

# Narcissism and Perceived Inequity in Attractiveness in Romantic Relationships

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**Abstract.** In three studies of romantic relationships ( $N = 253$ ,  $N = 81$ , and  $N = 98$ ) the hypothesis was tested that high narcissists, relative to low narcissists, distort the assessment of equity in attractiveness. Narcissism was measured by the Narcissistic Personality Inventory. In Study 1 the hypothesis was confirmed. In Study 2 it was shown that although narcissism correlated significantly with self-esteem, it was the unique variance in narcissism which predicted the tendency to feel underbenefited in respect to attractiveness. Finally in Study 3, dyadic data were analyzed on the basis of the Actor-Partner Interdependence Model. The data of 49 couples who lived together were included. The dyadic analysis indicated that actor narcissism exerted the expected influence on perceived inequity in attractiveness, whereas partner narcissism explained no additional variance. High narcissists felt more underbenefited than low narcissists. The analysis of dyadic data in Study 3 indicates that the link between narcissism and equity in attractiveness turns out to be an intrapersonal phenomenon because only actor narcissism, not partner narcissism, is significantly correlated with perceived inequity. In addition, partial intraclass correlations revealed that if one partner tended to feel underbenefited, the other partner tended to feel overbenefited. The results are explained on the basis of the agentic model of narcissism. All three studies consistently revealed a gender effect indicating that women felt more underbenefited than men in terms of attractiveness.

**Keywords:** narcissism, self-esteem, inequity, attractiveness, gender

One of the great hopes of research on personality and social interaction is that narcissism could be the missing link between egotism on the one hand and romantic relationships on the other. Narcissism is a personality trait which provides a theoretical framework for the explanation of the predilections of self-focused persons in social relationships in general and romantic relationships in particular.

The study of narcissism as a determinant of the structure of social relationships is an emerging topic (Campbell, 1999, 2005; Rhodewalt, 2005; Rhodewalt & Morf, 1995). Recently, the interrelationship between narcissism and attractiveness of the interaction partners seems to be the focus of a growing number of studies (Buffardi & Campbell, 2008; Vazire, Naumann, Rentfrow, & Gosling, 2008). The present research addresses the question of how narcissism and evaluation of own attractiveness are related to each other. The focus is on narcissism as a determinant of the social comparison with the partner on the dimension of attractiveness. Does narcissism fuel self-serving judgmental tendencies in the evaluation of own attractiveness relative to the attractiveness of the partner? To answer this question the trait of narcissism is linked to a measure of equity based on attractiveness.

Our theoretical framework is the agency model of narcissism proposed by Campbell, Brunell, and Finkel (2006). This model emphasizes several narcissistic qualities. Specifically, narcissists express a strong desire to hold an inflated

self-view on many judgmental dimensions and emphasize entitlement in interpersonal self-regulation. Our reasoning, which leads to the hypothesis of the present research, rests upon these qualities of narcissists. It is based on three steps, which are outlined in the following.

Step 1 starts with the striking predilection of narcissists to engage in self-serving judgments. Self-serving biases are part of a self-regulation strategy which serves to maintain the high, although fragile self-esteem of narcissists (Morf & Rhodewalt, 2001). When it comes to evaluation of performance, narcissistic people exhibit a strong tendency toward inflated self-appraisals. For example, they evaluate their own contributions as much higher compared to those of their coworkers (John & Robins, 1994). In addition, narcissists express a stronger need for admiration than non-narcissists (Campbell, 1999). Another line of research reveals that narcissists indicate that they feel themselves to be the victim of other people's interpersonal transgressions more frequently than non-narcissists (McCullough, Emmons, Kilpatrick, & Mooney, 2003).

Step 2 of our reasoning relates self-serving biases with biased social comparisons. Narcissists' employment of social comparisons reflects their self-serving tendencies. Sedikides, Rudich, Gregg, Kumashiro, and Rusbult (2004, p. 401) summarize the available evidence: "High narcissists manifest entitlement behavior at the direct expense of even close

others.” Narcissism might contribute to a bias in the process of social comparison via self-serving tendencies, which are linked with it. In these social comparisons, narcissists seem to express a strong sense of entitlement compared with others. As a consequence, narcissists’ assessments of self-partner differences presumably are distorted in a self-serving direction. In the same vein, they tend to consider themselves superior to their romantic partner in reference to positive characteristics (Campbell, Rudich, & Sedikides, 2002). Therefore, high narcissists seem to process social-comparison information in a biased self-serving way. As a consequence, they tend to infer own superiority in correspondence with own entitlements.

