Assessment, Enhancement, and Verification Determinants of the Self-Evaluation Process

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The 3 major self-evaluation motives were compared: self-assessment (people pursue accurate self-knowledge), self-enhancement (people pursue favorable self-knowledge), and self-verification (people pursue highly certain self-knowledge). Ss considered the possession of personality traits that were either positive or negative and either central or peripheral by asking themselves questions that varied in diagnosticity (the extent to which the questions could discriminate between a trait and its alternative) and in confirmation value (the extent to which the questions confirmed possession of a trait). Ss selected higher diagnosticity questions when evaluating themselves on central positive rather than central negative traits and confirmed possession of their central positive rather than central negative traits. The self-enhancement motive emerged as the most powerful determinant of the self-evaluation process, followed by the self-verification motive.

Self-understanding is a major concern for people across the life span (Breytspraak, 1984; Damon, 1983). Increased self-understanding carries several positive implications for the individual. Self-understanding is likely to lead to a well-defined (i.e., structurally sound, stable, and certain) self-concept. A well-defined self-concept facilitates self-regulation (Carver & Scheier, 1981), provides a sense of self-continuity (Dennett, 1982; Gergen & Gergen, 1988), accelerates processing of self-relevant information (Bargh, 1982), is associated with positive affect about the self (Baumgardner, 1990), is a key to goal setting (Markus & Nurius, 1986; Schlenker, 1985), influences social perception (Markus, Smith, & Moreland, 1985; Srull & Gaelick, 1983), determines choice of partner as well as behavior in personal relationships (Cantor, Mackie, & Lord, 1984; Snyder, Gangestad, & Simpson, 1983), and contributes to the projection of a consistent and desirable self-image to others (Harris & Snyder, 1986; Tice & Baumeister, 1990).

People can take several avenues in their quest for self-understanding. For example, they may evaluate themselves by comparing themselves with socially significant others (Kruglanski & Mayseless, 1990; Wood, 1989), engaging in attributional thinking (Bradley, 1978; Nisbett & Valins, 1972), using consensus information (Krosnick & Sedikides, 1990; Kulik & Taylor, 1981), or remembering their past (Ross, 1989; Ross & Conway, 1986). Regardless of its exact form, however, the self-evaluation process is likely to be motivated. Next, I discuss the motivational determinants of the self-evaluation process.

MOTIVATIONAL DETERMINANTS OF THE SELF-EVALUATION PROCESS

Self-evaluation can be accomplished through any of three primary routes: (a) the objective and accurate gathering and appraisal of self-relevant information, (b) the positive coloring of self-relevant information, or (c) the affirmation of preexisting self-conceptions. These three routes manifest the influence of three respective motives: self-assessment, self-enhancement, and self-verification. Discussion of these motives follows.

Accurate Self-Assessment

According to the self-assessment view, people are motivated to reduce uncertainty about their abilities or personality characteristics. Uncertainty is reduced by obtaining an objective and accurate picture of the self in self-evaluative settings. An accurate picture of the self is obtained through maximally diagnostic tests or tasks. Diagnostic tasks are high informational value tasks; more specifically, they are tasks that can clearly distinguish between people high versus people low in ability level or between people having a given personality trait versus having its alternative. According to the self-assessment perspective, people will tend to prefer high diagnosticity tasks when evaluating the self, regardless of the potentially negative implications for the self of task outcome. Valence of task outcome (i.e., success vs. failure), valence of personality characteristics

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I am grateful to Robert Arkin, Michael Strube, and four anonymous reviewers for their constructive feedback on earlier versions of this article. I also thank Joe Bollettieri, Monika Das, Julie Dean, Abbie Endres, Martina Gross, Carmen Loiselle, Judy Mathes, Sarah Pressly, Nichole Schneeberger, and especially Ed Hirt for their valuable contributions in various phases of this research.

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Journal of Personality and Social Psychology, 1993, Vol. 65, No. 2, 317-338
 0022-3514/93/$3.00

evaluated (i.e., positive vs. negative), and level of ability uncovered (i.e., high vs. low) are inconsequential to diagnosticity preferences (for reviews, see Trope, 1983, 1986).

Biased Self-Enhancement

According to the self-enhancement view, individuals involved in self-evaluation desire to enhance the positivity of their self-conceptions or protect the self from negative information. To this end, people will selectively process self-relevant information. For example, people will focus on information that has favorable implications for the self and avoid information that has unfavorable implications for the self. People will be mainly concerned not with task diagnosticity but with the valence of the task outcome or personality characteristic evaluated and the implications of this evaluation for the self. People can tolerate some inferential ambiguity in exchange for positive implications. As a result, people will regard tasks diagnostic of success, high ability, or positive personality attributes as more attractive and preferable than tasks diagnostic of failure, low ability, or negative personality attributes, respectively (for reviews, see Kunda, 1990, and Taylor & Brown, 1988).

Conservative Self-Verification

According to the self-verification view, people are motivated to verify their preexisting self-conceptions. For example, people will verify their positive self-conceptions by seeking out favorable feedback, and they will also verify their negative self-conceptions by soliciting unfavorable feedback about their abilities or personalities. Stated somewhat differently, people will seek verification for their certain self-conceptions to a greater degree than their uncertain self-conceptions. What matters is consistency between self-conceptions and feedback rather than self-conception valence or feedback valence (for reviews, see Swann, 1983, 1990).

TOWARD COMPARATIVE TESTING

Each of the three views just discussed has received ample empirical support when tested independently. Comparative tests of the three views, however, are relatively infrequent (Sedikides & Strube, 1993). It is comparative rather than independent testing that can provide unequivocal evidence regarding the strength of the influence of each motive on the self-evaluation process. Next, I describe a task that has the potential to afford comparative testing of the three views and derive the task-specific predictions of each view.

Self-Reflection Task

The task used in the present investigation involved self-reflection on the part of the subjects. Self-reflection is defined as the consideration of whether one possesses certain personality traits. (Personality traits contain, of course, information about a variety of personal domains, such as one's social behavior, relationships, moral values, work habits, and performance quality.) When inquiring about the possession of particular personality traits, people can ask themselves hypothetical questions pertaining to their attitudes, preferences, intentions, or behaviors. People can ask themselves at least two types of questions: (a) high versus low diagnosticity and (b) hypothesis-true versus alternative-true.

Question diagnosticity is defined in terms of the probability that the behavior, intention, or attitude alluded to by the question is present (or absent) provided that the relevant trait is present (or absent). A high diagnosticity question will ask about a behavior that is highly probable when a person possesses a trait (e.g., extraversion) and highly improbable when the person possesses the alternative trait (e.g., introversion; see Trope & Bassok, 1982). For instance, if a person wonders whether he or she is introverted, a diagnostic question might be "In my leisure time, do I like to stay home alone?" A desire to be alone is highly likely in introverted people and highly unlikely in extroverted people. Thus, either a yes or no answer would deliver useful information about this person's relative position on the introversion–extraversion trait dimension.

Self-reflection can also take the form of asking either hypothesis-true or alternative-true questions. Hypothesis-true questions confirm possession of the relevant trait when answered yes and deny possession of the trait when answered no. Alternative-true questions confirm possession of the relevant trait when answered no and deny possession of the trait when answered yes (see Devine, Hirt, & Gehrke, 1990). An example of a hypothesis-true question for the trait *friendly* is "Do I greet acquaintances by name when I meet them?" A yes answer to this question confirms possession of the trait *friendly,* whereas a no answer disconfirms possession of the trait. An example of an alternative-true question is "Would I avoid talking to people I don't know at a party?" In this case, a yes answer disconfirms possession of the trait *friendly,* whereas a no answer confirms possession of the trait.

