

## Interpersonal and Intrapsychic Adaptiveness of Trait Self-Enhancement: A Mixed Blessing?

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Reactions to trait self-enhancers were investigated in 2 longitudinal studies of person perception in discussion groups. Groups of 4-6 participants met 7 times for 20 min. After Meetings 1 and 7, group members rated their perceptions of one another. In Study 1, trait self-enhancement was indexed by measures of narcissism and self-deceptive enhancement. At the first meeting, self-enhancers made positive impressions: They were seen as agreeable, well adjusted, and competent. After 7 weeks, however, they were rated negatively and gave self-evaluations discrepant with peer evaluations they received. In Study 2, an independent sample of observers (close acquaintances) enabled a pretest index of discrepancy self-enhancement: It predicted the same deteriorating pattern of interpersonal perceptions as the other three trait measures. Nonetheless, all self-enhancement measures correlated positively with self-esteem.

In their influential paper, Taylor and Brown (1988) argued that positive illusions foster mental health. Since then, they and others have collected and reviewed a broad range of data affirming that position (e.g., Brown, 1991; Taylor & Armor, 1996; Taylor & Brown, 1994). Included among their three categories of positive illusions were *unrealistically positive self-evaluations*, the focus of this article.

Critics have disputed the adaptive value of unrealistically positive self-evaluations on theoretical grounds (Colvin & Block, 1994) as well as empirical grounds (Colvin, Block, & Funder, 1995; John & Robins, 1994; Shedler, Mayman, & Manis, 1993).<sup>1</sup> In a response, Taylor and Brown (1994) countered the critics' arguments by pointing to several critical differences, not only in operationalizing that form of illusion but also in operationalizing adaptive outcomes (see also Taylor & Armor, 1996).

An examination of the common methods of operationalizing unrealistically positive self-evaluations does reveal systematic differences between the supportive and critical literature. In the research marshaled to support the adaptiveness position (Taylor & Armor, 1996; Taylor & Brown, 1994), the recommended operationalization is the degree to which individuals rate themselves more positively than they rate others (e.g., Brown, 1986).

Following Taylor and Brown (1994), the label *self-aggrandizement* is used here to describe this tendency. In the critical literature, by contrast, the most common operationalization is the discrepancy on some evaluative dimension between self-ratings and those of knowledgeable observers: The label *self-enhancement* is used here for the tendency to overestimate one's positivity relative to a credible criterion (e.g., Colvin et al., 1995; John & Robins, 1994). This second approach is used in the present report to operationalize unrealistically positive self-evaluations.

Previous research with that operationalization has emphasized self-enhancement as a trait. Accordingly, the question of adaptive value has focused on determining whether trait self-enhancers enjoy more positive mental health than non-self-enhancers. In one set of studies using this operationalization, John and Robins (1994) measured the discrepancy between each participant's self- and observer ratings on a relatively unambiguous behavior, namely, performance in leaderless discussion groups. Self-enhancers were identified as those individuals with a positive self-rating after observer ratings were partialled out. These self-enhancers were subsequently rated as narcissistic by a group of trained observers.

Using several related operationalizations, Colvin et al. (1995) went further to demonstrate that individuals who self-enhanced (across a variety of personality items) were perceived negatively by trained observers across a range of personality and perfor-

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<sup>1</sup> They noted, for example, that the same self-report administration should not be used to identify both the self-enhancement and other characteristics of those self-enhancers. An association is predictable simply because all components of a questionnaire should show the same positive bias on the part of self-enhancers (Colvin et al., 1995, p. 1153; Yik, Bond, & Paulhus, 1998).

mance variables. In particular, the self-enhancers were seen as deceitful, hostile, and defensive.<sup>2</sup> Such negative impressions arose whether the observers were trained interviewers (Studies 1 and 2) or untrained observers viewing a videotaped debate (Study 3).<sup>3</sup>

Finally, Robins and John (1997b) reanalyzed their 1994 data to provide an "optimal adjustment" measure scored from ratings provided by five trained observers. Self-enhancers on performance (relative to ratings given them by group members) were rated by the observers as less well adjusted than either self-diminishers or accurates: The latter group comprised those whose self-rankings (1–6) were no more than 1 rank discrepant from the observer mean.

Together, these studies are consistent in suggesting that trait self-enhancement is maladaptive. That proposition is pursued in some detail in this report with a view to determining whether trait self-enhancement is invariably negative.

### Contrasting Criteria for Adaptiveness

Another reason for disputes about the adaptiveness of unrealistically positive self-descriptions may be a discrepancy in the preferred criterion for psychological health (e.g., Paulhus, Fridhandler, & Hayes, 1997; Smith, 1960). Among the most cited criteria are the tendency to (a) hold positive attitudes about oneself and (b) have positive relationships with others (e.g., Allport, 1960; Taylor & Armor, 1996). The *positive self-attitudes* criterion is described both as intrinsically adaptive (e.g., high self-esteem is good in itself) and as instrumentally adaptive (e.g., positive attitudes enable optimal task performance).

Although expert observers (in the studies cited above) rated self-enhancers negatively, peer participants may not agree. Note, for example, the Campbell and Fehr (1990) finding that outside observers are more critical than student peers who interact with a target individual. In fact, at least two studies with student peer-raters demonstrated *positive* reactions to self-enhancers. In these studies, judges were asked to rate their reactions to self-descriptions of individuals who self-promoted. Schlenker and Leary (1985) found that self-promoters were evaluated positively unless objective performance information directly contradicted the self-reports. Miller, Cooke, Tsang, and Morgan (1992) followed up this research to show that individuals who gave boastful self-presentations were rated as more competent (though less feminine and less socially involved) than individuals reporting the same positive information in less boastful terms. In short, peer perceivers may give self-enhancers the benefit of the doubt and evaluate them positively.

The literature as a whole, then, is inconsistent with regard to social perceptions of self-enhancers. Colvin et al. (1995) speculated that time course might be a moderator variable (p. 1160). That is, the self-promotion exhibited by self-enhancers may be well received in first impressions. But as interactions continue and vary in nature, this self-enhancing tendency may serve to alienate others. The present research directly addresses the time-course issue by evaluating peer impressions of self-enhancers over a series of meetings. Before hypotheses are offered, however, two well-established approaches to measuring self-enhancement must be reviewed.

### Trait Concepts of Self-Enhancement

Several previous lines of research have approached self-enhancement as a trait measurable with self-report questionnaires (for reviews, see Robins & John, 1997b; Paulhus, 1991). Three well-documented forms of trait self-enhancement will be considered here, namely, narcissism, self-deception, and impression management.