In the third step, we consider the consequences of narcissists’ high emphasis on own entitlement for fairness in romantic relationships. In general, people strive for fairness in their relationships. An equitable relationship is one in which the participant or an impartial observer perceives that “all participants are receiving equal relative outcomes from the relationship” (Walster, Berscheid, & Walster, 1976, pp. 2–3). Perceived inequity can take on two forms: It is either the result of feeling underbenefited or overbenefited. We assume that the emphasis of high narcissists on their own entitlements will result in a tendency to feel underbenefited in their romantic relationship. Specifically, high narcissists are likely to feel more underbenefited than low narcissists as regards the attractiveness dimension.

Our research focuses on one important dimension of equity in romantic relationships: attractiveness. It is defined as the stimulus value of a person, which s(he) possesses on the basis of the interpersonal attraction that s(he) elicits. In the context of romantic relationships, attractiveness of one partner depends on the interpersonal attraction felt by the other partner. Physical appearance is a strong determinant of interpersonal attraction (Aronson, Wilson, & Akert, 2007; Byrne, 1971). Furthermore, interpersonal skills such as behaving in a pleasant and polite way heighten a person’s attractiveness. In correspondence with this evidence, we regard a person’s attractiveness as a product of physical appearance, self-presentation, and impression formation (Rohmann & Bierhoff, 2007).

From the reasoning above the hypothesis is derived that high narcissists, relative to low narcissists, distort the assessment of equity in attractiveness in correspondence with their interest in self-enhancement that is motivated by a concern about their entitlements leading to an inflated self-view of their contributions in terms of attractiveness.

Some empirical evidence is available which supports the view that narcissists – more than non-narcissists – emphasize attractiveness and related aspects of physical appearance and focus on their own superiority on this dimension. In a study by Jackson, Ervin, and Hodge (1992) narcissism was positively associated with a positive body image. More specifically, narcissistic people evaluated their physical appearance, fitness, and sexuality more favorably than non-narcissists. Therefore, high narcissists, relative to low narcissists, report inflated self-descriptions of their own attractiveness. In addition, narcissists present highly attractive photographs of themselves on social networking Web sites like Facebook (Buffardi & Campbell, 2008). Further results indicate that attractiveness of photographs is a

valid cue of self-ratings of narcissism and is successfully used by observers as a cue to infer the level of narcissism of the person shown on the photograph (Vazire et al., 2008).

Finally, high narcissists, more than low narcissists, rated their own attractiveness higher when comparing themselves with others (Gabriel, Critelli, & Ee, 1994). In terms of equity judgments of attractiveness, this tendency would be evidenced by a distorted assessment of self-other differences in the direction of own superiority. Fueled by their preoccupation with what they deserve, narcissists tend to emphasize their own contributions and to ignore the contributions of others.

In our research we included self-esteem, which is positively correlated with narcissism (Raskin, Novacek, & Hogan, 1991). Because narcissism and self-esteem both refer to self-evaluation, such a positive association is to be expected. In addition, results of the same study indicate that self-esteem is positively related to self-enhancement. Therefore, the question arises whether an association between narcissism and self-enhancement is due to the self-esteem component that is shared with narcissism. Raskin et al. (1991) reported that self-esteem is related to narcissism after partialling out social-desirability bias and self-enhancement (see also Sedikides et al., 2004).

In correspondence with the assumption of the agentic model that narcissistic esteem is more than a reflection of self-esteem, we assumed that the relationship between narcissism and the self-serving judgment of the attractiveness dimension of equity is still present when the effect of self-esteem is statistically removed. In this context we consider self-esteem a confounding variable. By including self-esteem in the statistical analysis, our goal is to eliminate the effect of this confounding variable so that we can focus on the effect of narcissism alone on self-serving assessments of equity in attractiveness.