Class of question (hypothesis-true vs. alternative-true) can be combined with the answer to the question (yes vs. no) to form a new variable, namely response type. Answering yes to a hypothesis-true question or no to an alternative-true question is a confirmatory response type. Answering no to a hypothesis-true question or yes to an alternative-true question is a disconfirmatory response type. In conclusion, the self-reflection process is accomplished by asking the self questions that can vary in terms of diagnosticity and response type.

The self-reflection task simulates sufficiently the process of self-evaluation. This task is likely to instigate cognitive mechanisms that are consistent with major accounts of the information-gathering process (Kruglanski, 1990; Snyder, 1981; Trope & Bassok, 1982). As epitomized by Kruglanski's (1990) theory of lay epistemics, these accounts accept that the knowledge acquisition process is twofold: The first stage involves hypothesis generation, and the second stage entails hypothesis evaluation. Another advantage of the self-reflection task is that it provides a useful framework for comparative testing of the self-assessment, self-enhancement, and self-verification perspectives. I now turn to specific predictions that the three perspectives make with regard to this task.

Predictions

The three perspectives make contrasting predictions concerning the self-evaluation process and particularly the self-re-

flection task. In the following sections, I state the predictions for each pair of perspectives in reference to standard features of the experimental design. (The predictions are summarized in Table 1.)

To set up the context for the ensuing discussion, the reader should be briefly reminded of the general procedure of the reported experiments and be informed of the experimental design. Subjects selected or generated questions of varying diagnosticity to self-reflect on traits that were either central or peripheral to their self-concept (*trait centrality*) and were either positive or negative (*trait valence*). Subjects subsequently either confirmed or disconfirmed the selected questions. The question diagnosticity procedure (i.e., selecting questions of varying diagnosticity) is directly relevant to comparatively testing all three pairs of views. The response type procedure (i.e., confirmation or disconfirmation of questions) is only relevant to comparing the self-enhancement and self-verification views.

Self-Assessment Versus Self-Enhancement

As implied in the preceding paragraph, the discussion on self-assessment and self-enhancement refers exclusively to question diagnosticity. These two views make conflicting predictions regarding the trait centrality main effect, the trait valence main effect, and the interaction.

Trait Centrality Main Effect

The self-assessment view asserts that self-evaluation is primarily motivated by the need for uncertainty reduction. It follows that people will be predominantly interested in gathering knowledge about relatively unknown ability or personality characteristics and will be rather unconcerned with accumulating knowledge about well-known ability or personality charac-

Table 1
Comparative Testing of Self-Assessment, Self-Enhancement, and Self-Verification: Hypothetical Significant Effects and Theory Supported

Aspect of the self-reflection task	Hypothetical significant effect and description of the effect	Theory supported
Question diagnosticity	Trait centrality main effect Subjects select higher diagnosticity questions when self-reflecting on peripheral rather than central traits	Self-assessment
	Trait centrality main effect Subjects select higher diagnosticity questions when self-reflecting on central rather than peripheral traits	Self-verification
	Trait valence main effect Subjects select higher diagnosticity questions when self-reflecting on positive rather than negative traits	Self-enhancement
	Trait Centrality × Trait Valence Interaction Subjects select higher diagnosticity questions when self-reflecting on central positive rather than central negative traits and select lower diagnosticity questions when self-reflecting on central negative rather than peripheral negative traits	Self-enhancement
	Trait Centrality × Trait Valence Interaction Subjects select equal diagnosticity questions when self-reflecting on central positive and central negative traits but select higher diagnosticity questions when self-reflecting on central negative rather than peripheral negative traits	Self-verification
Response type	Trait centrality main effect Subjects confirm possession of central traits to a greater extent than peripheral traits	Self-verification
	Trait valence main effect Subjects confirm possession of positive traits to a greater extent than negative traits	Self-enhancement
	Trait Centrality × Trait Valence interaction Subjects confirm possession of central positive traits to a greater extent than central negative traits and disconfirm possession of central negative traits to a greater extent than peripheral negative traits	Self-enhancement
	Trait Centrality × Trait Valence interaction Subjects confirm possession of central positive traits to an equal extent as central negative traits but confirm possession of central negative traits to a greater extent than peripheral negative traits	Self-verification

teristics. The self-enhancement view is mute with regard to this issue.

Subjects in the present investigation self-reflected on traits that were either central or peripheral by asking themselves questions of varying diagnosticity. Central traits (or self-schematic traits[1]; see Markus, 1977) are high in self-descriptiveness and personal importance, whereas peripheral traits (or non–self-schematic traits) are low in self-descriptiveness and personal importance. Central traits are, by definition, traits on which subjects have considerable self-knowledge (Catrambone & Markus, 1987; Markus, 1977). Central traits are the

> reflection of the invariances people have discovered in their own social behavior. They represent patterns of behavior that have been observed repeatedly, to the point where a framework is generated that allows one to make inferences from scant information or to quickly streamline and interpret complex sequences of events. (Markus, 1977, p. 64)

In contrast, peripheral traits are traits about which subjects have little self-knowledge or certainty. It follows that, according to the self-assessment view, subjects will choose higher diagnosticity questions when self-reflecting on peripheral rather than central traits (trait centrality main effect). The self-enhancement view is mute with regard to this effect.

Trait Valence Main Effect

According to the self-enhancement view, people are more likely to accept successful outcomes or inferences about positive self-conceptions than failure outcomes or inferences about negative self-conceptions. The self-assessment view is rather mute with regard to this issue. Nevertheless, this view would have some difficulty explaining why people prefer success outcomes or positive feedback over failure outcomes or negative feedback in cases of equal outcome or feedback diagnosticity.

The present investigation expressed its concern with outcome valence or feedback valence by implicating the variable trait valence, namely whether the traits on which subjects self-reflected were positive or negative. According to the self-enhancement view, subjects will choose high diagnosticity questions when self-reflecting on positive traits because they desire to gain credible validation of their positive characteristics, but they will choose low diagnosticity questions when self-reflecting on negative traits in an effort to avoid high credence information that is damaging to the self (trait valence main effect). The self-assessment view would have some difficulty accounting for this main effect.

Trait Centrality × Trait Valence Interaction

A crucial variable for distinguishing between the two views is diagnosticity of performance outcome (i.e., success vs. failure). The self-assessment view predicts that individuals will be equally likely to prefer tasks of high success and failure diagnosticity because the discovery of capabilities and the discovery of liabilities are equally attractive and conducive to uncertainty reduction. In contrast, the self-enhancement view predicts that individuals will find high success diagnosticity tasks attractive and preferable because these tasks are likely to unveil their talents, but they will find high failure diagnosticity tasks unattractive and worth avoiding because these tasks are likely to expose their limitations.

In the context of the present investigation, asking the self high diagnosticity questions about positive central traits is assumed to be conceptually equivalent to high success diagnosticity, whereas asking the self high diagnosticity questions about negative central traits is taken as conceptually equivalent to high failure diagnosticity. Conversely, asking the self low diagnosticity questions about positive peripheral traits is assumed to be analogous to low success diagnosticity, whereas asking the self low diagnosticity questions about negative peripheral traits is taken as comparable to low failure diagnosticity.

