., 2007). Their results showed that both women and men rated their partners as being significantly more attractive than themselves, a finding that appears to be rather robust (Byrne, 1971; Murstein, 1972) and generalizable (see Barelds-Dijkstra & Barelds, 2008, who measured the love-is-blind bias as the difference between perceptions of one's partner and the partner's self-ratings).

That the love-is-blind bias is held by both women and men is important, as it suggests that the existence of cognitive bias that is general to both sexes. As such, the defining characteristics of the love-is-blind bias may have little to do with demographic factors such as sex, and more to do with relationship variables such as satisfaction and love (Swami et al., 2007). Moreover, both women and men should be expected to hold the love-is-blind bias if it serves some beneficial function. Indeed, recent work has suggested that the love-is-blind bias may buffer individuals against negative appraisals while enhancing self-beliefs (Barelds-Dijkstra & Barelds, 2008; Swami & Furnham, 2008a; Swami et al., 2007). That is, positive illusions about partner physical attractiveness may initially serve to focus one's perceptions of a new partner on their positive qualities, thus helping individuals navigate early romance (Swami & Furnham, 2008a). In the long term, the love-is-blind bias may serve to enhance commitment to the relationship, which in turn results in improved relationship satisfaction and self-esteem (see Taylor & Brown, 1988).

To date, however, research has not examined the individual and relationship variables that might predict the love-is-blind bias. Because self- and other evaluations are grounded within specific socioindividual contexts (Kwan, John, Kenny, Bond, & Robins, 2004), it is possible that individual difference variables influence the direction or strength of the love-is-blind bias. The present study, therefore, set out to replicate previous work documenting a love-is-blind bias (operationalized as the difference between partner perceptions and self-perceptions of physical attractiveness; see Gagné & Lydon, 2004), before examining various individual and relationship correlates of the bias. In terms of individual difference variables, we examined the relationship of the love-is-blind bias with an individual's Big Five personality factors (see Goldberg, 1993).

The Big Five framework is a hierarchical model of personality with five bipolar traits or factors (Agreeableness, Conscientiousness, Neuroticism, Openness, and Extraversion) representing personality at a broad level of abstraction (McCrae & Costa, 1997), and has recently been shown to influence perceptions of the physical attractiveness of potential partners (e.g., Swami, Furnham, Balakumar et al., 2008; Swami, Furnham, Chamorro-Premuzic et al., 2008). However, no previous work has assessed the Big Five framework in relation to the love-is-blind bias, which the

present study sought to rectify. Although this part of the study was largely exploratory, possible hypotheses include the suggestion that the love-is-blind bias will be positively associated with Agreeableness (as agreeable individuals are especially concerned with social harmony) or Extraversion (extraverts may be more likely to form positive illusions because of their higher engagement with the external world).

In addition to the Big Five, we also measured an individual's self-esteem, which provides a relative and reliable measure of perceived self-worth. It seems likely that self-esteem should be positively correlated with the love-is-blind bias, either because higher self-esteem leads to more positive behavioral styles within romantic relationships, or because positive illusions of partner physical attractiveness serve to increase one's own self-esteem. Finally, in terms of individual difference correlates, we also examined the association of the love-is-blind bias with participants' sociosexual orientation, which measures an individual's propensity to engage in low-investment, transient sexual relationships. We expected that participants with a *restricted* sociosexual orientation (that is, requiring high emotional investment and prolonged courtship before engaging in sexual relationships) would be more likely to hold positive partner illusions than participants with an *unrestricted* sociosexual orientation (that is, a willingness to engage in sexual relations in the absence of commitment).

