

University of Groningen

## Assessment of Positive Illusions of the Physical Attractiveness of Romantic Partners

Barelds, D.P.H.; Dijkstra, Pieterneel; Koudenburg, N.; Swami, V.

*Published in:*  
Journal of Social and Personal Relationships

*DOI:*  
[10.1177/0265407510385492](https://doi.org/10.1177/0265407510385492)

**IMPORTANT NOTE: You are advised to consult the publisher's version (publisher's PDF) if you wish to cite from it. Please check the document version below.**

*Document Version*  
Early version, also known as pre-print

*Publication date:*  
2011

[Link to publication in University of Groningen/UMCG research database](#)

*Citation for published version (APA):*

Barelds, D. P. H., Dijkstra, P., Koudenburg, N., & Swami, V. (2011). Assessment of Positive Illusions of the Physical Attractiveness of Romantic Partners. *Journal of Social and Personal Relationships*, 28(5), 706 - 719. <https://doi.org/10.1177/0265407510385492>

**Copyright**

Other than for strictly personal use, it is not permitted to download or to forward/distribute the text or part of it without the consent of the author(s) and/or copyright holder(s), unless the work is under an open content license (like Creative Commons).

**Take-down policy**

If you believe that this document breaches copyright please contact us providing details, and we will remove access to the work immediately and investigate your claim.

*Downloaded from the University of Groningen/UMCG research database (Pure): <http://www.rug.nl/research/portal>. For technical reasons the number of authors shown on this cover page is limited to 10 maximum.*

# Journal of Social and Personal Relationships

<http://spr.sagepub.com/>

---

## **An assessment of positive illusions of the physical attractiveness of romantic partners**

Dick P. H. Barelds, Pieterneel Dijkstra, Namkje Koudenburg and Viren Swami  
*Journal of Social and Personal Relationships* published online 16 February 2011  
DOI: 10.1177/0265407510385492

The online version of this article can be found at:  
<http://spr.sagepub.com/content/early/2011/01/23/0265407510385492>

---

Published by:



<http://www.sagepublications.com>

On behalf of:

[International Association for Relationship Research](#)

**Additional services and information for *Journal of Social and Personal Relationships* can be found at:**

**Email Alerts:** <http://spr.sagepub.com/cgi/alerts>

**Subscriptions:** <http://spr.sagepub.com/subscriptions>

**Reprints:** <http://www.sagepub.com/journalsReprints.nav>

**Permissions:** <http://www.sagepub.com/journalsPermissions.nav>

# An assessment of positive illusions of the physical attractiveness of romantic partners

Journal of Social and  
Personal Relationships  
000(00) 1–15

© The Author(s) 2011

Reprints and permissions:

sagepub.co.uk/journalsPermissions.nav

DOI: 10.1177/0265407510385492

spr.sagepub.com



Dick P. H. Barelds<sup>1</sup>, Pieternel Dijkstra<sup>1</sup>,  
Namkje Koudenburg<sup>1</sup>, and Viren Swami<sup>2</sup>

## Abstract

Positive illusions about a partner's physical attractiveness occur when individuals' ratings of their partner's attractiveness are more positive than more objective ratings. Ratings that may serve as a 'reality benchmark' include ratings by the partner him/herself and observer ratings. The present study compared the effects of using different reality benchmarks on the strength of positive partner physical attractiveness illusions ( $n = 70$  couples). Results showed that individuals positively biased both their own and their partner's physical attractiveness. As a consequence, using a partner's self-ratings as a reality benchmark results in an underestimation of positive illusions. Presenting participants with photographs had a small effect on physical attractiveness ratings provided by women, showing that photographs, to some extent, might constrain positive illusions.

## Keywords

Assessment, couples, partner-ratings, physical attractiveness, positive illusions

<sup>1</sup> University of Groningen, Groningen, The Netherlands

<sup>2</sup> University of Westminster, London, UK and HELP University College, Kuala Lumpur, Malaysia

## Corresponding author:

Dick P. H. Barelds, Department of Psychology, University of Groningen, Grote Kruisstraat, 2/1, 9712 TS, Groningen, The Netherlands

Email: d.p.h.barelds@rug.nl

During the course of a romantic relationship, partners will frequently uncover sources of negativity or conflict that may raise the fear that their partner is not the 'right' person after all (Murray, 1999). Such doubts about the partner are troublesome because negativity typically surfaces when individuals have already invested in their relationship (Miller, Niehuis, & Huston, 2006). In order to reach some cognitive resolution between their hopes and doubts, and to sustain a sense of security, partners often weave an elaborate fictitious story that both embellishes a partner's virtues and minimizes his or her faults (McNulty, O'Mara, & Karney, 2008; Murray, Holmes, & Griffin, 1996a).

Several studies, for instance, have found that individuals often rate their partner overly positive on characteristics such as "kind" and "intelligent", a phenomenon that has been referred to as "positive illusions" (Murray & Holmes, 1997; Murray et al., 1996a). By means of these positive illusions, partners may enhance their sense of security, overstate the case of commitment, and derogate alternative partners, thus stabilizing their long-term bond (Murray, 1999). Positive illusions about a partner have indeed been found to predict greater relationship satisfaction, love, and trust, and lower conflict and ambivalence in both dating and marital relationships (Murray & Holmes, 1997). In addition, longitudinal studies have shown that the stronger individuals' initial positive illusions about their partners, the more likely their relationship is to persist (Murray & Holmes, 1997; Murray et al., 1996a).