#### *Narcissism*

Self-enhancement has traditionally played a central role in diagnosing the narcissistic personality. This tendency arises naturally from the narcissistic character facets of superiority, entitlement, and self-admiration (Emmons, 1984). Indeed, the American Psychiatric Association's *Diagnostic and Statistical Manual of Mental Disorders* (1994; *DSM-IV*) definition includes as a defining characteristic the tendency to "exaggerate their accomplishments and talents" (p. 290). This self-enhancement, in turn, contributes to the narcissist's sense of entitlement. These concepts were incorporated in the Narcissistic Personality Inventory (NPI; Raskin & Hall, 1979), by far the most widely used measure of narcissism. A number of studies have demonstrated that this narcissistic self-enhancement is distinctive from but overlaps with (self-reported) self-esteem (Johnson, Vincent, & Ross, 1997; Raskin, Novacek, & Hogan, 1991a, 1991b).

In the study noted earlier, John and Robins (1994) confirmed the link between narcissism and self-enhancement by measuring both variables with a variety of accepted indicators. When aggregated measures of narcissism and self-enhancement were intercorrelated, a substantial association of .46 was obtained.

#### *Self-Deceptive Enhancement*

A second line of individual differences research originated in the tradition of measuring socially desirable responding in self-reports. Although the fear of self-enhancement in self-reports was long-standing, a clear distinction between self-deception and impression management awaited the chapter by Sackeim and Gur (1978), and only recently did a measure of self-deceptive enhancement (SDE) appear (Paulhus, 1988; Paulhus & Reid, 1991). The SDE scale items include "My first impressions about people are always right" and "I always know why I do things." Although the statements are arrogant to begin with, only extreme positive responses are counted. Thus, high scores on SDE suggest a form of rigid overconfidence. Subsequent research confirmed that the instrument does predict concrete distortions such as hindsight bias and overly positive self-descriptions (e.g., Hoorens, 1995; Paulhus, 1988).

There is reason to believe, despite the different labels, origins, and item content, that these two constructs—narcissism and

<sup>2</sup> These researchers compared self- and observer ratings on Q-set items. Both self- and observer ratings were weighted and aggregated by correlating them with a favorability prototype (Colvin et al., 1995, p. 1154). The discrepancy index was the difference between the Fisher-transformed versions of the self- and observer scores.

<sup>3</sup> These studies have been criticized in turn, particularly with regard to using difference scores as an individual-differences measure (Zuckerman & Knee, 1996).

self-deceptive enhancement—overlap substantially (McHoskey, Worzel, & Szyarto, 1998; Raskin et al., 1991a). In the studies presented here, we pursue this possibility by comparing the performance of the NPI and the SDE scale in predicting self-enhancement in a group setting.

### *Impression Management*

Although Raskin et al. (1991a) distinguished narcissism from socially desirable responding, the latter takes a number of forms that must be distinguished (Paulhus, 1986). Conceptually and empirically distinct from self-deception is *impression management*, that is, conscious manipulation designed to impress an audience (Baumeister, 1982; Leary, 1995; Schlenker, Britt, & Pennington, 1996). No doubt narcissists flaunt their assets publicly. But is their self-enhancement directed toward a public or private audience? To address this question in the present studies, we also included a standard measure of the public factor of desirable responding, namely, the Impression Management scale (Paulhus, 1991). A high correlation with this scale would suggest that self-enhancers are trying to impress public audiences with their good character.

### Indexes of Discrepancy Self-Enhancement (DSE)

In addition to questionnaire measures of self-enhancement, the studies in this report include discrepancy-based indexes similar to those used by Colvin et al. (1995) and John and Robins (1994). This operationalization—the degree to which a self-rating is more positive than the criterion—has the distinct advantage of being a face-valid indicator of self-enhancement. It indicates a rift between an individual's self-perception and a more credible index of reality. High scores on such discrepancy measures predict positive self-ratings (Monts, Zurcher, & Nydegger, 1977; Yik, Bond, & Paulhus, 1998) but negative ratings on evaluations by an independent set of observers (Colvin et al., 1995; Frenkel-Brunswick, 1939; John & Robins, 1994; Robins & John, 1997b).

In the present Study 1, discrepancy self-enhancement was measured as the degree to which each participant's self-rated performance exceeded the mean rating he or she received from fellow group members. In Study 2, a pretest measure of discrepancy self-enhancement was added: This version indexed the discrepancy between self-rated personality evaluations and corresponding ratings by close acquaintances. A simultaneous study of the five operationalizations reviewed above permits an evaluation of the degree of convergence of questionnaire and discrepancy methods of identifying self-enhancers.

### Study 1

In Study 1, we examined the ability of two trait self-enhancement measures to predict discrepancy self-enhancement over a series of discussion group meetings.<sup>4</sup> Our procedure extended previous research in two ways. First, measurement of self-observer discrepancies at two points in time permitted an evaluation of the time course of self-enhancement. Second, questionnaire measurement of self-enhancement was extended to include the Self-Deceptive Enhancement scale and the Impression Man-

agement (IM) scale as well as the NPI. Third, for comparison purposes we also included trait measures of personal adjustment (i.e., self-esteem and ego resiliency). Finally, a variety of self- and observer ratings were collected at two points in time to provide initial as well as final impressions of each participant's interpersonal qualities.

These ratings were collected in the context of small, leaderless discussion groups. Twenty-four groups of 4–5 participants each (initially strangers) met weekly for a total of 7 weeks. Prior to group assignment, participants completed a personality inventory that included several measures of trait self-enhancement. After Meetings 1 and 7 (hereafter known as Time 1 and Time 2), group members rated each other and themselves on performance in the group, adjustment, and the Big Five personality traits.

### *Hypotheses*

#### *Hypothesis 1*

Trait self-enhancement will predict discrepancy self-enhancement at Time 2. By Time 2, our participants had interacted for almost 2.5 hr—similar to the acquaintance level studied by John and Robins (1994).<sup>5</sup> Using the NPI as a measure of trait self-enhancement, they found a .30 association with discrepancy self-enhancement. Paulhus (1988) reported a similar finding with the SDE scale. Those findings should replicate at Time 2. A prediction for Time 1 is not specified because such a short period of acquaintance has never been studied.

#### *Hypothesis 2*

Trait self-enhancers will create positive observer impressions at Time 1. This hypothesis is based partly on the above evidence that short-term performance advantages are conferred by trait self-enhancement (Johnson, 1995; Paulhus, 1988; Robins & Beer, 1997). Moreover, audience reactions to self-enhancers tend to be positive when the audience cannot distinguish boasting from accurate positive self-descriptions (Miller et al., 1992).