In terms of relationship variables, we examined the association of the love-is-blind bias with relationship satisfaction, love styles, and relationship length. Specifically, we expected that the love-is-blind bias should be positively associated with relationship satisfaction, either because higher satisfaction may lead individuals to imbue their partners with more positive qualities, or because more positive illusions increases the stability of relationships and, hence, the satisfaction derived from those relationships. In terms of love styles, we expected that the love-is-blind bias would increase with positive love-styles (that is, romantic love and friendship-based love), but decrease with negative love styles (that is, ludic love). Finally, we predicted that the love-is-blind bias would decrease with greater length of the relationship, because individuals come to develop a more accurate image of their partners. An alternative possibility is that the strength of the love-is-blind bias decreases with relationship length because partners become less attractive with age, and to test this possibility we also examined the bias in relation to partner age.

## Method

### Participants

The initial sample consisted of 266 individuals of, for the most part, heterosexual orientation. Because of the very small number of participants who reported being gay ( $n =$

5) or unsure of their sexual orientation ( $n = 5$ ), data from these participants were not analyzed in the present study. The final (exclusively heterosexual) sample, therefore, consisted of 113 men and 143 women, with a mean age of 34.13 years ( $SD = 12.65$ ). Data collection took place in Vienna and its surrounding area (Eastern Austria), and represents a mixed community sample of volunteers from various occupational and living backgrounds. Only participants who were involved in a romantic relationship at the time of the experiment were invited to take part in the study. The majority of participants were Christians (85.9%) or of no religious affiliation (10.2%). In terms of the civil status of participants' relationships, 50.0% were in a dating relationship, 42.6% were married, and the remainder (7.4%) were engaged to be married. In terms of highest educational qualification, 22.4% had been educated to primary level, 33.5% to secondary level, 22.0% to an apprenticeship level, 6.2% to university level, and 15.9% to some other level.

## Measures

All participants completed a six-page questionnaire, which comprised a battery of scales presented in the following order:

- *Relationship demographics.* Participants were asked a number of questions about the nature of their relationships, including its sexual orientation and civil status. Participants were also asked to state, in months, how long they had been dating their current partner, and where applicable, how long they had been married or engaged (the two figures were computed as a single variable relating to length of the relationship).
- *Relationship satisfaction.* This was a novel nine-item scale designed to assess multiple aspects of relationship satisfaction. Participants rated, on 7-point scales, items referring to overall satisfaction with the relationship, relationship quality, self-partner similarity, consideration of ending the relationship, and frequency of conflict. A principal components analysis using Varimax (orthogonal) rotation revealed a single factor onto which all items loaded (eigenvalue = 5.12, 56.9% of the variance explained). All items had factor loadings higher than .55. A single factor score for relationship satisfaction was, therefore, computed by taking the average of responses across the nine items (Cronbach's  $\alpha = .89$ ).
- *Revised Lovestyle Perceptions Survey* (Grote & Frieze, 1994). Participants completed three scales designed to measure (1) romantic love with deep intensity and intimacy (Eros-R, four items), (2) game-playing love with little intensity or intimacy (Ludus-R, six items), and (3) friendship-based love defined as an affectionate and trusting love for a likable partner (FBL, nine items). All items were rated on a 7-point scale, with lower scores indicating greater disagreement with the item. Scores were calculated by taking the average of responses associated with each subscale, as delineated by Grote &