## **Positive illusions and physical attractiveness**

Physical attractiveness in general is an important factor fostering sexual attraction and initial interpersonal attraction (Swami & Furnham, 2008a). Indeed, both men and women highly value a potential partner's physical attractiveness (Buss, 1989; Feingold, 1990; Swami, 2007). Studies also have shown physical attractiveness to be an important attribute once a relationship has begun. Sangrador and Yela (2000) (see also Yela & Sangrador, 2001), for instance, found perceptions of a partner's physical attractiveness to be related positively to levels of intimacy, commitment, passion, and satisfaction. McNulty, Neff, and Karney (2008) reported observers' ratings of partners' physical attractiveness to be related to relationship quality. Specifically, these authors found that both spouses behaved more positively in relationships in which wives were more attractive than their husbands. Recent studies (e.g., Barelds-Dijkstra & Barelds, 2008; Barelds & Dijkstra, 2009; for a review, see Swami & Furnham, 2008b) have found that individuals also hold positive illusions about their partner's physical attractiveness. Positive illusions about a partner's physical attractiveness may seem trivial in nature, but are certainly not. As argued above, physical attractiveness is generally considered an important characteristic in mate selection (see Buss, 1989; Dijkstra & Buunk, 1998; Swami & Furnham, 2008a). Having a physically attractive partner may, therefore, enhance an individual's satisfaction with his or her relationship (Swami & Furnham, 2008b). In addition, individuals will often compare their partners' physical attractiveness with those of others. By means of modern media individuals are, however, exposed over and over again to images of highly attractive opposite-sex targets (Englis, Solomon, & Ashmore, 1994). Exposure to these images may, for instance, cause individuals to become less satisfied with their partner (Kenrick, Gutierrez & Goldberg, 1989; Zillman

& Bryant, 1988). Other (relationship) events may make people dissatisfied with their partner's appearance as well. People may, for instance, meet an attractive opposite sex individual at work and compare their partner with this person. In addition, friends or family may criticize one's partner's appearance, making a partner's physically unattractive features more salient. Those and other events may cause individuals to become dissatisfied with their partner's appearance. Positive illusions about a partner's physical attractiveness may form a buffer against negative relationship events that tend to lower perceptions of a partner's physical attractiveness, and help protect the relationship.

Despite these potentially important consequences, positive illusions about a partner's physical attractiveness have not been studied to any great extent (Barelds & Dijkstra, 2009). The present study aims to contribute to the literature by studying these illusions in two ways: first, by providing further evidence for its existence and, second, by shedding light on the best way to assess positive illusions about a partner's physical attractiveness.

### *Defining positive illusions*

According to Murray, Holmes, Dolderman and Griffin (2000), positive illusions about a partner's characteristics are said to occur when individuals' ratings of their partner on specific characteristics are more positive than ratings that reflect a more objective perspective. Ratings that may serve as a "reality" benchmark include, for instance, ratings made by friends and strangers (Murray et al., 2000; see also Miller et al., 2006) or by partners themselves (Murray, Holmes, & Griffin, 1996b). In the latter case, positive illusions about a partner's physical attractiveness are assumed to exist when an individual perceives his or her partner (partner-ratings) to be physically more attractive than his or her partner perceives him or herself (self-rating made by the partner). In terms of this definition, Barelds-Dijkstra and Barelds (2008; Barelds & Dijkstra, 2009) have shown that partners indeed hold positive illusions about their partner's physical attractiveness, and that these positive physical attractiveness illusions are related positively to relationship quality (Barelds & Dijkstra, 2009).

In line with earlier studies on positive illusions (Murray & Holmes, 1997), Barelds-Dijkstra and Barelds (2008) and Barelds and Dijkstra (2009) used partners' perceptions of their own attractiveness as a reality benchmark. One might argue, however, that self-perceptions – and therefore a partner's perception of his or her own physical attractiveness – are rarely unbiased. In general, people's self-ratings tend to be positively biased, that is, people rate their own qualities more favorably than the qualities of the typical person (Alicke, 1985; Brown, 1986; Taylor & Brown, 1988). According to Taylor and Brown (1988), people believe in their own superiority because a positive self-image, even though it is not correct, helps them persist in the face of life's many frustrations, and, as a result, may promote mental health. This also applies to self-ratings of attractiveness. Despite the fact that people are often critical of their physical appearance (Markham, Thompson & Bowling, 2005), they usually still think they are relatively attractive. Jansen and colleagues (Jansen, Nederkoorn, Smeets, Havermans, & Martijn, 2006; Jansen, Smeets, Martijn, & Nederkoorn, 2006), for instance, found psychologically healthy women rated their bodies as more attractive than objective observers rated these women's bodies. According to Jansen and colleagues (Jansen,

Nederkoorn, et al., 2006; Jansen, Smeets, et al., 2006), healthy women hold a “self-serving body image bias”, thinking they are more attractive than they are in the eyes of others. Only self-ratings of attractiveness made by women suffering from eating disorders did not differ from ratings made by objective observers. If people indeed positively bias their physical attractiveness, using a partner’s self-perceptions as a reality benchmark may serve as a too conservative standard against which an individual’s partner-ratings of physical attractiveness are compared for signs of positive bias (Miller et al., 2006).