## Study 1

Study 1 provided an initial test of the narcissism-inequity link. Participants responded to the multidimensional equity questionnaire, which allows the measurement of three domains: attractiveness, status, and liking/feeling. In addition, narcissism was measured. The main prediction is that narcissistic people emphasize their own attractiveness relative to that of the partner to a greater extent than less narcissistic people. In summary, narcissists are assumed to overestimate own attractiveness and underestimate the attractiveness of their partner.

## Method

### Participants

Two hundred fifty-three respondents participated in Study 1. One hundred fifty-nine students from introductory psychology classes participated to fulfill a course requirement. In addition, 94 persons were recruited through campus posters without offering payment. The final sample consisted of 253 persons (98 men and 155 women) with a mean age of

27.7 years ( $Mdn = 25$ ), who were either married or in a steady relationship. Participants reported a mean relationship length of 65.5 months ( $Mdn = 42$  months) in their current relationship. About 52.2% lived together with their partner, whereas 47.8% did not have a common household. About 26.5% were married.

## Materials

### Personality Measures

To measure narcissism, a German version of the 40-item narcissistic personality inventory (NPI) (Raskin & Terry, 1988) was used. A sample item is: "I am an extraordinary person." The NPI assumes that narcissism is a trait which varies in the normal population. Following Rhodewalt, Madrian, and Cheney (1998) we used a true-false format as opposed to a forced-choice format. Respondents were asked to agree (1) or disagree (0) with each statement. For all items agreement indicates a narcissistic response. The possible range of scores lies between 0 and 40. The internal consistency of the scale was good,  $\alpha = .86$ .

### Equity

Rohmann and Bierhoff (2007) developed an equity questionnaire on the basis of the Traupmann-Utne-Walster scales (1977, cited in Walster, Walster, & Berscheid., 1978) with the goal to identify independent dimensions of equity judgments in romantic relationships. On the basis of factor-analytic results, three scales were derived from a comprehensive list of attributes.

The first equity dimension was labeled *attractiveness*. The attractiveness scale which tapped physical appearance, flirting, and impression formation contains five items which load highly on the first dimension. The following items were included, each starting with "Please consider:" "... the appearance of your partner," "... how much you care about your appearance and how much your partner cares," "... which impression you and your partner make upon other persons," "... to which extent you and your partner attract the opposite sex," "... how good you and your partner are at flirting." Two further equity dimensions were labeled *status* and *liking/feeling*. The status dimension refers to level of education, income, and social status (example item: "Please judge the level of professional success"). Liking/feeling refers to a kind, affectionate, and warm person who is attached to the partner, shows it, and has a sympathetic understanding of the partner. Therefore, the dimension of liking/feeling is closely linked to intimacy, closeness, and care (example item: "Please consider how much you like each other").

The self-partner-difference method was employed to measure equity (Van Yperen & Buunk, 1990). Respondents were asked to indicate the difference between their partner and themselves with regard to their input into the relationship. The method of obtaining assessments is illustrated by the following example. Given the item "Please consider the appearance," respondents judge the difference between their own appearance and their partner's appearance. Nine alternatives

are offered: "I look" . . . "very much better," "much better," "somewhat better," "slightly better," "exactly as good," "my partner looks. . ." "slightly better," "somewhat better," "much better," "very much better." The alternative "My partner looks very much better than I do" indicates that the respondent has the highest advantage because he or she looks considerably less attractive than his or her partner. In contrast, the alternative "I look very much better than my partner" indicates the highest disadvantage because the person contributes much more than the partner. When the person indicates that own and partner looks are equal, the response stands for equity in the relationship. Further items referred to flirting and impression formation.

On the 9-point response scale a value of 5 indicates that the respondent perceives equity, 1–4 indicate that he or she feels underbenefited (the respondent indicates that he or she contributes more than the partner), and 6–9 indicate that the respondent feels overbenefited (he or she indicates that his or her partner contributes more than he or she does).

Note that the internal consistencies of the three equity scales were satisfactory or good. Specifically for equity in attractiveness  $\alpha$  was .77.

## Results

### Data-Analytic Strategy

The hypotheses were tested by multiple regression analyses with gender, narcissism, and their interaction as predictors of equity. The influence of age and relationship length was controlled in these analyses. We employed the procedure recommended by Aiken and West (1991) for the analysis of a combination of categorical and continuous predictor variables and their interaction. Specifically, we used dummy variable coding and centered the continuous predictor variable.