- Frieze (1994). Cronbach's  $\alpha$  coefficients for each scale were .69 for Eros-R, .60 for Ludus-R, and .89 for FBL, which are similar to previous reported coefficients (Grote & Frieze, 1994).
- *Abbreviated, 15-item Big Five Questionnaire* (Furnham, McManus, & Scott, 2003; McManus, Stubbings, & Martin, 2006). This is a brief scale for assessing the Big Five personality traits, suitable for looking at population-level correlations. Ratings were made on a 5-point scale (1 = *Strongly disagree*, 5 = *Strongly agree*). The five personality traits were arrived at by summing certain items, and Cronbach's  $\alpha$  coefficients were as follows: Openness (.61), Conscientiousness (.59), Extraversion (.56), Agreeableness (.51), and Neuroticism (.55). These coefficients are similar to what has been reported in earlier studies (Furnham et al., 2003; McManus et al., 2006).
  - *Estimating Physical Attractiveness Scale* (EPA; Swami et al., 2007). The EPA shows a normal distribution of *attractiveness ratings* and titles against each score ( $M = 100$ ,  $SD = 15$ ). Thus, 55 was labeled *Very unattractive*, 70 *Unattractive*, 85 *Low average*, 100 *Average*, 115 *High average*, 130 *Attractive*, 145 *Very attractive*. As a guide against which to make their ratings, participants were informed that there are some very attractive individuals, but that most people are of average attractiveness (depicted as the normal or bell-shaped distribution of attractiveness ratings). When making their ratings, participants were informed that the labels acted as a guide and that they could choose any number that they felt was most appropriate. Based on the normal distribution figure, participants were asked to provide ratings for overall physical attractiveness, overall facial attractiveness, overall body weight or size, overall body shape or figure, and overall height. This was followed by ratings for various individual attributes of human morphology (e.g., eyes, stomach, nose; see Table 1 for a full list of items used in this study). Participants were requested to provide ratings for themselves and for their romantic partners.
  - *Revised Sociosexual Orientation Inventory* (SOI-R; Penke & Asendorpf, in press). This is a nine-item questionnaire that assesses an individual's propensity to engage in low-investment, transient sexual relations. The original SOI (Simpson & Gangestad, 1991) has been criticized for being psychometrically problematic (Asendorpf & Penke, 2005; Voracek, 2005) and we, therefore, used a more recent revision of the SOI, which overcomes some of the earlier problems (Penke & Asendorpf, in press). Responses on all items were scored on 5-point scales and were aggregated to form a composite SOI-R score, ranging from 9 to 45. Those scoring low on the inventory possess a restricted sociosexual orientation (requiring high emotional investment and prolonged courtship before engaging in sexual relations), while those scoring high on the inventory possess an unrestricted sociosexual orientation (willing to engage in sexual relations in the absence of commitment).
  - *Rosenberg Self-Esteem Scale* (RSE; Rosenberg, 1965; German translation: Von Collani & Herzberg, 2003). The RSE is a brief, 10-item scale measuring self-worth, rated on a 4-point scale (1 = *Strongly disagree*, 4 = *Strongly agree*). Five items were reverse-coded prior to analysis, and an overall RSE score was computed by taking the average of responses to all items. The scale showed good internal consistency (Cronbach's  $\alpha = .74$ ).
  - *Demographics*. Participants provided their demographic details, including age, sex, ethnicity, and highest educational qualification.

## Procedure

All participants were recruited opportunistically through a snowball-sampling technique. A number of data collectors, who were project collaborators, directly recruited participants through their personal contacts (that is, friends and relatives). Each paper-and-pencil questionnaire was placed in a sealed envelope and inserted into a box which was then shaken. Participants were informed that the data would be prepared and analyzed by a different person in order to maintain the highest possible anonymity. Unless otherwise stated above, three researchers (TH, SS, MV) developed German versions of the scales from their originals in English, using the parallel blind technique (Behling & Law, 2000). All participants provided informed consent and were debriefed following the experiment.

## Results

### Descriptive Statistics

*Ms* and *SDs* for each item in the EPA are shown in Table 1, whereas those for all other scales are reported in Table 2. As can be seen from the latter, men scored significantly higher than women on Ludus-R, Openness, and SOI-R. To examine sex differences in ratings on the EPA, we computed a multivariate analysis of covariance (MANCOVA), with participant sex as the classification factor, and with Ludus-R, Openness, and SOI-R partialled out. Four separate MANCOVAs were calculated: (1) self-ratings for "overall" items (e.g., overall physical attractiveness, overall height) on the EPA, (2) self-ratings for low-level items (e.g., eyes, nose), (3) partner ratings for overall items, and (4) partner ratings for low-level items.