#### *Hypothesis 3*

Trait self-enhancers will create negative observer impressions at Time 2. Several studies cited above found that self-enhancers receive negative evaluations after judges have some familiarity with the targets (e.g., Colvin et al., 1995, Studies 1 and 2; Robins & John, 1997b).

#### *Hypothesis 4*

High scorers on measures of personal adjustment will draw positive reactions at both Time 1 and Time 2 for both self- and

<sup>4</sup> Although this report has only one author, the contributions of several others to the data collection are acknowledged by use of *we*.

<sup>5</sup> Here the level of acquaintance followed the standard assessment used by the Institute for Personality Assessment and Research (12 assessors meet for 10 hr with 12 assesseees). The estimated amount of interaction of each participant with each other participant is about 2 hr, but there is no control on previous acquaintanceship. The trained observers were initially strangers but interacted with each participant for roughly .5 hr one-on-one and another 2.5 hr observing.

observer impressions. This hypothesis is based on earlier findings that truly well adjusted individuals show adaptive responses in the short run and long run (Block & Block, 1980; Johnson et al., 1997; Rosenberg, 1965). Such individuals are generally rated as likable (Block & Robins, 1993), with the exception of egotistical self-esteem under threat (Baumeister, Smart, & Boden, 1996).

## Method

### Participants

Participants were 124 students, 44 male and 80 female, enrolled in a third-year psychology course at a large Canadian university. After the course was completed, they were asked if their data could be analyzed for research purposes. All agreed.

### Instruments

*Trait measures.* The pretest package included two direct measures of trait self-enhancement, one measure of impression management, and two measures of personal adjustment.

The NPI (Raskin & Hall, 1981) is a well-validated measure of narcissism. The 40-item forced choice version that we used shows strong convergent validity with clinical judgment (John & Robins, 1994).

The Balanced Inventory of Desirable Responding (BIDR; Paulhus, 1988, 1998) is a 40-item, 7-place, Likert-rated measure comprising two subscales: (a) the Self-Deceptive Enhancement scale (20 items), designed to tap overly positive self-evaluations that the respondent actually believes, and (b) the Impression Management scale (20 items), designed to tap self-enhancement targeted at an audience. Note that IM scores, but not SDE scores, are responsive to faking (Paulhus, Bruce, & Trapnell, 1995). The intercorrelation of the SDE and IM scales ranges from .20 to .35 (Paulhus, 1991).

Consistent with the reasoning that these styles represent systematic exaggeration of evaluative information, only extreme responses (i.e., 6 or 7, after rekeying) are scored. Paulhus (1991) reviewed empirical support for the reliability and validity of the two scales in measuring individual differences in characteristic self-presentational styles.

Two other pretest measures were included to tap participants' personal adjustment. Rosenberg's (1965) Self-Esteem Scale is the single most widely used measure of personal adjustment. The concept centers on global self-worth as typified by items such as "On the whole, I am satisfied with myself." The second measure, Block's (1989) Ego-Resiliency Scale, was designed to measure resourceful adaptation to everyday stressors. Sample items are "I enjoy dealing with new and unusual situations" and "I get over my anger reasonably quickly." The instrument's construct validity was reviewed by Block and Kremen (1996).

*Self- and peer ratings.* After Meetings 1 and 7, participants rated all their group members on three unipolar 15-point items related to performance in the group meetings ("contributed to group goals," "effective," and "performed well") and four others related to adjustment ("is well-adjusted," "is happy," "likes self," and "is mentally healthy").

Included in the same rating package were 15 bipolar items designed to assess the Big Five personality traits (McCrae & Costa, 1987). Thus, each dimension was assessed by three items. For example, Extraversion was measured with the items ranging from talkative to quiet, spontaneous to cautious, and friendly to aloof.

### Procedure

Prior to being assigned to groups, all participants completed a package of trait questionnaires. Next, participants were organized into 24 groups:

16 of the groups had 5 members, the remaining 11 groups had 4 members. Group assignments were random with the constraint of heterogeneity with regard to gender and ethnicity. The groups met weekly for 20 min over 7 consecutive weeks. Participants were requested to avoid interaction with fellow group members outside of official meetings. No instructions were given regarding leadership within the groups, but weekly instructions advised specifically that each individual was to participate in the meeting.

Before each meeting, a discussion topic or task was assigned. Topics had been selected to encourage interaction with class readings and lecture topics and to provide opportunity for a variety of personality dimensions to be brought into play. The topics, in chronological order, were descriptions of family's/friend's personality, verbal and quantitative problem solving, positive and negative qualities of the self, worries and concerns, creative and absorbing experiences, social issues, and Allport's characteristics of well-adjusted persons.

After completing Meetings 1 and 7, participants were given a rating sheet in an envelope and were asked to return the completed sheet to the instructor, sealed in the envelope, at the next class session. The sheets asked the participants to rate the behavior during that meeting of each member of the discussion group, including themselves, on a variety of 15-point scales. No ties were allowed; that is, no two members were to be assigned the same number on any one scale.

## Results

### Trait Measures

The alpha reliabilities were .78, .70, and .83 for the NPI, the SDE scale, and the IM scale, respectively.<sup>6</sup> The first two measures were correlated .50 (.67, if disattenuated). In addition, the pattern of relationships observed in this and other studies suggests that, despite the different labels, the NPI and the SDE scale tap highly overlapping trait constructs. For this reason, the two self-enhancement measures were standardized and combined for subsequent analyses to yield a composite measure labeled *trait self-enhancement*. In comparison with the larger NPI-SDE correlation, the IM scale showed only modest correlations (.18 and .23) with the NPI and the SDE scale, respectively.

Alphas for the Big Five traits were as follows: Extraversion (.88), Agreeableness (.80), Conscientiousness (.85), Emotional Stability (.87), and Openness to Experience (.88). Finally, the Rosenberg Self-Esteem and Ego-Resiliency Scales showed satisfactory alphas of .82 and .83, respectively. The latter were highly intercorrelated (.63), but their correlations with the trait self-enhancement composite were lower (i.e., .41 and .40 with the Rosenberg Self-Esteem and Ego-Resiliency Scales, respectively).

### Performance and Adjustment Ratings

When combined, the three performance items formed an index with alpha reliabilities of .72 and .74 at Times 1 and 2, respectively. Overall, the self mean (10.1) was significantly higher than the peer mean (9.2),  $t(122) = 3.03$ ,  $p < .01$ , and 60 percent of the participants gave themselves a higher rating than they received. The adjustment index, composed of four

<sup>6</sup> Sex differences were neither strong nor consistent. Accordingly, only the pooled results are reported.

items, showed alpha reliabilities of .68 and .75 at Times 1 and 2, respectively.