In addition, it can be argued that positive illusions may exist by the grace of imagination. As individuals are presented with more specific and objective information about their partner, for instance in the form of a photograph, they are less able to enhance their partner (Neff & Karney, 2002). In general, objective information and more concrete framing necessitates people to process information in a more systematic way and provides less leeway to construct an overly positive partner image (Kuyper & Dijkstra, 2009; Nier, 2004).

Individuals may no longer be able to ignore less appealing features and/or exaggerate attractive ones. Thus, it can be expected that presenting individuals with an objective and concrete picture of their partner in the form of a photograph will result in a smaller positive illusion about a partner’s physical attractiveness. The present study examined this issue by providing participants with photographs of themselves and their partner before assessing self- and partner-ratings of physical attractiveness.

Establishing the magnitude of positive illusions is important, as well as examining the extent to which this magnitude is a function of the person whose ratings are used as a benchmark. First, as noted before, positive illusions about a partner’s physical attractiveness matter. Thus, establishing how large these illusions are is important to better describe, understand, and explain relationship processes. Second, it is important to examine the extent to which different benchmarks result in different positive illusions. When a partner’s self reports are used as a reality benchmark, the magnitude of the positive illusion may be affected not only by the individual’s own propensity to distort the physical appearance of their partner, but also by their partner’s propensity to distort her/his own appearance. Learning how these different measures result in different positive illusions helps to better interpret results from both previous and future studies on positive illusions about a partner’s physical attractiveness.

## **The present study**

The present study set out to examine more closely the existence, direction, and strength of positive illusions about a romantic partner’s physical attractiveness. More specifically, we compared two different ways of assessing positive illusions about a partner’s physical attractiveness: (A) comparing individuals’ ratings of their partner’s attractiveness to self-ratings of their partner, and (B) comparing individuals’ ratings of their partner’s attractiveness to neutral observers’ judgments of a partner’s physical attractiveness. In so doing, we aimed to test four hypotheses. First, we expected individuals’ self-ratings of physical attractiveness to be positively biased, that is, higher than those made by objective observers (Hypothesis 1). Second, in line with previous research, we expected individuals to

positively bias perceptions of their partner's physical attractiveness (Hypothesis 2). Third, because self-perceptions of physical attractiveness are often positively biased, we expected the first assessment of positive illusions (assessment A) to result in smaller positive illusions about a partner's physical attractiveness than the second assessment (assessment B; Hypothesis 3). Finally, we tested the hypothesis that positive illusions about a partner's physical attractiveness will be smaller when individuals are confronted with a photograph of themselves and their partner (Hypothesis 4)

## Method

### *Participants*

Participants in this study were 70 heterosexual Dutch couples. The mean relationship length in this sample was 2.52 years ( $SD = 1.83$ ), with a minimum of three months and a maximum of 8.75 years. Three couples were married, 17 couples were cohabiting, and 50 couples were romantically involved without cohabiting or being married. The mean age of the sample was 22.39 years ( $SD = 3.36$ ; range 18–37 years). Couples were given €15 per person in return for their participation.

### *Procedure*

Participants were recruited at the University of Groningen in The Netherlands. A criterion for participation was that the couples had been involved in a serious intimate relationship for a minimum period of three months. Couples were invited to a laboratory testing session at the University of Groningen. During this testing session, couples were separated to assure independence and to prevent contamination resulting from contact. First, a frontal portrait picture was taken of each participant, using a digital photo camera (5.2 megapixels) that was fixed on a tripod and facing a neutral white background. If something was wrong with this portrait photo (e.g., the participant was not looking straight into the camera, was not facing the camera, or had her or his eyes shut), a new photograph was taken. The photographs were printed on the spot using a Canon Selphy printer that was connected to the camera.

The present study used an experimental design, with two conditions. In condition 1, participants provided ratings of their own and their partner's physical attractiveness. After they had filled in a number of filler questionnaires, they received a photograph of themselves and their partner and were again asked to provide self-ratings and partner-ratings of physical attractiveness, this time using the photographs as a reference. In condition 2, participants were given the photographs (self and partner) at the beginning of the testing session. Participants in this condition provided only one set of physical attractiveness ratings, as compared with two sets of physical attractiveness ratings in the other condition (i.e., ratings without and with the use of photographs). In both conditions, participants were told to look closely at the photographs (when provided) before answering the questions with regard to their own and their partner's physical attractiveness. Confidentiality of all responses was assured and couples were assigned randomly to one of the two testing conditions (35 couples per condition).

## Materials

**Observer judgments of physical attractiveness.** Participants' physical attractiveness was rated based on the photographs that were taken at the beginning of the experiment. Four raters (two male and two female, aged 21 to 35 years) judged all 140 participants, answering the following three questions for each photograph: (1) "How attractive is this person?", (2) "How attractive is this person to members of the opposite sex?", and (3) "How attractive is this person compared to other people of the same sex and the same age?". All questions were assessed on seven-point Likert-type scales, ranging from 1 (highly unattractive) to 7 (highly attractive). The scores on the three questions were highly inter-correlated ( $r$  values across raters, .84 to .94), and it was therefore decided to use the mean ratings of each rater to compute the inter-rater reliability. For this purpose, the intraclass correlation (ICC; Shrout & Fleiss, 1979) for average measures was computed, both for consistency ( $r = .91$ ), and for absolute agreement ( $r = .89$ ). The mean Pearson correlation between raters was  $r = .73$ . These numbers indicate a high degree of correspondence between raters (cf. Buss & Shackelford, 2008) with regard to both the rank order and the mean levels of physical attractiveness. The mean physical attractiveness ratings of the four raters were consequently averaged and used as an objective index of physical attractiveness.