The results of the first MANCOVA showed no significant sex difference,  $F(5, 247) = 1.43, p > .05$ . The second MANCOVA returned a significant sex difference,  $F(15, 237) = 1.99, p < .05, \eta_p^2 = .11$ ; with the analyses of covariance (ANCOVAs) showing that women rated themselves higher on eyes,  $F(1, 251) = 4.57, p < .05, \eta_p^2 = .02$ ; teeth,  $F(1, 251) = 5.24, p < .05, \eta_p^2 = .02$ ; buttocks,  $F(1, 251) = 6.73, p < .05, \eta_p^2 = .03$ ; and legs,  $F(1, 251) =$

**Table 1.** Means and standard deviations for all variables in the Estimating Physical Attractiveness (EPA) Scale, and results of self-partner comparisons (last column)

Item	Self-ratings				Partner-ratings				<i>t</i> <sup>a</sup>	
	Women		Men		Women		Men			
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>		
Overall physical attractiveness	103.05	13.47	105.90	16.78	111.37	15.93	114.38	15.46	-8.27	
Overall facial attractiveness	105.44	14.11	105.97	16.70	112.10	15.75	115.32	16.88	-8.14	
Overall body weight or size	97.50	21.30	100.34	20.24	107.82	17.17	107.57	18.02	-5.78	
Overall body shape or figure	97.18	21.33	101.40	21.31	109.55	17.96	110.33	18.36	-7.06	
Overall height	104.08	18.66	108.38	18.51	113.29	19.56	108.50	17.49	-4.23	
Breasts/chest	102.33	18.09	100.27	13.96	107.71	16.00	112.83	17.28	-6.22	
Eyes	113.25	17.15	109.35	16.52	116.40	17.90	116.46	16.41	-4.32	
Mouth and lips	108.76	15.87	106.68	15.49	112.19	17.28	115.22	15.96	-5.60	
Cheeks	102.99	13.21	102.05	15.60	106.47	15.15	110.65	15.37	-6.87	
Voice	104.20	15.71	103.13	16.63	111.44	17.05	107.64	16.99	-5.13	
Nose	101.13	17.58	99.36	15.21	105.99	18.11	109.67	17.56	-5.68	
Teeth	100.87	18.68	97.42	14.36	103.16	19.42	108.59	17.45	-4.29	
Waist	98.31	18.36	100.06	18.24	105.70	17.10	106.92	18.86	-5.73	
Hips	96.24	18.09	99.45	15.91	106.78	16.08	106.15	16.88	-6.99	
Stomach	92.73	18.44	94.96	20.00	103.22	19.40	104.95	17.71	-7.68	
Hands	102.80	19.65	103.18	16.76	111.74	18.82	110.26	17.22	-6.70	
Buttocks	97.62	20.52	105.29	19.65	115.97	16.92	111.94	19.20	-9.46	
Legs	95.35	21.16	102.22	16.76	109.45	17.72	106.28	16.23	-6.78	
Feet	99.02	16.84	101.65	14.20	104.17	17.46	105.55	14.38	-4.00	
Skin	103.76	18.10	102.31	17.28	106.40	17.62	110.39	18.18	-4.01	

Note. <sup>a</sup>*df* = 255, all results significant at the *p* < .001 level.

**Table 2.** Means, standard deviations and *F* ratios for sex differences on all scales used in the present study with the exception of the Estimating Physical Attractiveness (EPA) Scale

