From the top down:
Self-esteem and self-evaluation

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The affective model of self-esteem development assumes that: (a) self-esteem forms early in life in response to relational and temperamental factors; and (b) once formed, endows high self-esteem people with the ability to promote, protect, and restore feelings of self-worth. In this article, we use the model to examine the relation between self-esteem and self-evaluations, showing that one way high self-esteem people maintain feelings of self-worth is by claiming to possess socially valued qualities. We conclude by considering the implications of the affective model for understanding the nature and functions of self-esteem.

Self-esteem is one of psychology's most popular constructs. It is used as a predictor variable (some researchers study whether high self-esteem people think, feel, and behave differently than do low self-esteem people), an outcome variable (some researchers study how various experiences affect the way people feel about themselves), and a mediating variable (self-esteem needs are presumed to motivate a wide variety of psychological processes). The widespread appeal of self-esteem attests to its importance, but this popularity has had an undesirable consequence. Self-esteem has become a protean concept—so capable of changing form that its value is in risk of being undermined.

Out purpose in this article is to explore the nature and functions of self-esteem. We pay particular attention to the relation between self-esteem and the way people evaluate themselves in specific domains. To set the stage for this research, we begin by distinguishing three ways in which the term ''self-esteem'' is used.

Three meanings of self-esteem

Global self-esteem.   Self-esteem is most commonly used to refer to the way people characteristically feel about themselves. Many psychologists call this form of self-esteem, *global* self-esteem or *trait* self-esteem, as it is relatively enduring, both across time and situations. In the remainder of this paper, we will use the term ''self-esteem'' (without any qualifiers) when referring to this variable.

Attempts to define self-esteem have ranged from an emphasis on primitive libidinal impulses (Kernberg, 1975), to the perception that one is a valuable member of a meaningful universe (Solomon, Greenberg, & Pyszczynski, 1991). We take a decidedly less exotic approach and define self-esteem in terms of feelings of affection for oneself (Brown, 1993, 1998; Brown & Dutton, 1995). High self-esteem is characterised by a general fondness or love for oneself; low self-esteem is characterised by mildly positive or ambivalent feelings toward oneself. In extreme cases, low self-esteem people hate themselves, but this kind of self-loathing occurs in clinical populations, not in normal populations (Baumeister, Tice, & Hutton, 1989).

Self-evaluations.   The term ''self-esteem'' has also been used to refer to the way people evaluate their various abilities and attributes. For example, many scales designed to assess self-esteem include subscales for measuring academic self-esteem, social self-esteem, or athletic self-esteem (Harter, 1986; Marsh, 1990; Shavelson, Hubner, & Stanton, 1976). The terms ''self-confidence'' and ''self-efficacy'' have also been used to refer to these beliefs, and many people equate self-confidence with self-esteem. We prefer to call these beliefs *self-evaluations* or *self-appraisals*, as they refer to the way people evaluate or appraise their specific abilities and personality characteristics.

Feelings of self-worth.   Finally, self-esteem is also used to refer to rather momentary emotional states, particularly those that arise from a positive or negative outcome. This is what people mean when they speak of experiences that bolster their self-esteem or threaten their self-esteem. For example, a person might say her self-esteem was sky-high after getting a big promotion, or a person might say his self-esteem plummeted after a divorce. Following William James (1890), we refer to these emotions as *self-feelings* or *feelings of self-worth*. Feeling proud or pleased with ourselves (on the positive side), or humiliated and ashamed of ourselves (on the negative side) are examples of what we mean by feelings of self-worth.