**Self-rated general physical attractiveness.** In accordance with the judgments of physical attractiveness, all participants answered three questions concerning both their own (self-ratings), and their partner's (partner-ratings) general physical attractiveness: (1) "How attractive do you think you/your partner are/is?", (2) "How attractive do you think you/your partner are/is to members of the opposite sex?", and (3) "How attractive do you think you/your partner are/is compared to other people of the same sex and the same age?". Participants assigned to condition 1 answered all six questions twice: without and with photographs. As with the judgments of physical attractiveness, the scores on the three questions were averaged to obtain overall assessments of self and partner physical attractiveness. Cronbach's alpha for the three questions ranged from .87 to .95 for the self- and partner-ratings in the two conditions.

**Self-rated facial attractiveness.** The objective judgments of physical attractiveness were made on the basis of photographs displaying the respondent's face (i.e., not body). In condition 2, participants provided ratings of their own and their partner's physical attractiveness by means of the same photographs used for the objective judgments. In condition 1, however, participants first rated their own and their partner's physical attractiveness without the use of photographs. Therefore, these ratings (before the photographs were handed over to the participants) might reflect an overall physical attractiveness rating based on more than just facial features (e.g., bodily features). Even in condition 2, although participants were explicitly asked to look at the photographs before assessing their own and their partner's physical attractiveness, these ratings might reflect different aspects of physical attractiveness than portrayed on the photographs. Therefore, we additionally asked participants in both conditions to rate the attractiveness of their own and their partner's facial features. This enabled us to examine more closely



**Table 1.** Correlations between physical attractiveness measures (self-ratings and objective ratings)

	1	2	3
1. Observer judgments of physical attractiveness	.32**	.24*	.01
2. General physical attractiveness self-ratings	.27*	.29*	.56**
3. Facial attractiveness self-ratings	.23	.44**	.30*

Note: below the diagonal, the correlations for women ( $n = 70$ ); above the diagonal, the correlations for men ( $n = 70$ ); on the diagonal, the within-couple correlations as a measure of similarity between partners.

\* $p < .05$ ; \*\* $p < .01$ .

**Table 2.** Correlations between physical attractiveness measures (partner-ratings and objective partner-ratings)

	1	2	3
1. Observer judgments of a partner's physical attractiveness	.32*	.52*	.46*
2. Ratings of a partner's general physical attractiveness	.42*	.18	.62*
3. Ratings of a partner's facial attractiveness	.15	.53*	.18

Note: below the diagonal, the correlations for women ( $n = 70$ ); above the diagonal, the correlations for men ( $n = 70$ ); on the diagonal, the within-couple correlations as a measure of similarity between partners.

\* $p < .01$ .

potential differences between ratings of self and partner physical attractiveness and the observers' judgments of the participants' physical attractiveness. Participants were asked to rate the attractiveness of 11 facial features: nose, lips, ears, chin, eyes, cheeks/cheekbones, face, forehead, eyebrows, facial skin, and hair. These 11 facial features are based on Barelds and Dijkstra (2009; first seven features), and supplemented with the latter four. Participants rated their own (self-ratings) and their partner's (partner-ratings) attractiveness on each of these 11 facial features (1 = highly unattractive, 5 = highly attractive). Mean scores across these 11 facial features were computed, and linearly transformed into scales ranging from 1 to 7 ( $bX + c$ , with  $X$  the facial attractiveness score,  $b$  the weight of 1.5, and  $c$  the constant of  $-.5$ ) to facilitate comparability with the other attractiveness ratings, which were assessed on seven-point scales. Alpha coefficients for the facial attractiveness scale were .70 for self-ratings and .79 for partner-ratings (both conditions combined).

## Results

First, correlations were computed (across conditions) between the different measures of physical attractiveness. These correlations are reported in Tables 1 and 2. Table 1 lists the correlations between self-ratings of general physical and facial attractiveness and observer judgments of physical attractiveness, separately for men and women. Table 2 lists the correlations between the ratings of a partner's general physical and facial

attractiveness and observer judgments of a partner's physical attractiveness, again separately for men and women. For participants in condition 1, the ratings prior to seeing the photographs were used (see *Method* section).

Table 1 shows that, for both men and women, generally weak correlations ( $r$  values ranging from .01 to .27) were found between the observer judgments of physical attractiveness and the self-ratings of physical and facial attractiveness. In addition, moderate correlations were found between the self-ratings of facial and general physical attractiveness, for both men ( $r = .56, p < .01$ ) and women ( $r = .44, p < .01$ ). These results show a substantial overlap between the general ratings of physical attractiveness and the more specific ratings of facial attractiveness. Additional analyses showed that these correlations did not differ substantially between the two experimental conditions (for men  $r$  is .56 in both conditions, and for women  $r$  ranged from .35 in condition 1 to .47 in condition 2;  $p$  values  $< .01$ ). Finally, the within-couple correlations in Table 1 show consistent positive correlations (all  $r$  values around .30) between partner's levels of physical attractiveness, irrespective of the ratings that are used (objective judgments and self-ratings of physical and facial attractiveness). These results are consistent with studies showing positive assortative mating (Barelds-Dijkstra & Barelds, 2008; Luo & Klohnen, 2005).