The self-assessment view predicts that subjects will prefer high diagnosticity questions when self-reflecting on peripheral as opposed to central traits, regardless of trait valence (i.e., trait centrality main effect). Consequently, a reliable interaction would be incompatible with this view. The self-enhancement view, however, makes a strong interaction prediction. Subjects will select questions of much higher diagnosticity when self-reflecting on central positive compared with central negative traits, but they will prefer either slightly higher or equally high diagnosticity questions when self-reflecting on peripheral positive traits relative to peripheral negative traits. The interaction prediction can be stated in an alternative manner. Subjects will choose higher diagnosticity questions to self-reflect on central positive compared with peripheral positive traits, and they will choose lower diagnosticity questions to self-reflect on central negative compared with peripheral negative traits. The interaction prediction is based on the notion that individuals are more heavily invested in the enhancement and protection of their central than peripheral self-conceptions (Frey & Stahlberg, 1987; Gruder, 1977; Miller, 1976; Sherman, Presson, & Chassin, 1984; for a review, see Greenwald, 1981).

Self-Assessment Versus Self-Verification

As a reminder, the discussion contrasting predictions of the self-assessment and self-verification views pertains exclusively to question diagnosticity. This discussion involves the trait centrality main effect.

The self-assessment view predicts that people will be more likely to seek knowledge about their uncertain as opposed to certain self-conceptions. In contrast, the self-verification view predicts that people will seek knowledge about their certain as opposed to their uncertain self-conceptions. In the language of the present experimental design, both views predict a trait centrality main effect, but they predict a different direction for this effect. In particular, the self-assessment view predicts that people will select higher diagnosticity questions when self-reflecting on peripheral rather than central traits, whereas the self-verification view predicts that people will select higher diagnosticity questions when self-reflecting on central rather than peripheral traits.

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[1] Markus (1977) used the terms *self-schematic* and *non–self-schematic* idiographically, whereas I am using the terms *central* and *peripheral* both to refer to subjects' collective self-concept (Experiments 1, 2, 3, 5, and 6) and to their idiographic self-concept (Experiment 4).

Self-Enhancement Versus Self-Verification

The discussion involving the contrast between the self-enhancement and self-verification perspectives pertains to both question diagnosticity and response type.

Question Diagnosticity

The two perspectives make conflicting predictions concerning the trait valence main effect and the interaction.

Trait valence main effect. The self-enhancement perspective predicts that people will want to learn more about their assets than their liabilities. It follows that subjects will select higher diagnosticity questions to find out about their positive rather than negative traits (trait valence main effect). The self-verification view is mute with regard to this effect.

Trait Centrality × Trait Valence interaction. Both perspectives predict a significant interaction, but of a different pattern. According to the self-enhancement perspective, people will prefer more accurate information about their central positive self-conceptions than about their central negative self-conceptions. Furthermore, people will prefer less accurate information about their central negative self-conceptions than about their peripheral negative self-conceptions. In the context of the present investigation, subjects will choose higher diagnosticity questions to self-reflect on central positive than central negative traits, and they will choose lower diagnosticity questions to self-reflect on central negative than peripheral negative traits.

According to the self-verification perspective, however, people will want equally accurate information about their central positive and central negative self-conceptions (given that they are presumably held with equal certainty) and will want more accurate information about their central negative as opposed to peripheral negative self-conceptions. In the context of this investigation, subjects will select equal diagnosticity questions when self-reflecting on central positive and central negative traits but will select higher diagnosticity questions when self-reflecting on central negative as opposed to peripheral negative traits.

Response Type

The two perspectives make conflicting predictions with regard to the trait centrality main effect, the trait valence main effect, and the interaction.

Trait centrality main effect. Will subjects be more likely to confirm their central rather than peripheral self-conceptions? In the absence of information about self-conception valence, the self-enhancement view is mute concerning this issue. However, the self-verification view predicts that subjects will be more likely to verify their central rather than peripheral self-conceptions (or traits) because the central self-conceptions are, by definition, a more integral and permanent part of their self-concept. Thus, the self-verification view predicts a trait centrality main effect.

Trait valence main effect. Will subjects be more likely to confirm their positive as opposed to negative self-conceptions? The self-enhancement perspective predicts that subjects will strongly prefer to confirm their positive over their negative self-conceptions or traits. Thus, this perspective predicts a trait valence main effect. The self-verification perspective is mute regarding this effect.

Trait Centrality × Trait Valence interaction. According to the self-enhancement view, subjects will confirm possession of central positive self-conceptions or traits to a higher extent than possession of central negative self-conceptions or traits; however, subjects will evidence either only a slight tendency or no tendency at all to confirm their peripheral positive self-conceptions to a greater extent than their peripheral negative self-conceptions. Alternatively, subjects will confirm their central positive self-conceptions to a larger degree than their peripheral positive self-conceptions, and they will disconfirm their central negative self-conceptions to a larger degree than their peripheral negative self-conceptions. Thus, the self-enhancement view predicts a significant Trait Centrality × Trait Valence interaction. An interaction of this form, however, would be unanticipated by the self-verification view, which (as stated earlier) predicts that subjects will confirm their central self-conceptions regardless of valence (i.e., trait centrality main effect).

OVERVIEW OF THE INVESTIGATION

This investigation consisted of five pilot studies and six experiments. The pilot studies accomplished two major objectives. First, they established traits that the population under consideration regarded as central and peripheral to their collective self-concept. These collective traits were used in all experiments except Experiment 4. The function of collective (as opposed to idiographic) traits was to create a state of "unknowingness" about the traits during the self-reflection process. The second objective attained by the pilot studies was to generate behavioral questions of varying diagnosticity for each trait.

The experiments tested the relative strength of the three perspectives in regulating the self-evaluation process. In all experiments, subjects self-reflected on traits that were either central or peripheral and either positive or negative. In Experiment 1, subjects selected from a list three questions to ask themselves; in Experiment 2, they selected six questions. In Experiment 3, subjects generated their own questions, and, in Experiment 4, they generated both their own traits and their own questions. Experiment 5 replicated Experiment 1 and extended it by introducing a new manipulation: Some of the subjects were instructed to be accurate and objective in the question selection procedure. Finally, in Experiment 6, subjects selected questions to reflect either on themselves or on an acquaintance.

PILOT TESTING

Pilot Study 1

The purpose of Pilot Study 1 was to derive personality traits that the population of University of Wisconsin (UW) introductory psychology students regarded as central or peripheral to their collective self-concept. In this and all subsequent pilot studies, subjects were UW introductory psychology students run in small groups ranging in size from 4 to 10.

One hundred thirty subjects were instructed to list six traits that described them well and were important to them (i.e., central traits) and six traits that did not describe them well and were not important to them (i.e., peripheral traits). Subse-

quently, the experimenter and helpful colleagues compiled a list of central and peripheral traits under the stipulation that each trait be mentioned by at least 75% of the subjects. The central traits (and synonyms) were *kind* (considerate, gentle, sensitive, and thoughtful), *friendly* (cheerful, cooperative, happy, and pleasant), and *trustworthy* (dependable, faithful, reliable, and sincere). The peripheral traits (and synonyms) were *modest* (down-to-earth, humble, unassuming, and unpretentious), *predictable* (structured, organized, and planned), and *uncomplaining* (carefree, easygoing, and laid-back). Synonyms were determined by consulting the following sources: *Allen's Synonyms and Antonyms* (Allen, 1972), *The New Roget's Thesaurus in Dictionary Form* (Lewis, 1978), and *Webster's Ninth New Collegiate Dictionary* (1989).