Scale	Overall		Women		Men		<i>F</i> <sup>a</sup>
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	
Relationship length (months)	144.70	179.69	135.87	186.36	151.67	174.34	0.49
Relationship satisfaction	5.38	0.91	5.35	0.98	5.43	0.83	0.46
Eros-R	5.84	0.93	5.80	0.94	5.90	0.94	0.81
Ludus-R	2.46	1.03	2.32	0.97	2.64	1.07	6.21*
FBL	6.03	0.94	6.01	0.93	6.05	0.96	0.07
Conscientiousness	9.72	1.51	9.81	1.44	9.61	1.60	1.11
Extraversion	10.30	2.01	10.31	2.00	10.28	2.04	0.01
Neuroticism	8.42	2.28	8.59	2.34	8.20	2.19	1.80
Agreeableness	10.43	1.25	10.43	1.19	10.56	1.32	2.26
Openness	8.95	1.71	8.74	1.39	9.22	2.02	5.05*
SOI-R	21.93	3.56	21.10	3.15	22.96	3.78	18.45**
RSE	26.59	1.65	26.56	1.69	26.64	1.60	0.14

Note. \**p* < .05, \*\**p* < .001, <sup>a</sup>*df* = 1,255. Abbreviations: FBL = Friendship-Based Love; SOI-R = Revised Sociosexual Orientation Inventory; RSE = Rosenberg Self-Esteem Scale.

**Table 3.** Correlations between the love-is-blind bias and individual difference and relationship variables

	2	3	4	5	6	7	8	9	10	11	12	13	14
1. Love-is-blind bias	.93	.15*	-.04	-.01	.08	.15*	-.01	-.14*	.20**	.17**	-.20**	.08	.12
2. Conscientiousness		.19**	.12	.14*	.17**	-.07	-.01	.06	-.06	.01	.09	-.03	.09
3. Extraversion			-.04	.12	.18**	.08	.20**	-.19**	.10	.12	.19**	.07	-.20**
4. Neuroticism				.06	.10	-.15*	-.08	.05	-.21**	-.11	.05	-.08	.07
5. Agreeableness					.10	-.12	.07	.08	-.03	.04	.04	.08	.08
6. Openness						-.04	.12	.05	-.05	-.06	.20**	-.04	.05
7. Self-esteem							-.02	-.08	.10	-.01	-.13*	.03	-.10
8. Sociosexual orientation								-.20**	-.06	-.08	.29**	-.08	-.17**
9. Relationship length									-.22**	-.04	-.07	-.01	.72**
10. Relationship satisfaction										.70**	-.30**	.74**	-.25**
11. Eros-R											-.33**	.76**	-.24**
12. Ludus-R												-.36**	-.02
13. Friendship-based Love													-.06
14. Partner's age													

Note. \* $p < .05$ , \*\* $p < .001$ .

5.24,  $p < .05$ ,  $\eta_p^2 = .02$ . The third MANCOVA, for partner ratings on overall items, showed a significant sex difference,  $F(5, 247) = 2.82$ ,  $p < .05$ ,  $\eta_p^2 = .02$ ; and an inspection of the ANCOVA results showed that women rated their partners significantly higher than did men on overall height,  $F(1, 251) = 4.04$ ,  $p < .05$ ,  $\eta_p^2 = .02$ . The final MANCOVA also showed a significant sex difference,  $F(15, 237) = 3.44$ ,  $p < .001$ ,  $\eta_p^2 = .18$ . The ANCOVA results showed that men rated their partners higher than did women on breasts/chest,  $F(1, 251) = 7.00$ ,  $p < .05$ ,  $\eta_p^2 = .03$ ; cheeks,  $F(1, 251) = 5.04$ ,  $p < .05$ ,  $\eta_p^2 = .02$ ; teeth,  $F(1, 251) = 6.00$ ,  $p < .05$ ,  $\eta_p^2 = .02$ ; and skin,  $F(1, 251) = 4.84$ ,  $p < .05$ ,  $\eta_p^2 = .02$ .

### Self-Partner Differences in Ratings

To examine whether the present data provide evidence for the love-is-blind bias, we computed a series of paired  $t$ -tests for all variables on the EPA. The results of this analysis are presented in the final column of Table 1. As can be seen, participants rated their partners as significantly more attractive than themselves on all variables of the EPA, which provides very strong support for the love-is-blind bias.