Many researchers use the term *state self-esteem* when referring to feelings of self-worth (e.g., Butler, Hokanson, & Flynn, 1994; Leary, Tambor, Terdal, & Downs, 1995). This term implies that the essential difference between global

self-esteem and feelings of self-worth is that global self-esteem is more enduring. We disagree with this approach. In our mind, global self-esteem and feelings of self-worth are qualitatively different phenomena. To illustrate our thinking here, consider that most parents swell with pride when their children do something exemplary. But accomplishments of this sort do not change how much love parents feel for their children. The pride comes and goes, often in response to a particular event or achievement, but the love remains and is independent of whether something has or has not been achieved. This is how we think of the relation between global self-esteem and feelings of self-worth. Feelings of self-worth rise and fall in response to particular outcomes, but global self-esteem (or self-love) is enduring.

Relation among the three constructs

The theoretical distinction we have drawn regarding these uses of the term ''self-esteem'' raises the question of how they are related. Although several possibilities spring to mind, the research presented in this paper is guided by an affective model of self-esteem functioning (Brown, 1993, 1998; Brown & Dutton, 1995; Brown & Marshall, 2001; Dutton & Brown, 1997). In brief, the affective model assumes that: (a) self-esteem develops early in life in response to relational and temperamental factors; and (b) once formed, endows high self-esteem people with the ability to promote, protect, and restore high feelings of self-worth. This ability is particularly apparent when people confront negative outcomes, such as failure in the achievement domain or interpersonal rejection.

An investigation by Brown and Dutton (1995) provides some support for these assertions. In this investigation, high self-esteem participants and low self-esteem participants were randomly assigned to receive either success or failure feedback on an alleged test of their intellectual ability. Afterward, all participants completed an eight-item emotion scale. Four of the items assessed general feelings of happiness and sadness (happy, sad, glad, unhappy) and four of the items assessed feelings of self-worth (proud, pleased with myself, humiliated, ashamed). General feelings of happiness and sadness did not differ among the two self-esteem groups, but high self-esteem participants reported higher feelings of self-worth following failure than did low self-esteem participants. Along with other research (Brown & Marshall, 2001; Dutton & Brown, 1997), these results suggest that high self-esteem functions to promote and restore feelings of self-worth.

High self-esteem people use a variety of strategies to protect and rebuild feelings of self-worth (Brown, 1993, 1998). For example, rather than attributing failure to low ability, they are more apt to say they failed because of lack of effort or an ineffective strategy (Dutton & Brown, 1997). They also engage in selective social comparison processes, comparing themselves with others when

they are assured that the comparison will be favourable (Wood, Giordano-Beech, & Ducharme, 1999). Following in this tradition, the present research examines whether high self-esteem people also maintain high feelings of self-worth by adjusting their self-evaluations in ways that lead them to believe they possess socially desirable qualities (Baumeister, 1982; Brown & Smart, 1991; Dodgson & Wood, 1998). In more formal terms, we hypothesise that: (a) self-esteem influences self-evaluations; and (b) that self-evaluations influence feelings of self-worth. These hypotheses join the three uses of the term ''self-esteem'' we outlined earlier.

Overview of the present research

We conducted three investigations to test our hypotheses. In these studies, we experimentally varied the purported favourability of a trait, and examined whether self-esteem influences people's willingness to endorse that trait as self-descriptive. If, as we have claimed, self-esteem influences self-evaluations, we ought to find that high self-esteem people are more apt to say they possess a trait when it is described as desirable than when it is described as undesirable.

Before presenting this research, we think it's important to discuss the significance of the experimental manipulation of trait desirability. Previous research has established that self-esteem and self-evaluations are correlated (e.g., Marsh, 1986, 1993, Pelham, 1995). This correlation could arise because: (a) self-evaluations affect self-esteem; (b) self-esteem influences self-evaluations; or (c) some unknown, third variable, influences self-evaluations and self-esteem, without there being any causal link between them in either direction. By experimentally manipulating the desirability of the trait, we are able to test the viability of the second possibility. If self-esteem interacts with the purported desirability of a trait to influence trait endorsement ratings, we would be warranted in concluding that self-esteem (or some correlated third variable) influences self-evaluations.