Although the traits just described were mentioned by a decisive majority of subjects (i.e., 75%), it is always possible that the traits were in part a result of procedural peculiarities or sampling error. To offset this possibility, another list of traits was compiled: central and peripheral traits mentioned by at least one third of the subjects. This conservative procedure could afford a more convincing account of the collectively held central and peripheral traits when tested (along with the traits mentioned by 75% of the subjects) in a new study. The resulting additional "central" traits were clean, honest, independent, intelligent, open-minded, patriotic, and self-confident. The resulting additional "peripheral" traits were extroverted, funny, gossipy, hardworking, greedy, optimistic, romantic, and selfish. Thus, Pilot Study 1 produced a total of 21 traits, 10 central and 11 peripheral.

Pilot Study 2

The purpose of Pilot Study 2 was to cross-validate the results of Pilot Study 1 by having subjects rate the self-descriptiveness and personal importance of each trait. Each of 130 subjects received a booklet containing the 21 personality traits chosen in Pilot Study 1. Subjects rated each trait as to how well it described them on a scale ranging from *does not describe me at all* (1) to *describes me very well* (11); also, they rated how important the trait was to them on a scale ranging from *not very important to me* (1) to *very important to me* (11). The average rating for each trait dimension across subjects constituted the trait's self-descriptiveness and importance scores. The average self-descriptiveness and importance score constituted the trait's centrality score (Table 2). Self-descriptiveness and importance scores were highly correlated, with correlations for the 21 traits ranging from .78 to .93, all $ps < .0001$.

Three central and three peripheral traits were selected according to the following two rules. First, the central traits should have scores falling above the 90th percentile of the distribution, whereas peripheral trait scores should hover near the 50th percentile. Second, the traits should not be synonymous. The central traits selected were kind ($M = 9.78$), friendly ($M = 9.76$), and trustworthy ($M = 9.76$). The peripheral traits selected were modest ($M = 6.23$), predictable ($M = 6.32$), and uncomplaining ($M = 6.64$). The mean rating for the central traits ($M = 9.77$) was significantly higher than the mean rating for the peripheral traits ($M = 6.40$), $t(129) = 44.74$, $p < .0001$. In conclusion, the results of Pilot Study 2 validated the results of Pilot Study 1.

Table 2
Central and Peripheral Traits Resulting From Pilot Study 2

Trait	Descriptiveness	Importance	Centrality
Central			
Clean	9.80	9.66	9.72
Friendly	9.42	10.10	9.76
Honest	8.93	9.46	9.19
Independent	8.96	9.89	9.42
Intelligent	8.96	9.89	9.42
Kind	9.46	10.09	9.78
Open-minded	8.53	9.16	8.85
Patriotic	7.80	7.49	7.65
Self-confident	7.87	10.04	8.95
Trustworthy	9.82	10.46	10.14
Peripheral			
Extraverted	6.00	7.51	6.75
Funny	8.96	9.08	9.02
Gossipy	6.81	6.27	6.54
Greedy	5.96	6.66	6.31
Hardworking	7.89	9.19	8.54
Modest	6.30	6.15	6.23
Optimistic	7.64	8.72	8.18
Predictable	6.05	6.59	6.32
Romantic	9.05	8.78	8.91
Selfish	5.36	8.08	6.72
Uncomplaining	6.72	6.56	6.64

The traits just described were all positive (see Anderson, 1968). Next, the negative pole of each trait was derived. The negative poles (hereafter referred to as negative traits) were unkind, unfriendly, untrustworthy, immodest, unpredictable, and complaining. Thus, the final trait list contained 12 traits: 3 central positive (kind, friendly, and trustworthy), 3 central negative (unkind, unfriendly, and untrustworthy), 3 peripheral positive (modest, predictable, and uncomplaining), and 3 peripheral negative (immodest, unpredictable, and complaining).

Pilot Study 3

The aim of Pilot Study 3 was to obtain high and low diagnosticity behaviors for each of the 12 selected traits. Eighty subjects participated. Forty were provided with the six positive traits, and 40 were provided with the six negative traits. Half of the subjects in each of these conditions generated three high diagnosticity behaviors for each trait, and the remaining half generated three low diagnosticity behaviors for each trait. Diagnosticity was defined in terms of the probability of distinguishing between a trait and its polar opposite. Thus, a high diagnosticity behavior was defined as a behavior that would be highly likely to reveal whether the person performing the behavior would possess a given trait or its polar opposite.

The experimenter and helpful colleagues edited the behaviors, generated a few new ones, and also used additional behaviors from Fuhrman, Bodenhausen, and Lichtenstein's (1989) list. Twenty-four behaviors resulted for each trait. Twelve of the 24 behaviors were considered highly diagnostic of each trait, and the remaining 12 questions were considered low diagnostic of each trait.

Pilot Study 4

The goal of Pilot Study 4 was to cross-validate the results of Pilot Study 3. A list containing the traits and the questions was administered in booklet form to 120 subjects. Each page of the booklet given to subjects contained a trait listed at the top with its dictionary definition following. Definitions were derived from *Webster's Ninth New Collegiate Dictionary* (1989). The questions followed on the same page. The traits and the questions on each page were randomly ordered. Subjects were instructed to rate the diagnosticity of each question on a 9-point scale. Specifically, subjects rated how well the question would help them discriminate between the polar ends of the trait dimension under consideration. The scales ranged from *does not discriminate at all* (1) to *discriminates very well* (9). On the basis of subjects' ratings, three high diagnosticity and three low diagnosticity questions were selected for each trait. The questions and their mean diagnosticity ratings appear in Table 3.

EXPERIMENT 1

This experiment represents the first attempt of the present investigation to examine the relative influence of self-assessment, self-enhancement, and self-verification on the self-evaluation process.

Method

Subjects

Subjects were 120 UW students. In this and all subsequent experiments, (a) subjects were introductory psychology students participating for extra course credit, (b) subjects were run in small groups of 2 to 9, and (c) dividers set in the experimental room prevented subjects from seeing one another when seated.

Experimental Design

The experimental design involved a 2 (trait centrality: central traits vs. peripheral traits) × 2 (trait valence: positive traits vs. negative traits) × 3 (trait presentation order) between-subjects factorial. Thus, each subject self-reflected on three traits from one of the following four categories: central positive, central negative, peripheral positive, and peripheral negative. Subjects were randomly assigned to the experimental conditions.

Procedure

Each subject received a booklet. Subjects were informed on the cover page of the booklet that the experiment was concerned with self-understanding and that a good way for people to understand themselves is by asking questions to find out whether they have various (three in this instance) personality traits. The next three pages contained the three personality traits, one on each page. Each trait was listed at the top of the page, followed by its dictionary definition. Each trait was accompanied by a list of 12 questions. Half of the questions were hypothesis-true and half were hypothesis-false.[2] Furthermore, half of the questions were relatively high and half relatively low in diagnosticity. The 12 questions within each list were presented to subjects in a fixed random order. Subjects selected the 3 questions they would most likely ask themselves to find out whether they possessed the trait under consideration. After completing the question selection procedure for all traits, subjects answered the nine questions they had selected with a yes or a no.

Results and Discussion

Question Diagnosticity

A mean diagnosticity score was calculated for the nine questions chosen by each subject. The diagnosticity scores were entered in a 2 (trait centrality) × 2 (trait valence) × 3 (trait presentation order) analysis of variance (ANOVA).[3]

The trait centrality main effect was significant. Contrary to the self-assessment view and in support of the self-verification view, subjects chose higher diagnosticity questions when self-reflecting on central traits ($M = 7.30$) rather than peripheral traits ($M = 6.53$), $F(1, 108) = 40.79$, $p < .0001$. The trait valence main effect was not significant: Subjects did not reliably choose higher diagnosticity questions when self-reflecting on positive ($M = 6.94$) as opposed to negative ($M = 6.89$) traits, $F(1, 108) = 0.14$, $p < .71$. This finding fails to lend support to the self-enhancement view.