### Individual and Relationship Correlates

To examine the relationship between the love-is-blind bias with our measured variables, we first computed the former as the difference between ratings of partner overall attractiveness and self overall attractiveness. These difference scores were then correlated with the various individual (Big Five personality factors and self-esteem) and relationship (love styles, relationship length, and relationship satisfaction) measures. The results of this analysis are reported in

Table 3, and it can be seen that the love-is-blind bias was significantly positively correlated with Extraversion, self-esteem, relationship satisfaction, and Eros-R; and negatively correlated with relationship length and Ludic-R.

To examine whether any of the variables statistically predicted the love-is-blind bias, we conducted a hierarchical multiple regression with the love-is-blind difference scores as the dependent variable and predictor variables entered in two steps, namely individual difference variables (Big Five personality factors, self-esteem, and sociosexual orientation) and relationship variables (relationship length, relationship satisfaction, love styles, partner age). Results showed that the first step of the regression was not significant,  $F(7, 248) = 1.90$ ,  $p > .05$ . In contrast, the second step of the regression returned a significant result,  $F(13, 242) = 2.72$ ,  $p < .001$ ,  $\text{Adj. } R^2 = .08$ , with Ludus-R ( $\beta = -.19$ ,  $t = -2.65$ ,  $p < .05$ ), self-esteem ( $\beta = .15$ ,  $t = 2.42$ ,  $p < .05$ ), and Extraversion ( $\beta = .14$ ,  $t = 2.11$ ,  $p < .05$ ) emerging as significant predictors of the love-is-blind bias.

### Discussion

The results of this study support previous work suggesting that there exists a positive illusion in perceptions of partner physical attractiveness. Specifically, individuals appear to perceive their romantic partners as being significantly more attractive than themselves on a range of bodily components. Moreover, there appear to be few sex differences in this pattern, with both women and men just as likely to hold the love-is-blind bias. The results of the present study also showed that the love-is-blind bias was significantly associated with love styles (negatively with playful love and positively with romantic love), Extraversion, self-esteem, re-

lationship satisfaction, and relationship length. These results are considered in greater detail below.

First, to the extent that participants in the present study rated their partners as more physically attractive than themselves, our results corroborate previous work in support of the love-is-blind bias (Barelds-Dijkstra & Barelds, 2008; Swami et al., 2007). It is, therefore, possible to conclude that the love-is-blind bias is one instance in which partner perceptions "trump" self-perceptions. This runs counter to the relatively well-established finding that individuals often self-enhance in relation to others (e.g., on positive qualities such as trustworthiness), including their intimate partners (Brown, 1986; Taylor & Koivumaki, 1976). It would appear that, where perceptions of physical attractiveness are concerned, self-enhancement is less pronounced in relation to intimate partners.

Swami and associates (Swami & Furnham, 2008a; Swami et al., 2007) have suggested a number of possibilities that may explain the love-is-blind bias. First, it is possible that partners in the present study really were better-looking than the participants themselves. One way of testing this hypothesis would be to include ratings of participants by a nonaffiliated control group (e.g., using photographs of participants). However, it is unlikely that this will provide a complete answer, as it is seems improbable that all partners are more attractive than the self. Rather, the fact that positive partner illusions are robust and widespread suggests that these really are examples of partner idealism (van Lange & Rusbult, 1995).

A more likely explanation is that the love-is-blind bias is a normal part of maintaining relationship satisfaction and commitment to the relationship (see Rusbult et al., 2000). For instance, positive partner illusions may serve to buffer self-esteem and create better relationships (see Taylor & Brown, 1988), particularly during the initial stages of a romance. Initial attraction to a potential partner may involve composite images of idealized romance, but it nevertheless remains the case that positive illusions may enhance perceptions of the relationship, and in turn enhance self-perceptions (Brehm, Miller, Perlman, & Campbell, 2002; Flannagan, Marsh, & Fuhrman, 2005). In the long term, such positive illusions may have a beneficial effect on the relationship (e.g., prolonging feelings of love) as well as on individual health and well-being.