EXPERIMENT 1:

If it's an important trait to have, ''I have it''

Our first experiment examined the links between self-esteem, attribute importance, and self-evaluations. The participants were told that the experiment concerned the measurement of a cognitive ability called integrative orientation. Some participants were told this ability was important; others were told it was unimportant. Participants then rated their integrative orientation ability. We anticipated that high self-esteem participants would be more inclined than low self-esteem participants to rate themselves more highly on the ability when it was described as being important.

METHOD

Participants

The participants were 103 University of Washington undergraduates. They participated in exchange for extra course credit and were drawn from the top and bottom thirds on Rosenberg's (1965) self-esteem scale. This ten-item scale is a popular and well-validated measure of global self-esteem (Baumeister et al., 1989; Rosenberg, 1979). Fifty-four participants were classified as having low self-esteem ($M = 16.69$); 49 were classified as having high self-esteem ($M = 27.78$).

Materials and procedure

The experiment used a 2 (Self-esteem) $\times$ 2 (Importance) experimental design. Participants were tested in small groups of two to four students, and were seated at a separate computer in such a way that they could not see one another's computer screens. All instructions and experimental materials were presented on the computer.

At the start of the experiment, participants learned that the experiment involved a problem-solving ability called integrative orientation. We described integrative orientation as an aspect of creativity, an ability to find creative and unusual solutions to problems. Using random assignment to conditions, approximately half the participants learned that integrative orientation was a very important ability to possess and the other half learned that psychologists were not sure whether the ability was important or not, although no use for the ability had yet been found. After receiving this information, participants indicated: (a) how important they thought it was to be high in integrative orientation ability ($1 = not\ at\ all$; $7 = very$); and (b) then rated their integrative orientation ability ($1 = very\ low$; $7 = very\ high$). After completing these items, the participants were informed that the experiment was over. They were then debriefed, thanked, and excused.

RESULTS AND DISCUSSION

We performed an initial analysis to determine whether the experimental manipulation of importance was effective. A 2×2 (Self-esteem $\times$ Importance) analysis of variance (ANOVA) on the importance question (''How important do you think it is to be high in integrative orientation?'') yielded a single main effect of importance, $F(1, 99) = 13.47$, $p < .001$. Participants in the high importance condition thought that integrative orientation was a more important ability ($M = 5.0$) than did participants in the low importance condition ($M = 4.16$).

We anticipated that the importance manipulations would alter participants' perceptions of whether or not they possessed the ability, with high self-esteem participants being most inclined to say that they had the ability when they

thought it was an important ability to possess. This proved to be the case. An ANOVA on participants' ability ratings produced significant main effects of self-esteem, $F(1, 99) = 16.39$, $p < .001$, and importance, $F(1, 99) = 11.11$, $p < .005$, as well as the predicted Self-esteem $\times$ Importance interaction, $F(1, 99) = 4.91$, $p < .05$.

The nature of the interaction can be seen in Figure 1. In accordance with predictions, high self-esteem participants rated their integrative orientation ability more highly in the high importance condition than in the low importance condition, $F(1, 99) = 15.40$, $p < .001$; low self-esteem participants tended to do the same, but the effect was not significant ($F < 1$). It was also the case that high self-esteem participants assumed that their ability was higher than did low self-esteem participants when the ability was regarded as important, $F(1, 99) = 19.63$, $p < .001$, but not when it was regarded as unimportant, $F(1, 99) = 1.68$, n.s. In effect, high self-esteem participants, but not low self-esteem participants, said: ''If it's an important ability to have, I have it''.