The Trait Centrality × Trait Valence interaction was significant, $F(1, 108) = 12.45$, $p < .001$ (Table 4). Subjects selected higher diagnosticity questions while self-reflecting on central positive traits as opposed to central negative traits, $t(58) = 3.88$, $p < .0001$. It appeared that subjects wished to discover that they possessed central positive traits to a greater extent than central negative traits. This pattern was not evident in the case of peripheral traits. In fact, a marginally significant reversal of the preceding pattern was obtained. Subjects manifested a tendency for selecting higher diagnosticity questions while self-reflecting on peripheral negative traits as opposed to peripheral positive traits, $t(58) = -1.83$, $p < .07$. This interaction is consistent with the self-enhancement perspective. However, the interaction can be looked at somewhat differently: Subjects selected higher diagnosticity questions when self-reflecting on central positive rather than peripheral positive traits, $t(58) = 6.91$, $p < .0001$, and selected higher diagnosticity questions when self-reflecting on central negative rather than peripheral negative traits, $t(58) = 2.06$, $p < .04$. From this angle, the interaction is in line with the self-verification perspective.

Response Type

The total number of confirmatory and disconfirmatory responses was computed for each subject. For presentational simplicity reasons, a new index was created by subtracting the disconfirmatory responses from the confirmatory responses. Thus, positive difference scores indicate confirmation or acceptance of possession of a trait, whereas negative difference scores indicate disconfirmation or denial of possession of a trait.

The difference scores were entered in a 2 (trait centrality) × 2

[2] The within-subjects variable class of question (hypothesis-true vs. alternative-true) was used in this investigation for counterbalancing purposes.

[3] In all six experiments, separate analyses were conducted for each of the three traits. The analyses yielded results consistent for all traits and identical to the ones reported, although weaker. Thus, the presented analyses collapse across the three traits.

Table 3
Questions Resulting From Pilot Study 4 and Mean Diagnosticity Ratings

Category/question	*M*
Kind	
High diagnosticity	
Hypothesis-true	
Would I help a handicapped person cross the street?	7.76
Would I offer to take care of a neighbor's child, if their babysitter couldn't come?	7.72
Would I offer to help an elderly neighbor paint his/her house?	7.72
Alternative-true	
Do I ignore people who need help from me?	8.06
Would I purposely hurt someone to benefit myself?	8.02
Do I take advantage of other people?	8.02
Low diagnosticity	
Hypothesis-true	
Do I often empty the trash in our apartment?	5.41
Do I offer advice to people I don't even know?	5.26
Would I oil a squeaky door on the dorm hallway?	4.70
Alternative-true	
Would I drive by a broken down car during rush hour without stopping?	4.96
Would I demand a refund at a restaurant for slow service?	4.89
Do I carry a switchblade knife?	4.10
Unkind	
High diagnosticity	
Hypothesis-true	
Would I refuse to hold the door for a handicapped person?	8.38
Do I make fun of someone because of their looks?	8.21
Would I make an obscene gesture to an elderly person?	8.00
Alternative-true	
Would I volunteer time to work as a big brother/big sister to a child in need?	7.78
Would I try to cheer up someone who was having a bad day?	7.72
Would I help someone by opening a door, if their hands were full?	7.46
Low diagnosticity	
Hypothesis-true	
If I saw an animal running loose on the street, would I ignore it?	5.15
Am I easily irritated?	4.72
Would I cut out articles from library journals?	4.55
Alternative-true	
Do I often wash the dishes in our apartment?	5.76
Do I babysit for my younger siblings?	5.22
Would I pick up a hitchhiker?	3.35
Friendly	
High diagnosticity	
Hypothesis-true	
Would I stop and say "hi" to a person that I just met yesterday?	7.54
Would I invite a new neighbor over for dinner?	7.44
Would I introduce a new classmate to my friends?	7.39
Alternative-true	
Do I slam the door on trick-or-treaters?	8.21
Do I give off a rude attitude?	7.81
Do I try to make people feel uncomfortable around me?	7.36
Low diagnosticity	
Hypothesis-true	
Do I talk at parties?	5.87
Will I speak in front of a group?	4.48
Do I go to football games?	3.17
Alternative-true	
Do I avoid parties?	4.66
Do I interrupt my professor in class?	4.40
Do I work with my door closed?	3.17
Unfriendly	
High diagnosticity	
Hypothesis-true	
Do I look mean and nasty toward people I don't know?	7.49
Do I get up and move when someone sits at my table?	7.47
Do I often ridicule other people?	7.23

Table 3 (*continued*)

Category/question	*M*
Unfriendly (*continued*)	
High diagnosticity (*continued*)	
Alternative-true	
Am I willing to show a new neighbor around?	7.76
When a new person is brought into my dorm, do I go up and introduce myself?	7.59
Would I go up and talk to a person I don't know at a party?	7.44
Low diagnosticity	
Hypothesis-true	
Do I have a "no solicitor" sign on my door?	4.62
Do I let others initiate conversation?	4.28
Do I avoid crowds?	4.15
Alternative-true	
Do I talk a lot in class?	5.87
Do I laugh at people's jokes even though they are not funny?	5.02
Do I go to parties?	3.65
Trustworthy	
High diagnosticity	
Hypothesis-true	
Would I follow through on a promise I made to someone?	8.02
Do my friends and family confide their problems to me?	7.89
Are people willing to tell me embarrassing things about themselves in confidence?	7.67
Alternative-true	
Would I cheat on my girlfriend/boyfriend?	8.43
Do I break promises?	8.28
Do I tell secrets that I have been given in confidence?	8.23
Low diagnosticity	
Hypothesis-true	
Do I complete all the readings for a class by the deadline?	4.85
Do I stop at red lights?	4.37
Do I avoid getting drunk when I am with my friends?	3.41
Alternative-true	
Do I use my roommate's shampoo without asking?	4.94
Do I eat grapes in a grocery store?	4.36
Do I take sips off people's drinks without asking?	4.26
Untrustworthy	
High diagnosticity	
Hypothesis-true	
Do I often lie to my parents?	8.26
Do I break my word more often than I keep it?	8.02
Have I ever betrayed someone's confidence in me?	7.94
Alternative-true	
Do I keep promises?	8.20
Can I keep a secret?	8.00
Can a teacher leave me alone in a room while taking a test, and not be in fear that I will cheat?	8.00
Low diagnosticity	
Hypothesis-true	
Do I generally talk about others?	5.34
Would I take a pen from a bank after signing a check?	4.55
Do I use my roommate's calculator without asking?	4.43
Alternative-true	
Would I be invited to plan a surprise party for a friend?	5.50
Do I always go to class?	5.26
Do I always carry my license when I drive?	3.96
Modest	
High diagnosticity	
Hypothesis-true	
Do I take the focus off myself and redirect it to others?	7.68
Do I give others the credit for a group success?	7.38
Do I keep my successes to myself?	7.02

Table continues

Table 3 (*continued*)