In the present study, we also found that the love-is-blind bias was significantly associated with a number of individual and relationship variables. In terms of individual difference variables, the bias was positively correlated with the Big Five personality factor of Extraversion, which may be related to the fact that extraverts are oriented toward obtaining external gratification, particularly from human interactions. That is, more extraverted individuals may be more likely to hold positive illusions because such doing so may promote social interactions, particularly within romantic relationships. Our results also showed that self-esteem was correlated with the love-is-blind bias, and as suggested above, this could either be because higher self-es-

teem results in more positive behavioral styles in relation to the partner or because holding positive illusions serves to enhance one's own self-worth (that is, believing that the partner is more attractive than the self may serve to improve self-perceptions; Swami et al., 2007).

Our results also showed that positive illusions in partner physical attractiveness were stronger when individuals were high in romantic love (that is, intimate, intense, and affectionate love for one's partner) and low in playful love (game-playing love with little intensity or intimacy). Being intimately in love with someone may be a particularly strong buffer against negative partner perceptions, either because it serves to imbue the partner with various positive qualities that do not exist in reality (see McNulty, O'Mara et al., 2008; Murray et al., 1996a, 1996b), or because it ensures that the individual turns a blind eye toward existing weaknesses (see Murray & Holmes, 1993, 1994; Simpson et al., 1995). Our results also corroborated previous work showing that positive illusions of a partner are associated with greater relationship satisfaction (e.g., Miller et al., 2006; Murray & Holmes, 1997; Murray et al., 1996a,b).

Finally, length of the relationship was negatively correlated the love-is-blind bias, suggesting that, as the relationship progresses and an individual gets to know her or his partner better (or possibly with decreasing satisfaction derived from the relationship), the love-is-blind bias may decrease in strength. Moreover, we were able to rule out the possibility that this effect was the result of an objective decrease in the partner's physical attractiveness with age, as our results showed that partner age was not significantly correlated with the love-is-blind bias. These results suggest that reality may be damaging for an individual's confidence, and in turn, for the relationship itself (Murray & Holmes, 1997), suggesting that the love-is-blind illusion may be strongest during the initial part of a relationship.

In terms of limitations, the exploratory nature of this study should be acknowledged. Although our results supported a number of our predictions, there are a wide range of other individual difference variables that may predict ratings of self- and partner physical attractiveness, such as inaccurate worldviews, illusions of control, optimism, and subjective happiness or contentment. In addition, the relatively low Cronbach's  $\alpha$  coefficients for some scales could have caused the lack of significance for some variables. Future work would do well, therefore, to include a wider range of scales that demonstrate better validity and reliability. Future work may also wish to examine the love-is-blind bias in different cultural contexts, particularly between collectivist and individualist cultures (see Heine & Hamamura, 2007), or among nonheterosexual samples. The latter is important because our reliance on a heterosexual sample means that we cannot rule out the possibility that the love-is-blind bias in the present instance was caused by participants finding members of the opposite sex more attractive than members of their own sex. Future studies could begin the task of overcoming this concern by examining the love-is-blind bias among gay and lesbian participants, or by al-

tering the EPA to assess broader perceptions of attractiveness rather than simply assessing partner perceptions.

In conclusion, the present study adds to recent work documenting a love-is-blind bias in perceptions of romantic partner physical attractiveness. Both women and men appear to believe that their significant others are more physically attractive than themselves, which may have beneficial effects both on the relationship and on the self. Moreover, there appear to be a number of individual and relationship correlates of the love-is-blind bias, notably love styles, self-esteem, and the Big Five personality facet of Extraversion. More generally, our findings corroborate existing work suggesting that experiences of social interactions may not be entirely accurate, but are, rather, based on illusory ideals.

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