### Discrepancy Self-Enhancement Based on Group Ratings

The discrepancy measure of individual differences (DSE) required comparing each participant's self-rating on performance with the corresponding mean rating received from his or her peers. Following John and Robins (1994), we computed the self-rating residual after partialing out the mean peer rating. Separate values were calculated at Time 1 and Time 2: Their intercorrelation was only .14, *ns*.

### Predicting Discrepancy Self-Enhancement From Trait Self-Enhancement

Table 1 provides the correlations of our trait measures of self-enhancement with our discrepancy measure of self-enhancement (DSE) at both Time 1 and Time 2. Note that at Time 2, the correlation of the NPI with DSE was .33, a figure very close to that obtained by John and Robins (1994). The SDE scale showed a similar predictive power.<sup>7</sup> After these two predictors were combined into a trait self-enhancement index, the relationship was impressive ( $r = .40, p < .01$ ). Similar predictions from the Rosenberg Self-Esteem and Ego-Resiliency Scales were positive but not significant.

At Time 1, in sharp contrast, none of the trait measures showed significant prediction of discrepancy self-enhancement. To help interpret this pattern, the pattern of personality impressions at Time 1 and Time 2 was examined.

### Peer-Reactions to Self-Enhancers

Table 2 provides the correlations of the trait measures with peer ratings of personality, adjustment, and performance. Note that the Big Five dimension of Neuroticism has been reverse-scored and labeled Emotional Stability. As a result, all the criterion rating dimensions are now coded in the socially desirable direction.

Table 1  
Study 1: Correlations of Trait Measures With Discrepancy Self-Enhancement (DSE)

Trait measure	Time 1	Time 2	Significance of change ( <i>p</i> )
Self-Deceptive Enhancement (SDE) scale	-.09	.30	.02
Narcissistic Personality Inventory (NPI)	-.13	.33	.02
Trait self-enhancement <sup>a</sup>	-.05	.42	.01
Impression Management scale	.05	-.14	<i>ns</i>
Ego-Resiliency Scale	.07	.20	<i>ns</i>
Rosenberg Self-Esteem Scale	.16	.22	<i>ns</i>

Note.  $N = 124$  participants in 24 groups. DSE is indexed by self-rated performance in group meetings residualized on performance rated by other group members. Self-esteem is partialled out of all four self-enhancement measures. All calculations are one-tailed.

<sup>a</sup> Composite of SDE and NPI.

Consider first the correlates of trait self-enhancement. The NPI and the SDE scale showed very similar results. Hence, the composite is discussed. The general pattern is positive correlations at Time 1 and negative correlations at Time 2. In other words, self-enhancers made a better impression than non-self-enhancers in the first meeting. By the seventh meeting, however, the reverse was true. Significance tests of differences in dependent correlations were conducted (Steiger, 1980) and revealed significant reversals for the correlations of the trait self-enhancement index with Agreeableness, Stability, Performance, and Adjustment.

Note that the pattern of correlates for personal adjustment is rather different. Both self-esteem and ego resiliency showed positive correlations with positive attributes at both points in time. In other words, participants high in personal adjustment made positive first impressions and were able to sustain them across 7 weeks.<sup>8</sup>

## Study 2

Study 2 was designed to replicate and extend the results of Study 1. Following earlier researchers (Colvin et al., 1995; Frenkel-Brunswick, 1939; Monts et al., 1977), we sought to develop a trait measure of self-enhancement based on a discrepancy index of overly positive self-evaluations. Although a discrepancy index was constructed in Study 1, it was considered to be a dependent variable because it fluctuated across time as group members became better acquainted. Instead, we needed observers who were already well acquainted with the participant. Therefore, before the main part of the study, we collected personality ratings from two close acquaintances of each participant. These criterion ratings could then be compared with the self-ratings from the pretest self-report package to construct a trait DSE score.

Another question raised by the results of Study 1 is why self-enhancers occasion such negative attitudes at Time 2. Their self-admiration and sense of entitlement may be the source. But other research suggests that NPI narcissists have an interpersonal style characterized by a competitive and domineering social presence (Morf & Rhodewalt, 1993), which may be increasingly offensive over time. To clarify the nature of these negative interpersonal reactions, a number of specific personality ratings were examined.

## Method

### Participants

In partial fulfillment of course requirements, an intact third-year undergraduate personality class served as participants. The class comprised

<sup>7</sup> Partialing IM scores out of these correlations had no appreciable effect.

<sup>8</sup> The possibility that differences across groups might have created the dispositional correlations was considered. For each predictor and criterion in Tables 1 and 2, 23 dummy variables were created to represent membership in the 24 groups as well as 23 variables representing the interaction between group membership and the predictor. Out of 3,680 significance tests, only 169 were significant at the .05 level. Because 184 would be expected by chance, I concluded that group differences did not make any substantial contribution to these results.

Table 2

Study 1: Correlations of Trait Measures With Peer Ratings at Time 1 and Time 2

Trait measure	Peer ratings by fellow group members						
	Big Five traits						
	Extraversion	Agreeableness	Conscientiousness	Emotional Stability	Openness to Experience	Performance	Adjustment
Self-Deceptive Enhancement scale	.30/.23	.18/-.20	.15/.04	.15/-.06	.20/-.03	.30/-.07	.24/-.05
Narcissistic Personality Inventory	.35/.25	.24/-.16	.15/-.08	.19/-.05	.20/.13	.33/-.01	.30/-.08
Trait self-enhancement	.35/.27	.25/-.21	.20/.04	.20/-.12	.28/.00	.35/-.10	.36/-.11
Impression Management scale	-.06/-.10	.11/.25	.10/.21	-.09/.01	-.07/.15	.11/.14	-.04/-.09
Ego-Resiliency scale	.31/.27	.11/.21	-.04/.12	-.02/.14	.23/.33	.24/.23	.22/.29
Rosenberg Self-Esteem scale	.17/.17	.11/.19	.17/.15	.16/.14	.22/.30	.25/.28	.26/.26

Note.  $N = 124$ . Value at Time 1 (Week 1) is before the slash; value at Time 2 (Week 7) is after the slash. Correlations exceeding .23 are significant at  $p < .01$ , two-tailed test; correlations exceeding .17 are significant at  $p < .05$ , two-tailed test.