EXPERIMENT 2:

If I have it, it's important to have

Experiment 1 showed that high self-esteem people are particularly apt to lay claim to possessing an important attribute. Experiment 2 tests a parallel effect. In Experiment 2, we led some participants to believe they possessed a (fictitious) ability and then asked them to indicate how important it is to possess the ability.
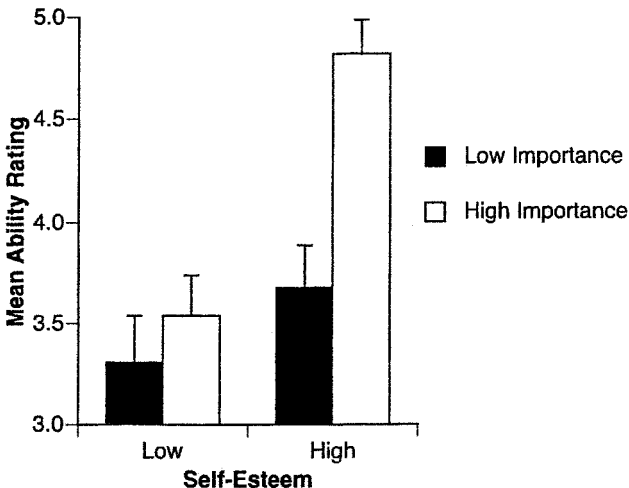

Figure 1. Mean ability ratings as a function of self-esteem and importance. (Error bars present standard error of the mean.)

We anticipated that high self-esteem participants would be especially apt to say: ''If I possess the ability, it's an important ability to possess''.

METHOD

Participants

The participants were 106 University of Washington undergraduates. They participated in exchange for extra course credit and were drawn from the top and bottom thirds on Rosenberg's (1965) self-esteem scale. Fifty-four participants were classified as having low self-esteem ($M = 17l.54$); 52 were classified as having high self-esteem ($M = 27.98$). The data from three other participants were discarded due to mechanical problems.

Materials and procedure

The experiment used a 2 (Self-esteem) $\times$ 2 (Ability) experimental design. As in Experiment 1, participants were tested in small groups of two to four students. All instructions and experimental materials were presented on the computer.

At the start of the experiment, participants learned that the experiment involved a problem-solving ability called integrative orientation. Instead of manipulating importance (as we had done in Experiment 1), we simply asked participants at this point to indicate how important they thought it was to be high in integrative orientation ability ($1 = not\ at\ all$, $7 = very$).

The experimental task was then introduced. This task was the Remote Associates Test (Mednick, 1962). With this task, participants were shown three words (e.g., car–swimming–cue) and asked to find a fourth word that relates to the other three (pool). Working interactively with the computer, participants completed three sample problems to ensure that they understood how the problems were solved.

Participants were then given 5 minutes to solve 10 problems. By varying the difficulty of the problems they received, some participants were able to solve many problems (high ability condition) and some were able to solve only a few problems (low ability condition). Difficulty level was determined on the basis of prior testing with an independent sample and on published norms (Brown & Dutton, 1995; MacFarlin & Blascovich, 1984).

After the allotted time for working on the test had expired, the computer paused for a moment and informed participants how many problems they had correctly solved. The participants then: (a) evaluated their performance; (b) rated their ability level; and (c) again indicated how important they thought it was for a person to be high in integrative orientation ability. Finally, the participants were informed that the experiment was over. They were then debriefed, thanked, and excused.

RESULTS AND DISCUSSION

Manipulation checks

Preliminary analyses indicated that the experimental manipulation was effective. In comparison with those who received difficult problems, participants who received easy problems: (a) solved more problems (Ms = 7.35 and 3.96, respectively); (b) evaluated their performance more favourably (Ms = 6.60 and 3.69, respectively); and (c) rated themselves higher in integrative orientation ability (Ms = 6.18 and 4.06, respectively; all ps < .001). There were no Ability × Self-Esteem interactions (all Fs < 1).[1]