Category/question	*M*
Modest (*continued*)	
High diagnosticity (*continued*)	
Alternative-true	
Do I brag about my accomplishments?	7.85
Do I act in a condescending manner to other people?	7.70
Do I flaunt my successes?	7.50
Low diagnosticity	
Hypothesis-true	
Do I try not to make others feel uncomfortable?	4.60
Am I easy to get along with?	3.66
Am I normally in a good mood?	2.83
Alternative-true	
Do I often mention how quickly I get my homework done?	5.04
Do I like compliments?	4.89
Do I become rowdy when my favorite team wins?	2.70
Immodest	
High diagnosticity	
Hypothesis-true	
Do I point out others' weaknesses to make myself look better?	7.59
Do I flaunt my wealth?	7.59
Do I like to show off in front of others?	7.33
Alternative-true	
Do I act modestly?	7.60
Do I let some of my achievements go by uncredited?	7.15
Do I give credit to everyone else in the group?	7.04
Low diagnosticity	
Hypothesis-true	
Do I seek credit for what I do?	5.72
Do I take pride in my own achievements?	3.89
Am I exhilarated when I get a good grade?	3.54
Alternative-true	
Do I try to make others feel good about themselves?	4.85
Do I think I am as good-looking as the average person?	4.60
Am I easy to talk to?	3.36
Predictable	
High diagnosticity	
Hypothesis-true	
Can others forecast my reaction to a new situation?	7.24
Do I have a daily routine?	7.13
Do I talk about the same things all the time?	6.33
Alternative-true	
Do I make last minute decisions?	7.87
Do I say surprising things?	7.53
Do I often do the opposite of what's expected of me?	7.38
Low diagnosticity	
Hypothesis-true	
Must I plan every step of an outing?	5.07
Do I think out every possible outcome of an act before doing it?	4.74
Do I dislike being surprised?	4.41
Alternative-true	
Do I sometimes wear different styles of clothes?	5.66
Do I sometimes do things I wish I hadn't?	4.81
Am I sometimes critical of other people's work?	3.34
Unpredictable	
High diagnosticity	
Hypothesis-true	
Do people never know what's going to come out of my mouth in any situation?	8.21
Do I do things on the spur of the moment?	8.02
Have I been told that I am hard to figure out?	7.75
Alternative-true	
Can people tell what I'll do next?	7.52
Can people correctly answer for me often times?	7.24
Am I consistent in my beliefs?	6.44

Table 3 (*continued*)

Category/question	*M*
Unpredictable (*continued*)	
Low diagnosticity	
Hypothesis-true	
Can people ever tell whether I am joking?	5.72
Do I participate in diverse activities?	5.51
Do I sometimes wear different hair styles?	5.51
Alternative-true	
Do I follow fashion trends?	5.17
Do I answer "fine" every time I am asked, "How are you?"	4.54
Am I relaxed about other people's work?	3.35
Uncomplaining	
High diagnosticity	
Hypothesis-true	
Do I keep small problems to myself?	7.70
Do I avoid talking about things not going my way?	7.53
Do I minimize problems?	7.34
Alternative-true	
Do I pick only the bad points to tell about my classes?	7.46
Do I talk constantly about things that I don't want to do?	7.41
Do I look for faults even if my life is going well?	7.20
Low diagnosticity	
Hypothesis-true	
Do I like my classes?	5.78
Do I sometimes do things that don't suit me?	5.70
Do I dislike being around whining people?	5.23
Alternative-true	
Am I picky in everything I do?	4.87
Do I occasionally question why I have to do something?	4.76
Do I raise my voice?	3.11
Complaining	
High diagnosticity	
Hypothesis-true	
Do I constantly inform others about my problems or ailments?	7.87
Do I focus on things that are not going my way?	7.09
Do I exaggerate problems?	7.04
Alternative-true	
Do I keep dissatisfaction to myself?	7.94
Do I tolerate situations well when I am not having a good time?	7.68
Do I minimize bad experiences when telling about them?	7.40
Low diagnosticity	
Hypothesis-true	
Do I think of reasons to avoid things?	4.76
If something is unfair, do I let my feelings be known?	4.20
Do I ask others to do things for me that I could do for myself?	3.98
Alternative-true	
Does it bother me when people around me whine?	5.57
Am I laid back in everything I do?	5.51
Do I speak in a calm voice?	5.00

(trait valence) × 3 (trait presentation order) ANOVA. The trait centrality main effect was not significant: Subjects were equally likely to confirm central ($M = 0.22$) and peripheral ($M = -0.03$) traits, $F(1, 108) = 0.21$, $p < .65$. The self-verification perspective was not supported. In contrast, the trait valence main effect was significant, $F(1, 108) = 188.35$, $p < .0001$. Subjects confirmed possession of positive traits ($M = 3.84$) and disconfirmed possession of negative traits ($M = -3.65$), a pattern consistent with the self-enhancement view.

The trait valence main effect was qualified by a significant interaction between trait valence and trait centrality, $F(1, 108) = 124.47$, $p < .0001$ (Table 4). Subjects strongly confirmed the possession of central positive traits and disconfirmed the possession of central negative traits, $t(58) = 19.86$, $p < .0001$; at the same time, subjects were somewhat likely to confirm the possession of peripheral positive traits and disconfirm the possession of peripheral negative traits, $t(58) = 1.69$, $p < .09$. The interaction can be viewed in a different way: Subjects were more likely to confirm positive traits when these traits were central rather than peripheral, $t(58) = 8.25$, $p < .0001$, and were more likely to

Table 4
Mean Diagnosticity Scores and Response Type (Confirmatory Minus Disconfirmatory Responses) as a Function of Trait Centrality and Trait Valence in Experiment 1

	Central traits		Peripheral traits	
Dependent measure	Positive	Negative	Positive	Negative
Diagnosticity scores	7.53	7.06	6.34	6.72
Response type	7.00	−6.57	0.67	−0.73

disconfirm negative traits when these traits were central rather than peripheral, $t(58) = -7.75$, $p < .0001$. The results of the interaction bolster the self-enhancement view and fail to support the self-verification view.

EXPERIMENT 2

One could argue that the partial support for self-enhancement obtained in Experiment 1 may be a methodological artifact. Subjects in Experiment 1 were asked to select only 3 of 12 questions. It is possible that subjects tended to self-enhance because the prospect for self-assessment or self-verification was unduly restrictive. An opportunity for thorough self-reflection might yield different results. If subjects had the opportunity to select a larger set of questions (i.e., more than 3), they could be more attuned to self-assessing or self-verifying concerns. The purpose of Experiment 2 was to address this possibility.

Method

The experimental design and procedure were similar to those of Experiment 1, with one noteworthy exception: 120 subjects self-reflected on each trait by selecting six rather than three questions.

Results and Discussion

Question Diagnosticity

The trait centrality main effect was significant. Subjects chose higher diagnosticity questions to self-reflect on central ($M = 7.02$) rather than peripheral ($M = 6.56$) traits, $F(1, 108) = 35.91$, $p < .0001$. This finding runs contrary to the self-assessment perspective and is in agreement with the self-verification perspective. The trait valence main effect was also significant. Subjects chose higher diagnosticity questions in self-reflecting on positive ($M = 6.89$) as opposed to negative ($M = 6.69$) traits, $F(1, 108) = 7.00$, $p < .009$. That is, subjects preferred high diagnosticity information when they wanted to examine possession of positive traits but avoided high diagnosticity information when they were confronted with the possibility of learning about their negative traits. This finding is congruent with the self-enhancement perspective.

The main effects just described were qualified by a significant Trait Centrality × Trait Valence interaction, $F(1, 108) = 33.26$, $p < .0001$ (Table 5). Subjects selected higher diagnosticity questions to self-reflect on central positive rather than central negative traits, $t(58) = 6.75$, $p < .0001$, and also selected higher diagnosticity questions to self-reflect on peripheral negative rather than peripheral positive traits, $t(58) = -2.03$, $p < .05$. Viewing the interaction from a different angle, subjects chose higher diagnosticity questions when self-reflecting on central positive rather than peripheral positive traits, $t(58) = 9.08$, $p < .0001$, but chose equally diagnostic questions when self-reflecting on central negative and peripheral negative traits, $t(58) = 0.15$, $p < .88$. Regardless of the viewing angle, the interaction pattern is partially supportive of the self-enhancement view and certainly incompatible with the self-verification view.