### Descriptive Statistics

Mean values and correlations are summarized in Table 1. The mean of each of the three equity scales was close to the point of equity. The average level of narcissism lies near the midpoint of the possible range of scores of the NPI.

The overall pattern of association among the variables is highlighted by the zero-order correlations which are summarized in Table 1. Narcissism was negatively associated with equity in attractiveness: Respondents who scored high on narcissism tended to consider themselves underbenefited in terms of equity in attractiveness. Gender turned out to be uncorrelated with narcissism and negatively correlated with equity in attractiveness and equity in liking/feeling but positively with equity in status. Therefore, women reported feeling more underbenefited than men in terms of attractiveness and liking/feeling and more overbenefited in terms of status.

### Narcissism and Equity Ratings

A hierarchical regression analysis was performed with equity in attractiveness as criterion. In Block 1, gender was entered.

Table 1. Descriptive statistics and zero-order correlations in Study 1

	<i>M</i>	<i>SD</i>	1	2	3	4	5	6
1. Age (years)	27.68	8.41	–					
2. Relationship length (months)	64.71	76.89	.74***	–				
3. Attractiveness	5.02	1.02	.04	.00	–			
4. Status	5.06	1	.07	.11	–.12	–		
5. Liking/feeling	5.06	0.68	–.04	.03	–.12	–.19**	–	
6. Gender	–	–	–.14*	.03	–.49***	.38***	–.13*	–
7. NPI	18.62	7.48	–.32***	–.25***	–.24***	–.10	.10	.03

Note. NPI = Narcissistic Personality Inventory. *N* = 246. Gender: male = 0, female = 1.

\**p* < .05, \*\**p* < .01, and \*\*\**p* < .001.

In Block 2, age and relationship length were included. In Block 3, narcissism was added to the equation. Finally, in Block 4 the interaction term was included. Gender contributed significantly to the explanation of self-partner differences in attractiveness,  $R^2$  change = .24,  $F(1, 245) = 77.74$ ,  $p < .001$ . Age and relationship length did not contribute to the explanation of self-partner differences in attractiveness,  $R^2$  change = .00,  $F(2, 243) = .64$ ,  $p = .529$ . The NPI which was entered in the third block contributed significantly to the explanation of the dependent variable,  $R^2$  change = .06,  $F(1, 242) = 21.96$ ,  $p < .001$ . Finally, the increase in  $R^2$  was very small in the fourth block,  $R^2$  change = .00,  $F(1, 241) = .83$ ,  $p = .363$ . In summary, only gender and narcissism turn out to be reliable predictors of equity in attractiveness. More specifically, gender was negatively associated with attractiveness indicating that women perceived themselves as more attractive than their partners, a tendency which did not occur in men. Narcissism was also negatively related to attractiveness indicating that higher narcissism is associated with higher assessment of own inputs relative to that of the partner. Following Ozer (1985) the partial correlation is used as a measure of explained variance. Whereas gender explained 51% of the variance in attractiveness, narcissism explained an additional 13%.

## Study 2

The results of Study 1 are in correspondence with the hypotheses which were derived from the agentic model of narcissism. Study 2 was planned as a further test of the basic link between narcissism and equity in attractiveness after partialling out the effect of self-esteem. In accordance with earlier research we considered self-esteem as a construct which overlaps in meaning with the construct of narcissism. Campbell, Reeder, Sedikides, and Elliot (2000), Emmons (1984), and Rhodewalt and Morf (1995) have reported substantial positive correlations between narcissism and self-esteem. However, we assume that the influence of narcissism on the inflated assessment of one's own contributions is based on those facets of narcissism that are independent of self-esteem (cf. Campbell, 1999).

Therefore, the methodological requirement in the prediction of equity in attractiveness is to take into account the

common variance of narcissism and self-esteem. Note that we control statistically for the linear relationship between narcissism and self-esteem. We ask the question whether the association between narcissism and equity in attractiveness is statistically robust if self-esteem is included among the predictors of equity in attractiveness. The answer to this question is restricted by focusing on the linear relationships among the variables. This is in accordance with the large majority of earlier studies in this research area and has the advantage that we can employ powerful statistical tools to test the hypothesis. In correspondence with Study 1, the hypothesis of the link between narcissism and equity in attractiveness was tested by hierarchical regression analysis.