Main analyses

To determine whether the experimental manipulations altered participants' perceptions of the importance of their integrative orientation ability, we performed a 2 × 2 × 2 (Self-esteem × Ability × Time: Pre-test Post-test) ANOVA, with pre-test and post-test ratings of importance as a repeated measure. Two effects reached significance: A main effect of time, $F(1, 102) = 62.71$, $p < .001$, and the predicted three-way interaction, $F(1, 102) = 4.77$, $p < .05$. The easiest way to understand this interaction is to examine the bottom row of Table 1. These change scores indicate that high self-esteem participants came to believe the ability was more important when they had been led to believe they possessed it than when they believed they lacked it, $t(102) = 2.39$, $p < .05$; low self-esteem participants tended to do the opposite, but the effect did not approach significance ($t < 1$). Further analyses showed that the two self-esteem groups did not differ when they were led to believe they lacked the ability ($t < 1$), but high self-esteem

TABLE 1
Mean pre-task and post-task importance ratings as a function of self-esteem and the experimental manipulation of ability as high or low: Experiment 2

	Low self-esteem		High self-esteem	
	High ability	Low ability	High ability	Low ability
Pre-task rating	4.06	4.07	4.32	4.40
Post-task rating	4.74	4.96	5.58	4.92
Change	0.68	0.89	1.24	0.53

Note: Values can range from 1 to 7.

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[1] The only effect of self-esteem was a main effect of self-esteem on ability ratings. Across experimental conditions, high self-esteem participants claimed to have higher ability than did low self-esteem participants (Ms = 6.2 and 4.05, respectively), $F(1, 102) = 9.34$, $p < .001$.

participants tended to believe the ability was more important than low self-esteem participants when they believed they possessed it, $t(102) = 1.86$, $p < .07$. In effect, high self-esteem participants, but not low self-esteem participants, said, ''If I have the ability, it's an important ability to have''.[2]

EXPERIMENT 3:

If it's desirable to possess, I possess it

To this point we have seen that high self-esteem people: (a) claim to possess an important trait; and (b) inflate the importance of traits they possess. We believe these judgements represent an affect-management strategy, whereby high self-esteem people arrange their self-evaluations to produce, maintain, and restore high feelings of self-worth. One way to test this hypothesis is to examine how trait endorsement decisions are influenced by threats to feelings of self-worth. If, as we have argued, high self-esteem people use self-evaluations to promote feelings of self-worth, their tendency to do so should be particularly evident following an experience that undermines their feelings of self-worth, such as interpersonal rejection or failure at an achievement-related task.

   We examined this hypothesis in Experiment 3 by modifying a procedure developed by Kunda and Sanitioso (1989). We presented participants with four traits of ambiguous desirability (e.g., cautious, methodical). Half the participants were told that the traits were desirable; the other half were told that the traits were undesirable. Independently, half the participants had just succeeded on the experimental task used in Experiment 2; the other had just failed. Finally, the participants indicated to what extent they thought the traits described them. Assuming that self-enhancement needs are stronger following a threat to self-worth (Brown, Collins, & Schmidt, 1988; Brown & Gallagher, 1992; Brown & Smart, 1991), and that self-evaluations reflect motivated needs to promote feelings of self-worth, we expected that high self-esteem participants would be most inclined to offer self-aggrandising self-evaluations after failure.

METHOD

Participants

The participants were 64 University of Washington undergraduates, participating for extra course credit. Using the same selection criteria as in the previous two experiments, 36 of the participants had low self-esteem ($M = 18.03$) and 28 had high self-esteem ($M = 27.54$).

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[2] Another way to analyse these data is to use pretask importance scores as a covariate in a 2×2 (Self-esteem $\times$ Ability) analysis of covariance. This analysis produced a significant Self-esteem $\times$ Ability interaction, $F(1, 101) = 4.75$, $p < .05$, and the adjusted scores revealed a pattern of results comparable to those reported in Table 1.

Materials and procedures

The experimental procedure was similar to that used in Experiment 2 with one exception. After learning how they had performed on the experimental task, the participants were shown a list of four traits (cautious, methodical, single-minded, strong-willed). Preceding the list was a brief paragraph describing the traits as desirable or undesirable. The specific wording read:

> The following are desirable (undesirable) qualities for a person to possess. Indicate to what extent you think these desirable (undesirable) attributes describe you.