Response Type

The trait centrality main effect was significant: Subjects confirmed central traits ($M = 1.10$) and disconfirmed peripheral traits ($M = -1.40$), $F(1, 108) = 7.76$, $p < .006$, a finding that supports the self-verification view. The trait valence main effect also reached significance: Subjects confirmed possession of positive traits ($M = 8.17$) and disconfirmed possession of negative traits ($M = -8.47$), $F(1, 108) = 343.45$, $p < .0001$. This finding is in agreement with the self-enhancement view.

The two main effects just described were qualified by a significant interaction between trait valence and trait centrality, $F(1, 108) = 104.31$, $p < .0001$ (Table 5). Subjects confirmed possession of central positive and disconfirmed possession of central negative traits, $t(58) = 23.84$, $p < .0001$. Subjects also confirmed possession of peripheral positive and disconfirmed possession of peripheral negative traits, $t(58) = 5.36$, $p < .0001$. Looked at somewhat differently, subjects confirmed possession of positive traits when these traits were central rather than peripheral, $t(58) = 9.53$, $p < .0001$, and disconfirmed possession of negative traits when these traits were central rather than peripheral, $t(58) = -5.26$, $p < .0001$. The obtained results support the self-enhancement but not the self-verification view.

EXPERIMENT 3

The preceding experiments suggested that, in the context of the self-reflection task, the self-evaluation process is guided predominantly by self-enhancing concerns. One potential limitation of these experiments, however, might be that they used an arguably impoverished simulation of the self-reflection process. The objective of Experiment 3 was to examine the self-reflection process in a situation of presumably higher ecological validity. Subjects were allowed to generate their own questions, as they would in a self-reflection period initiated on their own.

Table 5
Mean Diagnosticity Scores and Response Type (Confirmatory Minus Disconfirmatory Responses) as a Function of Trait Centrality and Trait Valence in Experiment 2

	Central traits		Peripheral traits	
Dependent measure	Positive	Negative	Positive	Negative
Diagnosticity scores	7.34	6.70	6.44	6.68
Response type	14.00	−11.80	2.33	−5.13

Method

Subjects, Experimental Design, and Procedure

The design was identical to that of Experiment 1. The procedure was also identical to that of Experiment 1, with one notable alteration: Instead of selecting questions from an experimenter-provided list, 120 subjects generated their own questions. Thus, subjects generated three questions to self-reflect on each of three traits.

Coding

Two judges, who were unaware of the purpose and design of the experiment, independently rated the questions that subjects had generated for degree of diagnosticity. Judges were told to decide how well each question discriminated between the relevant trait and its alternative: "Knowing the answer to a given question (affirmative or negative), how well would you be able to tell whether the person having the trait under consideration is kind versus unkind (or friendly vs. unfriendly, trustworthy vs. untrustworthy, modest vs. immodest, predictable vs. unpredictable, and uncomplaining vs. complaining)?" Judges rated each question on a 9-point scale ranging from *not at all diagnostic* (1) to *extremely diagnostic* (9). Intercorrelations of judges' ratings for the nine questions ranged from .54 to .85, all $ps < .0001$. The mean judge diagnosticity rating was used in the analyses to follow. (Additional separate analyses for each ratings produced similar results.)

The judges also coded subjects' responses to each question as either confirmatory or disconfirmatory. Interjudge agreement was considerably high ($\kappa = .94$). Judges resolved their few disagreements through discussion. (Again, additional separate analyses for each judge yielded identical results.)

Results and Discussion

Question Diagnosticity

A significant trait centrality main effect revealed that subjects generated higher diagnosticity questions to self-reflect on central ($M = 7.30$) as opposed to peripheral ($M = 6.76$) traits, $F(1, 108) = 22.64$, $p < .0001$. This result supports the self-verification view and runs contrary to the self-assessment view. The trait valence main effect was significant and consistent with the self-enhancement perspective: Subjects generated higher diagnosticity questions when self-reflecting on positive ($M = 7.27$) as opposed to negative ($M = 6.79$) traits, $F(1, 108) = 18.08$, $p < .0001$.

These main effects were qualified by a significant interaction, $F(1, 108) = 37.22$, $p < .0001$ (Table 6). As far as the central traits were concerned, subjects generated higher diagnosticity questions to self-reflect on positive as opposed to negative ones, $t(58) = 10.63$, $p < .0001$; however, with regard to peripheral traits, subjects generated equally diagnostic questions to self-reflect on both positive and negative ones, $t(58) = -1.07$, $p < .29$. Alternatively, subjects generated higher diagnosticity questions when self-reflecting on central positive as opposed to peripheral positive traits, $t(58) = 7.70$, $p < .0001$, but generated equally diagnostic questions when self-reflecting on central negative and peripheral negative traits, $t(58) = -0.96$, $p < .34$. The interaction pattern is consistent with the self-enhancement view but fails to support the self-verification view.

Table 6
Mean Diagnosticity Scores and Response Type (Confirmatory Minus Disconfirmatory Responses) as a Function of Trait Centrality and Trait Valence in Experiment 3

	Central traits		Peripheral traits	
Dependent measure	Positive	Negative	Positive	Negative
Diagnosticity scores	7.88	6.71	6.65	6.87
Response type	6.23	−6.20	0.60	−1.07

Response Type

The trait centrality main effect was not significant: Subjects were not more likely to confirm central ($M = 0.02$) as opposed to peripheral ($M = -0.24$) traits, $F(1, 108) = .22$, $p < .64$, thus failing to support the self-verification perspective. The trait valence main effect was significant: Subjects confirmed possession of positive traits ($M = 3.42$) and disconfirmed possession of negative traits ($M = -3.64$), $F(1, 108) = 146.49$, $p < .0001$. This finding is congruent with the self-enhancement perspective.

Paralleling the earlier findings, the trait valence main effect was qualified by a significant interaction, $F(1, 108) = 84.09$, $p < .0001$ (Table 6). Subjects confirmed the possession of central positive and disconfirmed the possession of central negative traits, $t(58) = 16.77$, $p < .0001$. Subjects also manifested a tendency toward confirming the possession of peripheral positive traits and disconfirming the possession of peripheral negative traits, $t(58) = 1.74$, $p < .09$. Viewed somewhat differently, subjects were more likely to confirm positive traits when these traits were central rather than peripheral, $t(58) = 6.35$, $p < .0001$, and more likely to disconfirm negative traits when these traits were central rather than peripheral, $t(58) = -6.22$, $p < .0001$. These results lend support to the self-enhancement but not the self-verification view.

EXPERIMENT 4

Arguably, the procedures of the preceding three experiments did not pay full justice to the self-verification perspective. An adequate testing of this perspective would require that subjects' preexisting (both positive and negative) self-conceptions be at stake during the self-evaluation process. Experiments 1–3 assumed that subjects' collective central traits satisfied this requirement. However, a more rigorous test would demand that subjects self-evaluate in reference to idiographically defined preexisting (i.e., central) self-conceptions. Experiment 4 was designed to provide such a test.

Experiment 4 fulfilled another objective: It tested the assumption made in the previous three experiments that central traits are held with higher certainty than peripheral traits. This assumption was the basis for pitting the self-verification perspective against the self-assessment perspective. Thus, submitting this assumption to empirical scrutiny would also afford a more valid examination of the self-verification (and self-assessment) perspective.