89 students (34 male; 55 female). After the course, participants were asked if their data could be used for research purposes. All agreed.

### Instruments and Procedure

The instruments were similar to those of Study 1, with two additions. All participants were asked to complete the NEO Five Factor Inventory (NEO-FFI; Costa & McCrae, 1989) 2 weeks before the 16 groups were created randomly. The NEO-FFI is a well-validated measure that shows high associations with peer ratings and behavioral measures. Though the inventory is relatively short (twelve 5-point items), each domain score is highly reliable.

In addition, participants took home two envelopes, each containing a copy of the NEO-FFI with instructions for two close acquaintances to rate the participant. Acquaintances were to complete the NEO-FFI privately (away from the participant) and mail it back to research lab in the stamped envelope. On both measures, participants placed their ratings on 5-point scales ranging from *very low* (1) through *very high* (5) on the appropriate dimension.

### Additional Peer Ratings

Study 1 included 22 rating items to tap the Big Five dimensions, task performance in the meetings, and adjustment. In Study 2, an additional 8 items were included in the Time 1 peer ratings to tap a range of variables related to social and intellectual skills. Participants made their ratings on 15-point scales ranging from *very low* (1) through *very high* (15). A final addition to the Time 2 ratings was a set of 7 items designed to gauge the interpersonal and adjustment facets of the self-enhancer's interpersonal style (e.g., "arrogant," "tends to brag").

## Results

### Self-Report Trait Measures

The alpha reliabilities were .80 and .68 for the NPI and the SDE scale, respectively.<sup>9</sup> The two measures were correlated .53 (.72, if disattenuated). Again, the similarity of the pattern of relationships suggests that, despite the different labels, the NPI and SDE scale tap the same trait construct. Accordingly, those two self-enhancement measures were standardized and combined into a composite labeled *trait self-enhancement*.

In addition, the five self-report scales of the NEO-FFI showed satisfactory alpha reliabilities, ranging from .77 to .90. When

aggregated across the two raters, the peer-rating measures showed similar reliabilities. Finally, the 10-item Rosenberg Self-Esteem scale showed a satisfactory alpha of .82.

### Performance and Adjustment Measures

To represent performance in the group, we again formed a composite of three items ("contributed to group goals," "effective," and "performed well"). The alpha of the composite was .73 and .72 at Times 1 and 2, respectively. Adjustment was again indexed with the composite of four items: "is well-adjusted," "is happy," "likes self," and "is mentally healthy." The alpha of this composite was .80 and .71 at Times 1 and 2, respectively.

### Discrepancy Self-Enhancement

The data permitted the calculation of two discrepancy measures: One was based entirely on pretest data and was used as a predictor variable; the other was based on the group ratings and was used as a dependent variable (as in Study 1).

*Group-level DSE based on ratings after Meetings 1 and 7.* Overall, the self- and peer means on performance were 10.3 and 9.2, respectively, and 66% of participants gave themselves a higher rating than did their fellow group members. As in Study 1, we measured self-enhancement by the residual self-rated performance after partialing out the mean rating received from peers. Separate values were calculated at Time 1 and Time 2.

*Pretest DSE based on close-acquaintance ratings.* Two versions of the pretest DSE index were calculated. The first paralleled the weighted favorability index developed by Colvin et al. (1995). This version required favorability judgments of all 60 NEO-FFI items by an independent set of four raters. They responded on a 1 (*very favorably*) to 7 (*very unfavorably*) scale to the question "How favorably or unfavorably would you regard a person who possessed this trait?"

Self-favorability scores were then derived by correlating each participant's responses with the favorability prototype. The ac-

<sup>9</sup> Again, sex differences were neither strong nor consistent. Therefore, only the pooled results are reported.

quaintance favorability scores were derived the same way. Fisher's  $r$  to  $z$  transformation was then applied to both sets of correlations. Finally, the discrepancy index was formed by subtracting the acquaintance score from the self-score.

An alternative version of this index followed the self-enhancement calculations developed by Paulhus and John (in press). They recommended calculating five residuals, each created by partialing out the peer rating of a NEO-FFI factor from the corresponding self-rating score. The first principal factor was used to create a factor score for each participant representing that individual's tendency to self-enhance. The pattern of correlates was similar to that using the self-favorability scores. The second version is reported below because the results were slightly clearer.

### Predicting Group-Level DSE From Trait Self-Enhancement

As a whole, the pattern replicated that of Study 1. Table 3 includes the correlations of our two trait measures of self-enhancement with DSE at both Time 1 and Time 2. Note that at Time 2, the correlations of the NPI and the SDE scale with DSE are .30 and .26, respectively, figures very close to those obtained in Study 1. When these two predictors are combined into a trait self-enhancement index, the relationship is impressive ( $r = .39, p < .01$ ). Again self-esteem has a positive but nonsignificant association. At Time 1, none of the trait measures showed significant prediction of DSE.

### Peer Reactions to Self-Enhancers

Table 4 provides the correlations of the trait measures with peer ratings of personality, adjustment, and performance. Note that the Big Five dimension of Neuroticism has been reverse-scored and labeled Emotional Stability. As a result, all rating dimensions are coded in the socially desirable direction.

The correlates of trait self-enhancement were also similar to those in Study 1. The NPI and the SDE scale showed very similar results. The new trait measure, the pretest DSE, also showed very similar results to the NPI and the SDE scale. The

general pattern is positive correlations at Time 1 and negative correlations at Time 2. In other words, self-enhancers made a better impression than non-self-enhancers in the first meeting. By the seventh meeting, however, the reverse was true.<sup>10</sup> Significance tests of differences in dependent correlations (Steiger, 1980) revealed significant reversals in the correlations of the trait self-enhancement index with Agreeableness, Stability, Performance, and Adjustment. Again, self-esteem showed positive correlations with positive attributes at both points in time.

*ANOVA analysis of discrepancy measures.* Although the NPI and the SDE scale have a self-other rating-discrepancy notion built into the measure, the pretest discrepancy self-enhancement was constructed from separate self and acquaintance ratings. Therefore, the latter can be used to address the recent criticism of purely correlational tests on the basis that they do not reveal the pattern of self-other means (Zuckerman & Knee, 1996). Accordingly, an ANOVA was conducted using trichotomized versions of self- and close-acquaintance evaluations as independent variables. With rated adjustment as the dependent variable, interaction effects approached significance at both Time 1 and Time 2. The pattern of means was consistent with the correlational results; that is, the patterns were reversed in that positive self-other discrepancies predicted adjustment at Time 1 and maladjustment at Time 2.