The participants then rated the self-descriptiveness of each trait using 9-point scales (1 = *not at all*, 9 = *extremely*). When they had finished making their ratings, they signaled the experimenter to indicate that they were through. They were then debriefed, thanked, and excused.

RESULTS

As in Experiment 2, participants who received easy problems: (a) solved more problems; (b) evaluated their performance more favourably; and (c) rated themselves higher in integrative orientation ability than did those who received difficult problems (all $ps < .001$).

To test our main hypothesis, scores on the four traits were averaged to create a self-evaluation index and were then analysed by means of a $2 \times 2 \times 2$ (Self-esteem × Test Performance × Trait Desirability) ANOVA. The ANOVA revealed main effects of Test Performance, $F(1, 56) = 5.56$, $p < .05$, a Self-esteem × Test Performance interaction, $F(1, 56) = 4.20$, p .05, and a higher-order Self-esteem × Test Performance × Trait Desirability interaction, $F(1, 56) = 4.25$, $p < .05$.

Table 2 presents the means relevant to interpreting the higher-order effect. As can be seen, high self-esteem participants, but not low self-esteem participants,

TABLE 2
Self-evaluations as a function of self-esteem, test performance, and
trait desirability: Experiment 3

	Low self-esteem		*High self-esteem*	
	Success	*Failure*	*Success*	*Failure*
Desirable	6.14	5.81	6.70	6.38
Undesirable	5.85	6.00	6.69	4.44
Difference	0.29	−0.19	0.01	1.94

Note: Values can range from 1 to 9.

responded to failure by denying that undesirable traits described them. Simple effects analyses revealed a Test Performance × Trait Desirability interaction for high self-esteem participants, $F(1, 56) = 5.46$, $p < .05$, but not for low self-esteem participants ($F < 1$). Additional analyses revealed a Self-esteem × Trait Desirability interaction following failure, $F(1, 56) = 6.63$, $p < .05$, but not following success ($F < 1$). Finally, the mean for high self-esteem participants in the failure/undesirable trait condition ($M = 4.44$) was significantly different than all of the other group means (all ps $< .05$).

RESULTS AND DISCUSSION

The findings from Experiment 3 provide evidence that high self-esteem people arrange their self-perceptions to promote positive feelings of self-worth. Interestingly, they did so not by inflating the self-descriptiveness of desirable traits, but by minimising the self-descriptiveness of undesirable traits. This finding suggests that self-protection may be a more important consideration to high self-esteem people than is self-promotion. Alternatively, the particular traits we chose may be responsible for the effect. Despite our attempts to manipulate the desirability of these traits, it is probably the case that few people truly aspire to be methodical and single-minded. High self-esteem people may simply have found it easier to restore feelings of self-worth by denying they possess these *negative* traits than by claiming to possess these *positive* traits.

GENERAL DISCUSSION

Self-esteem has been used to describe: (a) general feelings of affection for oneself; (b) evaluations of self in specific domains; and (c) momentary feelings of self-worth, such as pride and shame. In this paper, we investigated the relations among these three constructs. Our research was guided by the notion that high self-esteem people are more adept than low self-esteem people at building and preserving high feelings of self-worth, and that they do so, in part, by claiming to possess socially desirable traits and/or by denying that they possess socially undesirable traits.

The findings from three investigations supported these hypotheses. In Experiment 1 we found that high self-esteem participants claimed to possess an ability when it was important to possess, and in Experiment 2 we found that high self-esteem participants claimed that an ability they possessed was an important one to have. Neither of these tendencies occurred among low self-esteem participants. Finally, in Experiment 3 we found that high self-esteem participants responded to failure by denying that (allegedly) undesirable traits described them. Collectively, these findings are consistent with the claim that high self-esteem people use their self-evaluations to promote and restore high feelings of self-worth.