Table 2 shows the correlations between the ratings of a partner's physical and facial attractiveness and observer judgments of a partner's physical attractiveness. The correlations between observer judgments of a partner's physical attractiveness and ratings of both a partner's facial and general physical attractiveness were substantially higher than the correlations found for self-ratings, and are particularly high for men. Men's ratings of their partner's facial and general physical attractiveness correspond relatively strongly to the objective judgments of their partner's physical attractiveness.

The general picture emerging from Tables 1 and 2 is that there is support for the validity of the objective judgments of physical attractiveness, that the general physical attractiveness ratings and the more specific facial attractiveness ratings are highly related, and that there seems to be a discrepancy between objective judgments of physical attractiveness and ratings of physical (and facial) attractiveness made by the participants, particularly for self-ratings.

Next, we compared the mean ratings of physical attractiveness separately for men and women and the two conditions (see Table 3). More specifically, we compared observers' judgments of physical attractiveness to self-ratings of (1) facial and (2) general physical attractiveness, and ratings made by the partner of individuals' (3) facial and (4) physical attractiveness. For example, observers' judgments of men's general physical attractiveness were compared with men's self-ratings of facial and general physical attractiveness, and their female partners' ratings of men's facial and general physical attractiveness. The means listed in Table 3 for condition 1 are based on the ratings before seeing the photographs.

In support of Hypothesis 1, the mean attractiveness scores reported in Table 3 clearly show that for both men and women, in both conditions, observers' judgments of physical attractiveness were substantially (and significantly) lower than self-ratings of facial and physical attractiveness ( $t$  values across conditions range between 4.03 and 7.34 for women,  $p < .001$ ;  $t$  values across conditions range between 7.30 and 11.74 for men,

**Table 3.** Mean attractiveness ratings by sex and condition (SD in parentheses)

	Condition 1	Condition 2
<b>Women</b>		
Self-ratings of facial attractiveness	4.60 <sub>a1</sub> (.48)	4.30 <sub>a2</sub> (.50)
Self-ratings of general physical attractiveness	4.76 <sub>a1</sub> (.78)	4.32 <sub>a2</sub> (.97)
Men's ratings of women's facial attractiveness	5.66 <sub>b1</sub> (.66)	5.27 <sub>b2</sub> (.59)
Men's ratings of women's general physical attractiveness	5.93 <sub>c1</sub> (.92)	5.80 <sub>c1</sub> (.78)
Observers' judgments of physical attractiveness	3.47 <sub>d1</sub> (.97)	3.51 <sub>d1</sub> (1.00)
<b>Men</b>		
Self-ratings of facial attractiveness	4.80 <sub>a1</sub> (.52)	4.57 <sub>a1</sub> (.58)
Self-ratings of general physical attractiveness	5.14 <sub>b1</sub> (.70)	4.99 <sub>b1</sub> (.61)
Women's ratings of men's facial attractiveness	5.12 <sub>b1</sub> (.67)	5.08 <sub>b1</sub> (.58)
Women's ratings of men's general physical attractiveness	5.93 <sub>c1</sub> (.71)	5.83 <sub>c1</sub> (.86)
Observers' judgments of physical attractiveness	3.23 <sub>d1</sub> (.92)	3.13 <sub>d1</sub> (1.00)

Note: Condition 1: photographs afterwards ( $n = 70$ ), condition 2: photographs immediately ( $n = 70$ ). Means with different subscript letters differ significantly *within* columns and within sex ( $p < .05$ ). Means with different subscript numbers differ significantly *between* columns and within sex ( $p < .05$ ).

$p < .001$ ; paired samples  $t$ -tests). In support of Hypothesis 2, ratings of a partner's facial and physical attractiveness (both for men and women) were significantly higher than a partner's self-ratings of facial and physical attractiveness, in both conditions ( $t$  values across conditions range between 7.60 and 8.77 for men and between 2.33 and 5.98 for women, all  $p$  values  $< .05$ ; paired samples  $t$ -tests). Ratings of a partner's facial and physical attractiveness were found to differ, for both men and women, from the objective ratings of a partner's attractiveness ( $t$  values across conditions range between 10.78 and 17.30 for men and between 10.24 and 17.35 for women, all  $p$  values  $< .001$ ; paired samples  $t$ -tests).

In other words, confirming Hypotheses 1 and 2, both self-ratings of physical attractiveness and partner-ratings of physical attractiveness were clearly positively biased. These findings also support Hypothesis 3, indicating that the use of partners' self-ratings of physical attractiveness as a "reality benchmark" against which to compare individuals' ratings of their partner's physical attractiveness leads to an underestimation of the magnitude of the positive illusions individuals may hold about their partner's physical attractiveness.