## Method

### Participants

Eighty-one participants (23 men and 58 women) were recruited through campus posters. Their mean age was 29 years (*Mdn* = 26 years). All participants lived in a partnership. About 46.9% lived together with their partner and 18.5% were married.

## Materials

### Personality Measures

The NPI and the Feelings of Inadequacy Scale (FIS) by Janis and Field (1959) were administered. For the NPI, the internal consistency was  $\alpha = .84$ . The FIS is a widely used measure of self-esteem. Whereas the original questionnaire includes 23 items, the German adaptation contains only 16 items (Example: "How often do you feel that you dislike yourself?"). Responses were obtained on a 5-point rating scale. For some items, the poles were labeled "never" to "very often," for others "generally no" to "very strongly." The 16 items in the German FIS refer to self-regard and self-confidence (cf. Fleming & Courtney, 1984). Because these dimensions of self-esteem are highly correlated, it is reasonable to treat the 16-item scale as a unidimensional measure of self-esteem. In correspondence with this reasoning, the internal consistency of the scale was good,  $\alpha = .87$ .

## Equity

The equity-in-attractiveness subscale of the multidimensional equity questionnaire was administered. The internal consistency of the scale was satisfactory,  $\alpha = .65$ .

## Results

### Descriptive Statistics

The mean of the NPI was  $M = 16.59$  ( $SD = 6.62$ ) and of the FIS  $M = 3.34$  ( $SD = 0.51$ ). The mean of equity in attractiveness was  $M = 4.89$  ( $SD = 0.94$ ). Gender and NPI were uncorrelated,  $r(77) = -.01$ ,  $p = .901$ . Whereas narcissism correlated significantly with equity in attractiveness,  $r(77) = -.36$ ,  $p < .001$ , the association of self-esteem and equity in attractiveness was not significant,  $r(77) = -.11$ ,  $p = .310$ . In addition, the linear correlation between self-esteem and narcissism was substantial,  $r(77) = .46$ ,  $p < .01$ . Applying the Curve Estimation routine in SPSS 14 indicates that nearly all of the systematic relationship between self-esteem and narcissism is due to the linear component,  $R^2 = .21$ , whereas the inclusion of the quadratic and cubic components adds very little,  $R^2$  change = .005.

### Narcissism and Equity in Attractiveness

The results of the hierarchical regression analysis were as follows. In Block 1 and Block 2, gender and age were entered. Gender turned out to be a highly significant predictor of attractiveness,  $R^2$  change = .21,  $F(1, 77) = 20.42$ ,  $p < .001$ . Women scored higher than men. Age was not significantly related to attractiveness,  $R^2$  change = .00,  $F(1, 76) = .30$ ,  $p = .584$ . In Block 3, self-esteem was added as a predictor,  $R^2$  change = .03,  $F(1, 75) = 3.0$ ,  $p = .087$ . In Block 4, narcissism was as expected a significant predictor of attractiveness,  $R^2$  change = .12,  $F(1, 74) = 13.35$ ,  $p < .001$ . Higher narcissism scores were associated with higher assessments of own attractiveness relative to the partner. In Block 5, the Gender  $\times$  Narcissism interaction was entered as a predictor,  $R^2$  change = .01,  $F(1, 73) = 1.63$ ,  $p = .205$ . In the final step, the two further two-way interactions and the three-way interaction were taken into account. These three predictors only minimally improved the prediction,  $R^2$  change = .04,  $F(3, 70) = 1.38$ ,  $p = .255$ . Whereas gender explained 48% of the variance in attractiveness, narcissism explained an additional 32% (cf. Ozer, 1985).

## Study 3

Whereas Studies 1 and 2 included mostly students, Study 3 targeted a population of couples who had been married for a long time. By including dyadic data it was possible to

disentangle actor and partner effects. More specifically, the design of the study allows for the examination of the distinctive contribution of actor narcissism and partner narcissism.

Individual data which were obtained in Studies 1 and 2 can be interpreted from different perspectives. It might be that – in correspondence with our hypothesis of a self-serving bias in fairness judgments – actor narcissism is positively related to equity in attractiveness as is suggested by the hypothesis. But it is also possible that the results are dependent upon partner narcissism or a combination of actor and partner narcissism indicating that interpersonal processes are at work. Including the data of both dyad members in the statistical analysis allows us to investigate the relative importance of actor and partner narcissism on equity perceptions. The analysis of the combined data of both dyad members may rule out the possibility that the self-serving bias in equity assessments is dependent on partner narcissism.