Potential limitations

We see several important implications of our findings. Before discussing them, we consider some potential limitations. One issue is whether our high self-esteem participants truly believed their self-aggrandising self-assessments. Some would argue that these judgements were offered primarily for public consumption, shaped more by concerns with managing a public image of competency than a desire to promote private feelings of self-worth (Baumeister et al., 1989).

Several factors militate against this interpretation. First, all judgements were made under anonymous conditions; at no time were participants asked to identify themselves. Furthermore, the experimenter was not present when participants made their judgements and participants made their responses working interactively with a computer. These factors should have served to reduce the public nature of the experimental setting in participants' minds. Finally, and perhaps most importantly, self-enhancing tendencies like those revealed in this research have been shown to be at least as apparent under private conditions as under public conditions (Brown, 1990; Brown & Gallagher, 1992). For these reasons, we do not believe our findings can be understood with reference only to impression management concerns.

Our use of extreme groups also merits comment. Instead of using only participants with high self-esteem and low self-esteem, we might have included the entire range of self-esteem scores and used a regression-based analytic approach, rather than the ANOVA-based approach we utilised. We cannot say for sure how this change would have affected our findings, but it is interesting to note that prior research using continuous variables has produced a pattern of findings compatible with the extreme-group, ANOVA approach used here (Brown & Marshall, 2001; Dutton & Brown, 1997). Given this comparability, we see no reason to assume on a priori grounds that our results would have been different had an alternative analytic strategy been used.

It is also important to emphasise that our findings are correlational in nature. Our experimental manipulations allow us to conclude that people classified as high in self-esteem adjust their self-evaluations to match a trait's purported desirability, but we cannot rule out the possibility that the effects we have attributed to self-esteem are due to some correlated third variable, such as anxiety, depression, or negative affectivity (Watson & Clark, 1984). This limitation is an inherent aspect of personality research.

Some researchers believe this problem can be overcome by experimentally manipulating self-esteem (e.g., Arndt & Greenberg, 1999; Heatherton & Polivy, 1991; Leary et al., 1995). This is typically accomplished by giving people positive or negative self-relevant feedback (e.g., telling people they are high or low in some ability). This research strategy ignores the distinction we have made between global self-esteem and feelings of self-worth. In our judgement,

providing people with false personality feedback or varying their performance on an achievement test influences their momentary feelings of self-worth but not their self-esteem level. Because such manipulations do not provide a suitable analogue for the experience of having high self-esteem or low self-esteem, they do not overcome the limits of the correlational approach we have adopted. Perhaps the best one can do is to measure variables that are known to correlate with self-esteem, and control these variables in all statistical analyses (see Brown & Marshall, 2001, for an illustration of this approach).

Implications

Despite these limitations, our findings have some important implications for understanding the nature of self-esteem. A good deal of previous research has shown a strong correlation between self-esteem and self-evaluations (Harter, 1986; Marsh, 1986, 1990, 1993, 1995; Pelham, 1995; Pelham & Swann, 1989). This correlation has generally been taken to mean that self-evaluations determine self-esteem. Pelham and Swann (1989), for example, refer to self-evaluations as ''the building blocks of self-esteem'' (p. 673), arguing that ''people move from specific knowledge of their abilities and accomplishments to global [self-esteem]'' (p. 672).

The data we reported in this paper provide an alternative perspective on this issue. Rather than viewing the relation between self-evaluations and self-esteem as a bottom-up process, in which specific self-views determine global self-esteem, our findings suggest that the relation may well be a top-down process, in which self-esteem influences self-evaluations (Brown, 1993). From this perspective, global self-esteem guides the way people evaluate their specific qualities. People who are fond of themselves in a general way (i.e., those with high self-esteem), imbue themselves with many positive qualities. They like the way they look; they enjoy their sense of humour; they appreciate their talents. The causal process is a top-down one, from global feelings of affection to beliefs that one possesses many socially valued attributes.