Results only partially supported Hypothesis 4 (see Table 3). That is, presenting participants with photographs (condition 2) only had a very small effect on self- and partner-ratings of facial and general physical attractiveness. In fact, only women's self-rated facial and general physical attractiveness and men's ratings of women's facial attractiveness were significantly lower in the condition where participants were confronted with photographs of themselves and their partner ( $t$  values are 2.50, 2.09 and 2.59 respectively,  $p$  values  $< .05$ ; independent samples  $t$ -tests using condition as the independent variable), but still substantially higher than the objective judgments of physical attractiveness. Participants in condition 1 first provided self- and partner-ratings of physical attractiveness without using photographs (reported in Table 3), and then also

provided a second set of general self- and partner- physical attractiveness ratings using the photographs (not reported in Table 3). This allows for a direct comparison between ratings with and without photographs within the same sub-sample. For women, self-ratings ( $M = 4.14$ ,  $SD = 1.18$ ) and partner-ratings ( $M = 5.59$ ,  $SD = .77$ ) for general physical attractiveness significantly decreased when photographs were offered (paired samples  $t$ -tests:  $t$  values are 4.19 and 2.97 respectively,  $p < .01$ ). For men, there was a small but significant difference between the two measurements in relation to self-ratings (second rating,  $M = 4.87$ ,  $SD = 1.00$ ,  $t = 2.30$ ,  $p < .05$ ), but not in relation to partner-ratings (second rating,  $M = 5.81$ ,  $SD = 1.01$ ,  $t = 1.55$ ,  $< p$ ). We may, therefore, conclude that ratings of physical attractiveness are slightly negatively affected by the presence of photographs. It must be noted, however, that ratings remained substantially positively biased, that is, they were more positive than the observers' judgments. Table 3 finally shows that the mean observer judgments of physical attractiveness did not differ between the two conditions: participants in the two conditions did not differ in their level of physical attractiveness ( $t$  values  $\leq .42$ ,  $> p$ ).

## Discussion

A positive illusion about a partner's physical attractiveness may be said to occur when individuals' ratings of their partners' physical attractiveness are more positive than ratings that reflect a more objective perspective. The first aim of the present study was to show that, in line with previous studies, individuals positively bias ratings of their own and their partner's physical attractiveness. Indeed, we found this to be the case in our study. Individuals believed both they themselves and their partners were more attractive than objective observers judged them to be. When it comes to their appearance and that of their loved ones, people seem to hold rosy views. This does not mean that people may not be dissatisfied with parts of their body. Indeed, many studies show that the high standards the modern media nowadays impose on people's physical appearance cause many people to become dissatisfied with their own and their partner's bodies (for an overview, see Dijkstra, Gibbons, & Buunk, 2010). It seems, however, that despite these images, people still rate themselves and their partner relatively attractive.

The findings that individuals positively bias their own and their partner's physical attractiveness are not without consequence. From these findings, it follows that, when calculating positive illusions, using a partner's self-ratings results in smaller positive illusions than using ratings of objective observers. That is, the use of partner's self-perceptions as a reality benchmark serves as a relatively conservative standard against which to compare an individual's ratings of their partner's physical attractiveness, at least compared with using ratings of objective observers. It seems advisable for researchers who wish to study positive illusions about a partner's physical attractiveness to be aware of this fact. In addition, because previous research on positive illusions regarding a partner's physical attractiveness (e.g., Barelds-Dijkstra & Barelds, 2008; Barelds & Dijkstra, 2009) used partner self-ratings rather than observer ratings as a reality benchmark, these previous studies may not have done enough justice to the phenomenon of positive illusions of a partner's physical attractiveness. The phenomenon of positive illusions of a partner's physical attractiveness may be larger than previously reported. Future research may shed

more light on how positive illusions based on objective observer ratings of attractiveness and those based on a partner's self-ratings are related differently to important relationship variables, such as relationship satisfaction and commitment.

### *Strength of the positive partner physical attractiveness illusion*

The second aim of the present study was to examine the strength of positive illusions about a partner's physical attractiveness: to what degree is this illusion influenced by the presence of objective and concrete information regarding one's own and one's partner's physical attractiveness, in the form of photographs? We argued that individuals, when confronted with a photograph of themselves and their partner, would have greater difficulty positively biasing their own and their partner's physical attractiveness than in the absence of these photographs. Our results only partially confirmed this expectation. Presenting men with photographs seemed to affect ratings of women's facial attractiveness. In women, self-ratings of facial and general physical attractiveness declined in response to photographs of themselves, but still remained clearly more positive than the ratings of the objective observers. In addition, in condition 1, where participants rated their own and their partner's physical attractiveness both without and with the use of photographs, a decline was found in women's ratings of men's general physical attractiveness. However, although photographs seem to constrain positive illusions to some extent, positive illusions about a partner's physical attractiveness seem to constitute a relatively strong relationship phenomenon. Regardless of being (or not being) exposed to photographs, self- and partner-ratings were clearly more positive than ratings made by objective observers. A possible explanation is that participants attributed the lack of attractiveness they found in their own and their partner's pictures to external factors. Confronted with photographs, individuals may, for instance, think: "When that picture was taken, I was really tired" or "The person who took the pictures is a bad photographer". Several studies indeed show that people tend to externally attribute their own and their partner's failures and vices in order to maintain high relationship satisfaction (Bradbury & Fincham, 1990).

It seems important for future studies to examine what exactly the consequences are of these relatively strong, positive illusions about a partner's physical attractiveness, in terms of, for instance, relationship commitment and romantic jealousy. It has, for instance, been found that, as individuals perceive their partner to be more attractive, they report higher levels of romantic jealousy (Demirtas & Donmez, 2006), suggesting that positive illusions about a partner's physical attractiveness may have not only positive but also negative consequences. Likewise, McNulty et al. (2008) found that cognitive strategies that aim to enhance the relationship, such as positive illusions, are only beneficial to healthier marriages. In more troubled marriages they may decrease relationship satisfaction because they allow marital problems to worsen over time.