Another important advantage of dyadic data analysis is related to the pair correlation of equity in attractiveness. A substantial pair correlation of the dyad members indicates that their daily experiences have something in common which is reflected in their estimates. In the case of equity judgments a common daily experience is reflected in a negative pair correlation which indicates that if one dyad member expresses to be overbenefited, the other member indicates to be underbenefited. Therefore, it is expected that equity judgments of attractiveness of dyad members tend to be complementary. It is possible to obtain an adjusted measure on the pair level, which is represented by the partial intraclass correlation of equity in attractiveness between husbands and wives. The adjusted intraclass correlation controls for the effects of narcissism and gender. This adjusted estimate of pair correlation is derived from the Actor-Partner Interdependence Model (APIM; Kenny, Kashy, & Cook, 2006).

## Method

### Participants

Volunteers from introductory psychology classes obtained data from 102 parents who were recruited as couples. The data of 49 couples were complete and included in the statistical analysis. All participants were married, had children, and lived together with their partner. Their mean age was 51 years ( $Mdn = 51$ ), and their mean relationship length was 28.8 years ( $Mdn = 28$ ). Participants were on average married for 25.8 years ( $Mdn = 26$ ).

### Materials

The NPI and the multidimensional equity questionnaire were administered. The NPI once again proved to be a reliable measure of narcissism,  $\alpha = .83$ . Equity in attractiveness achieved a good internal consistency,  $\alpha = .80$ .

## Results

### Data-Analytic Strategy

The APIM was employed as the primary statistical tool. Specifically, this tool for multilevel analysis is included in SPSS 14. The analysis followed closely the suggestions by Kenny et al. (2006, pp. 158–162).

### Descriptive Statistics

The mean level of narcissism was relatively low,  $M = 13.22$  ( $SD = 6.00$ ).<sup>1</sup> Mean equity in attractiveness was  $M = 5.21$  ( $SD = 1.00$ ). The mean levels of equity in status and equity in liking/feeling were also nearly balanced,  $M = 5.12$  ( $SD = 1.28$ ) and  $M = 5.00$  ( $SD = 0.54$ ), respectively.

### Narcissism and Equity

Fixed effects for gender, actor narcissism, partner narcissism, and the Gender  $\times$  Actor narcissism interaction were evaluated. The results are summarized in Table 2. They indicate that gender and actor narcissism exerted independent influences on attractiveness. In addition, partner narcissism exerted no reliable influence on the dependent variable. Finally, gender did not moderate the association between actor narcissism and equity in attractiveness.

Next, on the basis of the covariance parameter estimates within APIM, the partial intraclass correlation of equity in attractiveness between husbands and wives was calculated. The couple correlation of the equity in attractiveness was significant,  $r(47) = -.32$ ,  $p < .05$ . After controlling the effects of actor and partner narcissism and gender, the correlation was  $-.38$ . Therefore, if one partner tended to feel underbenefited, the other partner tended to feel overbenefited.

## Discussion

Our theoretical framework for the understanding of narcissism as a determinant of equity judgments was based on the agency model of narcissism (Campbell et al., 2006). From the theoretical framework we derived the hypothesis that high narcissists tend to perceive their relationship as underbenefiting in terms of attractiveness to a greater extent than low narcissists. In correspondence with the hypothesis, the results of three studies consistently showed that narcissists see themselves as putting more into their romantic relationship than their partner in terms of attractiveness. They estimate the amount of own attractiveness to be higher in comparison to the amount of attractiveness contributed by the partner.

Table 2. Multilevel analysis of equity in attractiveness in Study 3

Predictor variable	Covariance parameter estimate	df	t	p
Gender	0.65	91	3.51	.001
Actor narcissism	-1.34	87	2.60	.011
Partner narcissism	0.04	87	0.08	.938
Gender $\times$ Actor narcissism	-0.13	74	0.28	.783

One alternative explanation of the link between narcissism and equity in attractiveness is that it is mediated by self-esteem. However, as the results of Study 2 indicate, narcissism remains a significant predictor of equity in attractiveness after self-esteem is additionally included among the predictors. It was the unique variance in narcissism which predicted the tendency to feel underbenefited in attractiveness. The narcissism-inequity link turns out to be a replicable result confirming the theoretical assumption that narcissists express a strong sense of entitlement.