Although our data establish the viability of the top-down approach, they do not rule out the possibility that bottom-up processes occur as well. Nevertheless, we think there are good reasons to question the adequacy of the bottom-up approach. For one thing, the notion that self-evaluations determine self-esteem begs the question of what determines self-evaluations in the first place. Consider, for example, people's ideas about their attractiveness. At all ages, and for both males and females, perceived attractiveness is closely related to self-esteem (Harter, 1993; Pliner, Chaiken, & Flett, 1990). People who like the way they look, like themselves (and people who like themselves, like the way they look). The bottom-up approach assumes that the causal arrow goes from perceived attractiveness to self-esteem: People somehow come to regard themselves as attractive or unattractive and this decision affects their level of self-esteem.

What this approach leaves unanswered is the question of why some people regard themselves as attractive to begin with.

One possibility is that people correctly perceive how attractive they *really* are, but this is not the case. A comprehensive review of the literature found that the correlation between self-perceptions of attractiveness and attractiveness as rated by others was .24 (Feingold, 1992). This value suggests that people's perceptions of their attractiveness are only weakly related to how attractive they *really* are (as indexed by consensual judgements). Importantly, this value is not low because observers disagree about who is attractive and who is not. Inter-rater reliability (consensus among observers) in these studies is uniformly high, typically exceeding .60. This means that people are in strong agreement about the attractiveness of others but these consensual judgements do not coincide with people's perceptions of their own attractiveness.

This is by no means an isolated example. Although people's self-perceptions are rather accurate in domains of low importance (e.g., punctuality, con-scientiousness), they are not very accurate in domains of high importance (e.g., intelligence, likeability). In fact, the more desirable the trait, the less accurate are people's self-evaluations (John & Robins, 1993; Park & Judd, 1989). In general, then, the correspondence between what people *actually* are like and what they think they are like in highly evaluative domains is modest at best.

These low associations would seem to pose problems for the bottom-up approach. They tell us that people's assessments of their specific qualities are not unbiased, literal representations of what they are really like. Instead, they appear to be schema-driven constructions and interpretations. The top-down approach we favour can accommodate these findings. It states that people's perceptions of their specific qualities are heavily influenced by their overall level of self-esteem. High self-esteem gives rise to the perception that one has many positive qualities and is good at many things.

The malleability of self-evaluations creates another problem for the bottom-up model. The bottom-up model assumes that self-esteem is built upon self-evaluations, yet our findings show that high self-esteem people readily adjust their self-evaluations to promote feelings of self-worth. The willingness with which high self-esteem people modify their self-evaluations to promote feelings of self-worth suggests that these evaluations might not provide the bedrock upon which self-esteem rests.

A related issue concerns the shifting correlates of self-esteem at different stages of life. During adolescence, self-esteem is closely related to beliefs about one's popularity; in adulthood, self-esteem is linked to beliefs about one's character and productivity. Using their self-evaluations to promote feelings of self-worth, high self-esteem people assume that they possess those attributes that are valued by their particular reference group at the time. The *correlates* of self-esteem will therefore shift as people age, but these changes will represent shifts in the manifestations of self-esteem rather than in its basis.

Finally, our findings speak to the role self-evaluations play in self-esteem functioning. Because it assumes that self-esteem depends on the way people evaluate themselves in particular domains, the bottom-up approach holds that self-esteem differences in behaviour are reducible to the way people view their specific qualities. If we could equate the way people evaluate their specific attributes, we would find no effect of global self-esteem.

Two investigations by Dutton and Brown (1997) recently examined this issue and found mixed support for this position. Although self-evaluations (not self-esteem) uniquely predicted people's *cognitive* reactions to success and failure, self-esteem (not self-evaluations) uniquely predicted people's *emotional* reactions to success and failure. In conjunction with the present findings, these results support the claim that global self-esteem serves to regulate people's affective reactions to negative events. In our judgement, this is the primary function of self-esteem: It allows people to fail without feeling bad about themselves.

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