## **Conclusion**

The present study contributes to the literature in several ways. First, we found that, as they do with many other characteristics, people positively bias their physical

attractiveness, even in modern society, where people are bombarded with media images of beauty. Second, we found that the use of partners' self-ratings of physical attractiveness as a reality benchmark results in smaller positive illusions than the use of objective observers' ratings of a partner's physical attractiveness. Finally, we found that positive illusions about a partner's physical attractiveness are relatively strong, that is, they are hardly influenced by the presence of photographs of oneself and one's partner.

A limitation of the present study is that its participants were relatively young (on average in their twenties) and consisted of couples who, on average, had been together for only 2.5 years. It is very likely possible that, when conducted in an older sample, the difference between positive illusions based on a partner's self-ratings and ratings of objective observers are smaller or even absent. In general, older people are less likely to have a distorted body image (Huang & Chang, 2005). In addition, it is possible that positive illusions are much stronger in the beginning of the relationship, when partners are still in love and tend to idealize each other strongly. Likewise, positive illusions may be larger when people are younger and, as a consequence, relatively attractive. As a result, it seems wise for future studies on positive illusions about a partner's physical attractiveness to examine couples of different ages.

It must also be noted that one may also define positive illusions differently than the present study did. For instance, in their studies, Swami and colleagues (Swami, 2009; Swami, Furnham, Georgiades, & Pang, 2007; Swami, Stieger, Haubner, Voracek, & Furnham, 2009) report a phenomenon they also refer to as a positive illusion, that is, the love-is-blind bias (LIBB). The LIBB shows that people find their partner physically more attractive than they find themselves. This is, however, a different phenomenon than the one studied in the present research: in contrast to our definition of positive illusions, the LIBB is based on within-subject comparisons of self and partner physical attractiveness only, ignoring an external standard with which individuals' perceptions may be compared (Barelds & Dijkstra, 2009). Nonetheless, the LIBB might also be an important phenomenon. Finding one's partner more attractive than oneself could indicate that people (still) idealize their partner, a phenomenon that is characteristic of passionate love and relationship stability (Stafford & Merolla, 2007). However, defining positive illusions the way we did in the present study reveals much more information about the process that precedes the tendency to view the partner as more attractive than oneself. Using an external standard in the form of partner or objective observer ratings makes it possible to find out why partners are usually reported to be more attractive than people find themselves: because people find themselves physically more unattractive than they actually are, because people find their partner physically more attractive than he or she actually is, or (however unlikely) because partners are more attractive.

### **Conflict of interest statement**

The author(s) declared no conflicts of interest with respect to the authorship and/or publication of this article.

## Funding

This research received no specific grant from any funding agency in the public, commercial, or not-for-profit sectors.

## References

- Alicke, M. D. (1985). Global self-evaluation as determined by the desirability and controllability of trait adjectives. *Journal of Personality and Social Psychology, 49*, 1621–1630.
- Barelds, D. P. H., & Dijkstra, P. (2009). Positive illusions about a partner's physical attractiveness and relationship quality. *Personal Relationships, 16*(2), 263–283.
- Barelds-Dijkstra, P., & Barelds, D. P. H. (2008). Positive illusions about one's partner's physical attractiveness. *Body Image, 5*, 99–108.
- Bradbury, T. N., & Fincham, F. D. (1990). Attributions in marriage: review and critique. *Psychological Bulletin, 107*(1), 3–33.
- Brown, J. D. (1986). Evaluations of self and others: self-enhancement biases in social judgments. *Social Cognition, 4*, 353–376.
- Buss, D. M. (1989). Sex differences in human mate preferences: evolutionary hypotheses tested in 37 cultures. *Behavioral and Brain Sciences, 12*, 1–49.
- Buss, D. M., & Shackelford, T. K. (2008). Attractive women want it all: good genes, economic investment, parenting proclivities, and emotional commitment. *Evolutionary Psychology, 6*(1), 134–146.
- Demirtas, H., & Donmez, H. (2006). Jealousy in close relationships: personal, relational and situational variables. *Türk Psikiyatri Dergisi, 17*(3), 181–191.
- Dijkstra, P., & Buunk, B. P. (1998). Jealousy as a function of rival characteristics: an evolutionary perspective. *Personality and Social Psychology Bulletin, 24*, 1158–1166.
- Dijkstra, P., Gibbons, F., & Buunk, A. P. (2010). Social comparison theory. In J. E. Maddux & J. P. Tangney (Eds.), *Social psychological foundations of clinical psychology* (pp. 195–211). New York: Guilford Publications.
- Englis, B. G., Solomon, M. R., & Ashmore, R. D. (1994). Beauty before the eyes of the beholders: The cultural encoding of beauty types in magazine advertising and music television. *Journal of Advertising, 23*, 49–64.
- Feingold, A. (1990). Gender differences in effects of physical attractiveness on romantic attraction: A comparison across five research paradigms. *Journal of Personality and Social Psychology, 59*, 981–993.
- Huang, L. L., & Chang, C. (2005). Body image and its predictors in Taiwan: interpersonal pressure and media agreement as mediators. *Chinese Journal of Psychology, 47*, 287–308.
- Jansen, A., Nederkoorn, C., Smeets, T., Havermans, R., & Martijn, C. (2006). Jij ziet, jij ziet, wat ik niet zie: het vertekende lichaamsbeeld van gezonde vrouwen/You see, you see, what I don't see: the distorted body-image of healthy women. *Psycholoog, 41*, 518–526.
- Jansen, A., Smeets, T., Martijn, C., & Nederkoorn, C. (2006). I see what you see: the lack of a self-serving body-image bias in eating disorders. *British Journal of Clinical Psychology, 45*, 123–135.
- Kenrick, D. T., Gutierrez, S. E., & Goldberg, L. L. (1989). Influence of popular erotica on judgments of strangers and mates. *Journal of Experimental Social Psychology, 25*, 159–167.
- Kuyper, H., & Dijkstra, P. (2009). Better-than-average effects in secondary education: A 3-year follow-up. *Educational Research and Evaluation, 15*(2), 167–184.