The patterns were not clear enough, however, to address the question of curvilinear effects of self-enhancement (Baumeister, 1989; Robins & John, 1997b; Taylor & Armor, 1996). Instead, we divided participants on their pretest DSE scores to form groups of self-enhancers: 42 accurates (within .7 SDs of zero), 30 self-enhancers, and 17 self-diminishers. A one-way ANOVA on Time 2 adjustment was significant,  $F(2, 86) = 3.8, p < .05$ . The accurates were rated as significantly better adjusted than either the self-enhancers,  $t(71) = 2.8, p < .01$ , or the self-diminishers,  $t(58) = 2.1, p < .05$ . These results are consistent with those of Robins and John (1997b). Unfortunately, our sample size was not large enough to distinguish accurates from those self-enhancers who show an optimal margin of illusion (Baumeister, 1989).

### Specific Interpersonal Ratings

Recall that several additional peer ratings were collected—some at Time 1, some at Time 2, and some at both points in time. Correlations of trait self-enhancement with these ratings are shown in Tables 5 and 6.

In Table 5, the positivity of the correlates at Time 1 adds further support to the finding that self-enhancers created good impressions. The pattern of correlates clarifies the nature of these impressions by suggesting possible sources for the positive evaluations. At Time 1, self-enhancers were considered intelligent, confident, and entertaining. (The reaction was not a uniform halo, however, because self-enhancers were not seen as particularly wise or hardworking.) In short, group colleagues appear to enjoy their presence during this initial session.

Table 3  
Study 2: Correlations of Trait Measures With Group-Level Discrepancy Self-Enhancement (DSE)

Trait measure	Time 1	Time 2	Significance of change ( $p$ )
Pretest DSE	.10	.33	.09
Self-Deceptive Enhancement (SDE) scale	-.09	.26	.03
Narcissistic Personality Inventory (NPI)	-.00	.30	.03
Trait self-enhancement <sup>a</sup>	-.13	.35	.01
Rosenberg Self-Esteem Scale	-.12	.20	<i>ns</i>

Note.  $N = 89$  participants in 16 groups. Group-level DSE is indexed by residuals of self-rated performance regressed on performance as reported by other group members. Self-esteem is partialled out of all four self-enhancement measures.

<sup>a</sup> Composite of SDE and NPI.

<sup>10</sup> Consistent with Johnson et al. (1997), the negative correlations of self-enhancement with adjustment increased in size when self-esteem was partialled out. Self-enhancement and self-esteem appear to act as mutual suppressors in predicting interpersonal adjustment.

Table 4

Study 2: Correlations of Trait Measures With Peer Ratings at Time 1 and Time 2

Trait measure	Peer ratings by fellow group members						
	Big Five traits						
	Extraversion	Agreeableness	Conscientiousness	Emotional Stability	Openness to Experience	Performance	Adjustment
Pretest discrepancy self-enhancement	.28/.20	.20/-.18	.15/.06	.15/-.08	.18/.00	.30/.07	.16/-.23
Narcissistic Personality Inventory	.25/.21	.21/-.17	.19/.10	.13/-.01	.22/.02	.31/-.04	.30/-.17
Self-Deceptive Enhancement scale	.24/.20	.23/-.19	.15/.11	.13/-.05	.20/.03	.22/-.09	.27/-.11
Trait self-enhancement	.35/.28	.25/-.25	.21/.10	.24/-.10	.23/.00	.35/-.20	.35/-.22
Rosenberg Self-Esteem Scale	.21/.20	.17/.19	.13/.15	.23/.15	.22/.15	.30/.24	.28/.28

Note.  $N = 89$ . Value at Time 1 (Week 1) is before the slash; value at Time 2 (Week 7) is after the slash. Correlations exceeding .23 are significant at  $p < .01$ , one-tailed test; correlations exceeding .17 are significant at  $p < .05$ , one-tailed test. Self-esteem is partialled out of all four self-enhancement measures.

In Table 6, the peer ratings at Time 2 also suggest reasons for the diminished appeal of self-enhancers. They were perceived as overestimating their abilities, hostile, defensive, and tending to brag, though still not boring. Of the four items used at both times, the biggest change from Time 1 to Time 2 was on warmth (dependent  $t$  test,  $p < .01$ ). At both times, self-enhancers are seen as entertaining and confident.

### Discussion

This examination of self-enhancement recognizes the interplay of individual differences with group dynamics. Such an interactive approach is necessary to evaluate the interpersonal adaptiveness of trait self-enhancement. The methodology borrows directly from three recent reports on this topic (Colvin et al., 1995; John & Robins, 1994; Raskin et al., 1991a, 1991b), but that research was extended in at least two ways. First, the concept of trait self-enhancement was validated by demonstrating the convergence of three operationalizations: (a) self-peer evaluative discrepancies, (b) the SDE scale, and (c) the NPI.

Table 5

Study 2: Correlations of Three Trait Self-Enhancement Measures With Interpersonal Variables Rated by Peers at Time 1

Rating	NPI	SDE	Pretest DSE <sup>a</sup>
Confident	.25*	.20*	.25*
Entertaining	.33*	.30*	.36*
Warm	.16	.17*	.19*
Boring	-.23*	-.18*	-.21*
Intelligent	.23*	.25*	.23*
Physically attractive	.16	.16	.19*
Wise	.09	-.14	-.12
Hardworking	.09	.03	.11

Note.  $N = 89$ . NPI = Narcissistic Personality Inventory; SDE = Self-Deceptive Enhancement scale; DSE = discrepancy self-enhancement.

<sup>a</sup> Pretest DSE is the discrepancy between evaluative components of self and acquaintance-rated personality. Self-esteem is partialled out of all three self-enhancement measures.

\*  $p < .05$  (two-tailed).

And inclusion of conceptual relatives such as personal adjustment and impression management provided for a test of discriminant validity. Second, a comprehensive set of peer reactions to self-enhancers was collected at two points in time to provide initial as well as final impressions. I deal with the issue of individual differences first.

### The Construct Validity of Trait Self-Enhancement

A few years ago, Raskin et al. (1991a) speculated about a link between narcissism and self-deception as a trait. The present data supported this speculation in several ways. First, in two large-scale studies, standard measures of the two concepts, NPI and the SDE scale, respectively, showed substantial intercorrelations (see also McHoskey et al., 1998). Second, the patterns of correlates of the two measures were strikingly similar. This empirical linkage contributes to our understanding of both constructs.