One limitation of this study is related to the use of linear regression models. In our multiple regression approach only linear associations between variables are taken into account. This is in correspondence with earlier research and in accordance with our concern to disconfirm the alternative hypothesis that the linear relationship between narcissism and equity in attractiveness is due to the self-esteem component of narcissism. A curvilinear relationship between self-esteem and narcissism might, for example, occur if the association between self-esteem and narcissism is less pronounced in the middle range of self-esteem than in the more extreme ranges. But the results of the curve-fitting program indicate that the predominant part of the association between self-esteem and narcissism is linear, whereas only a very small part of the relation is based on the nonlinear component.

An interesting question relates to the issue whether the narcissism-inequity link is due to intrapsychic processes or interpersonal processes. If intrapersonal processes are involved, actor narcissism is significantly related to perceived inequity. If interpersonal processes are involved, partner narcissism exerts a significant influence on perceived inequity. The dyadic data analysis of Study 3 provides the answer to the question whether actor narcissism or partner narcissism or both determine equity assessments of attractiveness. The results of the APIM indicate that only actor narcissism, not partner narcissism, determines equity judgments. Therefore, the link between narcissism and equity in attractiveness turns out to be an intrapersonal, not an interpersonal phenomenon. This result supports our claim that the process of self-enhancement, which presumably is a distinctive feature of narcissists, may explain the link between narcissism and perceived inequity.

<sup>1</sup> Note that in correspondence with the results of Foster, Campbell, and Twenge (2003) narcissism scores in the older sample were lower than in the younger samples.

One important inference from the dyadic data analysis is that after controlling for the effects of narcissism and gender, equity assessments of dyad members are somewhat complementary. If one dyad member scores high on perceived equity of attractiveness, the other dyad member tends to score low. This result corresponds with the simple pair correlation, which is also significantly negative, although it is somewhat stronger.

Other empirical evidence is also in correspondence with the self-enhancement hypothesis. By biasing information processing in one's own interest, the narcissist can perceive him- or herself as being highly attractive, fulfilling his or her desire to be admired. In accordance with this self-regulation process, Jackson et al. (1992) reported that narcissism and the perception of a positive body image were positively associated for both men and women. Other research which shows that narcissists have a self-inflated view of their physical attractiveness (Gabriel et al., 1994) and that they are inclined to use a pattern of defensive attribution (Stucke, 2003) is also in agreement with our results. This evidence is supplemented by results which indicate that narcissistic people tend to feel that they are the "victim" of other people's transgressions more frequently than less narcissistic people (McCullough et al., 2003). Attractiveness seems to be an area where self-enhancement of narcissists flourishes because (a) it is highly relevant for narcissistic self-enhancement and (b) it constitutes a highly subjective judgment dimension which is easy to bias in a self-serving fashion.

A surprising result is the strong gender difference in perceived equity: Women claimed to invest more than men in terms of attractiveness. This finding corresponds with earlier findings that women in general feel more underbenefited in their relationship than men (VanYperen & Buunk, 1990). One explanation for these gender differences specifically concerning attractiveness follows from evolutionary psychology, which stresses the importance of good looks of women as mate selection criterion (Buss, 2000). The evolutionary perspective is also supported by results which show that physical attractiveness molds the partner choice of men more strongly than that of women (Buunk, Dijkstra, Fetchenhauer, & Kenrick, 2002; Feingold, 1990).

The link between narcissism and attractiveness is intriguing, and new empirical evidence indicates that it is a rich source of information for personality research (Buffardi & Campbell, 2008) as well as for the study of interpersonal processes (Vazire et al., 2008). Our research adds to this line of investigation showing that narcissism refers to intrapsychic processes which bias assessments of interpersonal entitlements. These results are consistent with past theory and research on narcissism, but go beyond past work by examining these processes in ongoing relationships. The dyadic data analysis indicates that the intrapersonal effect is decisive, not the interpersonal effect. In addition, assessments of entitlement seem to be rooted in daily experiences of the dyad members as is indicated by the substantial negative partial intraclass correlation of equity appraisals in pairs.

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