- Luo, S. & Klohnen, E. C. (2005). Assortative mating and marital quality in newlyweds: a couple-centered approach. *Journal of Personality and Social Psychology*, 88, 304–326.
- Markham, A., Thompson, T., & Bowling, A. (2005). Determinants of body-image shame. *Personality and Individual Differences*, 38, 1529–1541.
- McNulty, J. K., Neff, L. A., & Karney, B. R. (2008) Beyond initial attraction: physical attractiveness in newlywed marriage. *Journal of Family Psychology*, 22, 135–143.
- McNulty, J. K., O'Mara, E. M., & Karney, B. R. (2008). Benevolent cognitions as a strategy of relationship maintenance: “Don’t sweat the small stuff” . . . But it is not all small stuff. *Journal of Personality and Social Psychology*, 94, 631–646.
- Miller, P. J. E., Niehuis, S., & Huston, T. L. (2006). Positive illusions in marital relationships: a 13-year longitudinal study. *Personality and Social Psychology Bulletin*, 32, 1579–1594.
- Murray, S. L. (1999). The quest for conviction: motivated cognition in romantic relationships. *Psychological Inquiry*, 10, 23–34.
- Murray, S. L. & Holmes, J. G. (1997). A leap of faith? Positive illusions in romantic relationships. *Personality and Social Psychology Bulletin*, 23, 586–604.
- Murray, S. L., Holmes, J. G., Dolderman, D., & Griffin, D. W. (2000). What the motivated mind sees: Comparing friends’ perspectives to married partners’ views of each other. *Journal of Experimental Social Psychology*, 36, 600–620.
- Murray, S. L., Holmes, J. G., & Griffin, D. W. (1996a). The self-fulfilling nature of positive illusions in romantic relationships: love is not blind, but prescient. *Journal of Personality and Social Psychology*, 71, 1155–1180.
- Murray, S. L., Holmes, J. G., & Griffin, D. W. (1996b). The benefits of positive illusions: idealization and the construction of satisfaction in close relationships. *Journal of Personality and Social Psychology*, 70, 79–98.
- Neff, L. A., & Karney, B. R. (2002). Judgments of a relationship partner: specific accuracy but global enhancement. *Journal of Personality*, 70, 1079–1112.
- Nier, J. A. (2004). Why does the “Above Average Effect” exist? Demonstrating idiosyncratic trait definition. *Teaching of Psychology*, 31, 53–54.
- Sangrador, J. L. & Yela, C. (2000). “What is beautiful is loved”: physical attractiveness in love relationships in a representative sample. *Social Behavior and Personality*, 28, 207–218.
- Shrout, P. E. & Fleiss, J. L. (1979). Intraclass Correlations: Uses in Assessing Rater Reliability. *Psychological Bulletin*, 2, 420–428.
- Stafford, L., & Merolla, A. J. (2007). Idealization, reunions, and stability in long-distance dating relationships. *Journal of Social and Personal Relationships*, 24, 37–54.
- Swami, V. (2007). *The missing arms of Venus de Milo: reflections on the science of physical attractiveness*. Brighton: Book Guild.
- Swami, V. (2009). An examination of the love-is-blind bias among gay men and lesbians. *Body Image*, 6, 149–151.
- Swami, V., & Furnham, A. (2008a). *The psychology of physical attraction*. London: Routledge.
- Swami, V., & Furnham, A. (2008b). Is love really so blind? *The Psychologist*, 21, 108–111.
- Swami, V., Furnham, A., Georgiades, C., & Pang, L. (2007). Evaluating self and partner physical attractiveness. *Body Image*, 4, 97–101.
- Swami, V., Stieger, S., Haubner, T., Voracek, M., & Furnham, A. (2009). Evaluating the physical attractiveness and oneself and one’s romantic partner: individual and relationship correlates of the love-is-blind bias. *Journal of Individual Differences*, 30, 35–43.



- Taylor, S. E. & Brown, J. D. (1988). Illusion and well-being: a social psychological perspective on mental health. *Psychological Bulletin*, *103*, 193–210.
- Yela, C. & Sangrador, J. L. (2001). Perception of physical attractiveness throughout loving relationships. *Current Research in Social Psychology*, *6*, 57–75.
- Zillman, D., & Bryant, J. (1988). Pornography's impact on sexual satisfaction. *Journal of Applied Social Psychology*, *18*, 438–453.