Table 6

Study 2: Correlations of Three Trait Self-Enhancement Measures With Interpersonal Variables Rated by Peers at Time 2

Rating	NPI	SDE	Pretest DSE <sup>a</sup>
Confident	.27*	.20*	.19*
Entertaining	.09	.13	.16
Warm	-.22*	-.25*	-.19*
Boring	-.03	-.13	-.11
Arrogant	.35*	.25*	.25*
Tends to brag	.33*	.30*	.36*
Overestimates abilities	.23*	.25*	.23*
Supportive	-.09	-.14	-.12
Defensive	.11	.15	.19*
Hostile	.24*	.21*	.26*

Note.  $N = 89$ . NPI = Narcissistic Personality Inventory; SDE = Self-Deceptive Enhancement scale; DSE = discrepancy self-enhancement.

<sup>a</sup> Pretest DSE is the discrepancy between evaluative components of self and acquaintance-rated personality. Self-esteem is partialled out of all three self-enhancement measures.

\*  $p < .05$  (two-tailed).



For example, the fact that narcissistic behavior involves self-deception rather than impression management reinforces the findings of Raskin et al. (1991b); that is, narcissists are not exaggerating their talents merely to manipulate public impressions in a conscious way—they really believe they are superior. The resulting strength of self-confidence should result in firmer decisions and a self-evaluation that is resistant to persuasion (Robins & John, 1997a). At the same time, it entails an inflexible, dogmatic self-view that is vulnerable to shattering (Rhodewalt & Morf, 1995).

The nature of the SDE scale is also elucidated by linking it to narcissism. The former construct arose in the context of questionnaire response styles (Paulhus, 1986; Sackeim, 1983) but has now been provided with a more characterological base. Rather than indicating a temporary and localized bias that emerges only during the course of filling out questionnaires, the SDE scale taps a central component of character.

The present data also confirm the trait nature of the third member of the triad, that is, discrepancy-based self-enhancement. This index is a face-valid operationalization, consistent with previous research (Colvin et al., 1995; John & Robins, 1994; Robins & John, 1997a). Here, the index converged with the NPI and the SDE scale to confirm the conceptual overlap of the three constructs. This evidence that the tendency to self-enhance constitutes a trait is supported by previous research: In particular, Colvin et al. (1995) showed a substantial degree of rank-order stability over five years.

Note, however, that the discrepancy self-enhancement scores calculated at Time 1 correlated with neither the DSE at Time 1 nor the questionnaire trait measures. Therefore, our data dictate a caveat to this operationalization: To converge with other indicators of self-enhancement, DSE must use observer ratings from qualified raters, that is, those with at least a few hours of interactions with the target individuals.<sup>11</sup>

The possibility of a curvilinear relation of trait self-enhancement with adjustment was also evaluated. Whereas the first two measures (the NPI and the SDE scale) are designed to tap extreme self-enhancement, only the DSE can be examined for degrees of self-enhancement. Consistent with Robins and John (1997b), individuals with accurate levels of self-evaluation were rated as better adjusted than self-enhancers or self-diminishers. Unfortunately, our methodology was not powerful enough to assess the more provocative hypothesis that a mild degree of self-enhancement is optimal (Baumeister, 1989).

### *Self-Enhancement Versus Personal Adjustment*

Perceptions of self-enhancers contrasted in an interesting way with perceptions of those high in personal adjustment. Those scoring high on the Rosenberg Self-Esteem Scale are also known to have a self-enhancing interpersonal style (Baumeister & Tice, 1989), and they did show a certain degree of self-enhancement on our discrepancy indexes. Yet those high in personal adjustment were able to sustain positive reactions across 7 weeks. The difference may be a matter of moderation; that is, their self-enhancement paled in comparison with that of trait self-enhancers and may have exceeded the optimal level (Baumeister, 1989). Alternatively, it may be that self-report measures of adjustment inevitably include some degree of self-en-

hancement (Block & Thomas, 1955; Johnson et al., 1997). If so, self-enhancement should be partialled out or observer-rating measures of adjustment should be used in future research.

### *Adaptive or Not?*

I began this article by noting the arguments for and against the adaptiveness of positive illusions. The clear message from this confusion is that any global answer to the adaptiveness question will be inadequate. Accordingly, the scope of this article has been restricted to the narrower question of the adaptiveness of trait self-enhancement with respect to two operationalizations of adaptiveness: (a) positive self-attitudes and (b) harmonious interpersonal relations.

### *Intrapsychic Adaptiveness*

Self-enhancement appears to be adaptive with regard to the first criterion. Self-enhancers scored higher on self-reports of both self-esteem and ego resiliency. These results are consistent with previous research using self-aggrandizement as the operationalization of positive illusions (e.g., Brown, 1986). According to Taylor and Armor (1996, p. 883), the promotion of such positive attitudes has intrinsic as well as instrumental benefits.

One might argue, however, that it is precisely that component of self-evaluation free from self-enhancement that is intrapsychically adaptive. It is difficult to see how one could challenge the intrinsic benefits of the positive self-attitudes induced by self-enhancement. But claims about various instrumental benefits could be evaluated using the methodology in the present article to separate genuine self-esteem from the portion induced by self-enhancement (see also Johnson et al., 1997).

### *Interpersonal Adaptiveness*

Colvin et al. (1995) suggested that time course might be a critical moderating factor (p. 1156); that is, the interpersonal style of self-enhancers might be adaptive in the short run but maladaptive in the long run. We tested the time course hypothesis by collecting participant-observer impressions of the same participants across a 7-week series of meetings. Our use of random assignment and a longitudinal design has a distinct advantage over cross-sectional designs (see Paulhus & Bruce, 1992). Serious issues of selection bias are raised if one compares the reactions of well- and poorly acquainted observers (e.g., strangers vs. friends). Friends may react differently because of the special relationship with the target (see Fehr, 1996). Our methodology involved the same raters rating the same targets in the same context; only level of acquaintance and topic of conversation varied.

The data sustained the conjecture that time moderates the link between self-enhancement and adaptiveness: Positive initial perceptions deteriorated to negative perceptions within 2.5 hr. Exactly what happened is difficult to specify without on-line

<sup>11</sup> Recent research suggests two forms of self-enhancement: egoistic and moralistic (Paulhus & John, in press). It is the egoistic form that correlates with the NPI and the SDE scale.

videotapes (e.g., Gosling, John, Craik, & Robins, 1998). Among the possibilities is the speculation by Colvin and colleagues (1995) that self-enhancers might enjoy short-term benefits associated with temporary maintenance of self-esteem through self-promotional coping. This coping process may have given our self-enhancers an advantage over non-self-enhancers in the stressful context of a meeting with five strangers. While those about them were appearing anxious and cautious, the self-enhancers appeared confident and interesting.

On the other hand, a constant level of self-promotion could just as easily explain the reversal. In the first meeting, self-promotion could not be distinguished from self-disclosure because insufficient information was available to cast doubt on their claims (Miller et al., 1992; Schlenker & Leary, 1985). At some point during the seven meetings, however, the discrepancy between self-enhancers' claims and their actual behavior created negative impressions. Consistent with their definition as individuals with self-views discrepant from those of observers, self-enhancers would show no sensitivity to feedback from the group, thus gradually turning off their colleagues (Taylor & Armor, 1996).

Or, it may have been factors other than self-promotion that eventually offended others. After the positive reactions to their self-confident style wore off, colleagues of the self-enhancers may gradually have detected some of the negative attributes associated with narcissism. For example, they picked up the tendency to be arrogant, hostile, and defensive (Morf & Rhodewalt, 1993). Alternatively, examples of their self-absorption and entitlement tendencies may eventually have accumulated to an offensive level (Carroll, Hoeningmann-Stovall, & Whitehead, 1996). We find this enlightenment hypothesis most convincing because the pattern of final personality impressions matches exquisitely the attributes known to be associated with trait self-enhancement (Robins & John, 1997b).

Finally, it may be that the content of the later discussions was critical in turning the tide against self-enhancers. For example, when discussing "positive and negative self-qualities," their excessive self-promotion may have become more evident, thereby triggering the whole cascade of negative attributions. Or, the problem-solving session may have demonstrated unequivocally the discrepancy between self-enhancers' claims and their true abilities. Alternatively, the conflict created in the "social issues" topic may have created the stressful, competitive circumstances that trigger narcissistic derogation of others (see below).

### *A Curious Course of Impression Formation*

After this 7-week period of acquaintance (about 2.5 hr in contact), the impressions of self-enhancers provided by our group members bore a remarkable resemblance to the Q-sort profiles detailed by Colvin and colleagues (1995). Yet there is something noteworthy about the course of impression formation that could not have been detected without our two-phase assessment. Previous longitudinal studies of impression formation showed a straightforward pattern on the Big Five dimensions of personality; that is, impressions showed some accuracy after one interaction but became more accurate with increased acquaintance (Paulhus & Bruce, 1992; Paulhus & Reynolds, 1995). The present studies of self-enhancers show a rather dif-

ferent dynamic. Self-enhancers gave very positive impressions at Time 1 and rather negative impressions at Time 2. Rather than the typical primacy effect (a tendency to sustain initial impressions), an actual reversal of valence was observed. Rather than the usual pattern of building on a kernel of truth, the positive initial impressions had to be *unlearned* over time.

### *Contradiction With Colvin et al. (1995, Study 3)?*

Note that Colvin and colleagues did include one study of short-term reactions. Unacquainted coders rated the participant's behavior in a videotaped debate with a cross-sex partner. These coders had a similar reaction to self-enhancers: They were rated as bragging, irritable, hostile, and so forth. This negative first impression appears at odds with the positive first impressions reported by our group members.

Several possible explanations for the discrepancy might be offered. One is the difference in type of observer. Colvin and colleagues' (1995) observers were strangers observing a videotape. Our raters were participant-observers. It is known that stranger-observers tend to be harsher than participant-observers (Campbell & Fehr, 1990). Why they should be particularly harsh with self-enhancers, however, is not at all clear.

Another possible explanation for the discrepancy is the difference in social context. Their Study 3 was a debate: The authors speculated that this situation probably "evoked competitive, hostile, and narcissistic behaviors" (Colvin et al., 1995, p. 1158).<sup>12</sup> The topic of our first meeting was less likely to promote debate than some subsequent topics. Over the course of seven meetings, it is likely that enough conflict arose to allow our participant-observers to see the same dark side of self-enhancers that external observers of a debate could see immediately. Rather than a bizarre, artifactual sequence of events, the gradual process of acquaintanceship created in our meetings closely resembled that of many common social and business situations. Hence, I suspect that this dynamic sequence of reactions to self-enhancers has wide applicability.

If so, then Colvin and colleagues (1995) may have been premature in speculating that self-enhancers "manifest behaviors that are immediately detrimental to their social interactions" (p. 1159). Apparently, self-enhancers' interpersonal style does have a certain (albeit temporary) appeal. I suspect that the nature of the group setting is critical here. Our setting represents those where participants are thankful to have a member who can break the ice by being confident, clever, and entertaining.

### *Is Adaptiveness Unitary?*

In a recent review, my colleagues and I disputed the utility of arguing for or against the global adaptiveness of psychological defenses (Paulhus, Fridhandler, & Hayes, 1997). How likely is it, we asked, that any one trait or process will have outcomes that are positive in every sense of the word? Is it not more likely that every coping style yields a combination of positive and negative outcomes? There are too many criteria that can easily conflict with one another: short-term distress, long-term distress,

<sup>12</sup> This speculation is consistent with a recent conclusion that threatened egotism begets aggression (Baumeister, Smart, & Boden, 1996).

task performance, reproductive success, and so forth. In our view, the adaptiveness of a trait can be evaluated only locally—that is, one must specify the precise criterion as well as the specific point in time (Paulhus et al., 1997, p. 567).

Narcissism, in particular, has been described as a combination of adaptive and maladaptive elements (Kernberg, 1980; Rhodewalt & Morf, 1995; Robins & John, 1997b; Robins & Beer, 1997). Similar research on self-deceptive enhancement has revealed the same adaptive–maladaptive combination (Johnson, 1995; Johnson et al., 1997; Paulhus, 1991). Reactions to self-enhancers in the present studies exemplify, perhaps more than any previous research, the elusive nature of the concept of adaptiveness.

First of all, their high self-esteem scores confirmed that self-enhancers were adaptive with respect to the intrapsychic criterion of having a positive self-view (Taylor & Armor, 1996). Self-enhancement was also interpersonally adaptive in the short run. And, if the bulk of their social interactions are short-term, as they are in many vocations and avocations, then self-enhancers could lead rewarding and productive lives. Difficulties are most likely to arise over conflicts in their long-term relationships with coworkers, friends, and romantic partners.<sup>13</sup> Unless they make adjustments or pair up with complementary partners (see Fehr, 1996), their lives are likely to be characterized by chronic interpersonal conflict. Rather than uniformly adaptive or maladaptive, then, the tendency toward self-enhancement is best viewed as a mixed blessing.

<sup>13</sup> On the other hand, it is beneficial to have positive illusions about the actual relationship (Murray, Holmes, & Griffin, 1996).

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