The third purpose of Experiment 4 was to eliminate a rival

hypothesis. Specifically, it is possible that the findings of the previous experiments were partially due to the three subject-generated central positive traits (i.e., kind, friendly, and trustworthy) being more positive than the three subject-generated peripheral positive traits (i.e., modest, predictable, and uncomplaining). Stated otherwise, trait centrality may have been confounded with trait valence. To examine this possibility, an additional pilot study was conducted (Pilot Study 5). Eighty undergraduates rated all six traits on a scale ranging from *least positive, desirable, or favorable* (0) to *most positive, desirable, or favorable* (6). Presentation of the traits was randomized for each subject. Central positive traits (M = 5.60) were rated as more desirable than peripheral positive traits (M = 3.96), $t(79)$ = 20.65, $p < .0001$. [Analogously, the experimenter-generated central negative traits (M = 0.60) were rated as more undesirable than the experimenter-generated peripheral negative traits (M = 3.24), $t(79) = -26.07$, $p < .0001$.] The results of Pilot Study 5 leave open the likelihood of confounding between trait centrality and trait valence. This likelihood can be reduced by using idiographic traits.

Finally, Experiment 4 was designed to control for an additional possible weakness of Experiments 1–3, namely the artificiality with which negative traits were created. It was assumed that the experimenter-derived negative traits (i.e., unkind, unfriendly, untrustworthy, immodest, unpredictable, and complaining) were as central or peripheral to the subjects' collective self as were the subject-generated positive traits (i.e., kind, friendly, trustworthy, modest, predictable, and complaining). Obviously, this assumption needs validation.

Method

Subjects, Experimental Design, and Procedure

Three hundred fourteen UW undergraduates, run in large groups, filled out a brief questionnaire during the 2nd week of an academic semester (first session). The questionnaire asked subjects to list (a) four traits that they thought were as positive as possible, described them very well, and were as important to them as possible (i.e., central positive traits); (b) four traits that they thought were as negative as possible, described them very well, and were as important to them as possible (i.e., central negative traits); (c) four traits that they thought were as positive as possible, did not describe them well, and were not important to them (i.e., peripheral positive traits); and (d) four traits that they thought were as negative as possible, did not describe them well, and were not important to them (i.e., peripheral negative traits). Subjects were instructed to make every attempt to list four traits in each of the categories. Next, subjects rated each trait they had listed on a 9-point scale, ranging from *extremely uncertain about having this trait* (1) to *extremely certain about having this trait* (11), that assessed the certainty with which the trait was held. Finally, subjects recorded their names and phone numbers.

Three experimental assistants telephoned 149 subjects between the 7th week and the 14th week of the same academic semester. The assistants telephoned only subjects who had complied with the request to list four traits in each category (257 subjects, or 82%, did so). The assistants scheduled an individual appointment with subjects for a "study on self-perception" (second session). Six subjects refused to participate, and 23 did not report to the laboratory at the scheduled time. The remaining 120 subjects were used in the experiment.

Each of the 120 subjects was randomly assigned to one of the conditions of the 2 (trait centrality) × 2 (trait valence) between-subjects design of the experiment. Assignment to a given condition carried the implication that the subject would be asked to self-reflect exclusively on traits pertaining to this condition. That is, subjects self-reflected on only 3 of the 16 traits that they had listed in the first experimental session. This procedure was followed in an effort to conceal the relation between the first and second experimental sessions. Alternatively, this procedure was intended to create a state of "unknowingness" regarding the self-reflection task.

To summarize, subjects generated three questions for each of 3 traits from among the 16 traits they had listed in the first session. In addition, subjects generated three questions for each of 3 traits that they had not listed in the first session. Data pertaining to these additional questions were not used in analyses. This extra precaution was taken in an attempt to further disguise the relation between the two experimental sessions.

The order of the six traits was randomly determined for each subject. Before being dismissed, subjects were asked to guess the purpose of the experiment. They were also specifically probed regarding whether they thought that "any prior experience with studies in the Psychology Department this semester affected their responses in the present study." No subject guessed the purpose of the experiment or the relation between the two experimental sessions.

Coding

As in Experiment 3, two judges rated each question for degree of diagnosticity on a 9-point scale ranging from *not at all diagnostic* (1) to *extremely diagnostic* (9). Intercorrelations of judges' ratings for the nine questions ranged from .72 to .87, all $ps < .0001$. The mean judge diagnosticity rating was used in the analyses to follow. (Separate analyses for the ratings of individual judges yielded identical results.)

The judges also coded subjects' responses to each question as either confirmatory or disconfirmatory. Interjudge agreement was high (κ = .89). Judges resolved their disagreements through deliberation. (Again, separate analyses for individual judges produced identical results.)

Results and Discussion

Question Diagnosticity

Pitting the self-verification perspective against the self-assessment perspective required validation of the assumption that trait centrality implies trait certainty. The results indeed validated this assumption: Central traits (M = 6.96) were held with higher certainty than peripheral traits (M = 6.05), $F(1, 119) = 44.10$, $p < .0001$.

The trait centrality main effect was significant. Subjects generated higher diagnosticity questions while self-reflecting on central (M = 7.13) as opposed to peripheral (M = 6.55) traits, $F(1, 116) = 55.80$, $p < .0001$. This result is consistent with the self-verification perspective and inconsistent with the self-assessment perspective. The trait valence main effect also reached significance in support of the self-enhancement perspective: Subjects generated higher diagnosticity questions while self-reflecting on positive (M = 7.05) as opposed to negative (M = 6.63) traits, $F(1, 116) = 28.91$, $p < .0001$.

The two main effects just described were qualified by a significant interaction, $F(1, 116) = 68.14$, $p < .0001$ (Table 7). Subjects generated higher diagnosticity questions to self-reflect on central positive relative to central negative traits, $t(58) = 10.35$, $p < .0001$, but tended to generate higher diagnosticity questions to self-reflect on peripheral negative relative to peripheral posi-

tive traits, $t(58) = -1.91$, $p < .06$. Stated otherwise, subjects generated higher diagnosticity questions when self-reflecting on central positive as opposed to peripheral positive traits, $t(58) = 12.12$, $p < .0001$, but generated equally diagnostic questions when self-reflecting on central negative and peripheral negative traits, $t(58) = -0.52$, $p < .34$. This interaction is generally supportive of the self-enhancement perspective and nonsupportive of the self-verification perspective.

Response Type

The trait centrality main effect was significant: Subjects confirmed their central traits ($M = 5.40$) to a higher extent than their peripheral traits ($M = 0.07$), $F(1, 116) = 83.34$, $p < .0001$, thus supporting the self-verification perspective. The trait valence main effect was also significant: Subjects confirmed possession of positive traits ($M = 4.14$) and disconfirmed possession of negative traits ($M = -1.34$), $F(1, 116) = 22.97$, $p < .0001$. This result is compatible with the self-enhancement perspective.

Most crucial for the issue of relative support for the self-enhancement versus self-verification views is the interaction. The interaction was significant, $F(1, 116) = 4.22$, $p < .042$ (Table 7). Subjects confirmed the possession of central positive traits to a greater extent than the possession of central negative traits, $t(58) = 6.30$, $p < .0001$, a finding that supports the self-enhancement view at the expense of the self-verification view. Furthermore, subjects were somewhat more likely to confirm possession of peripheral positive than peripheral negative traits, $t(58) = 1.63$, $p < .10$. The interaction can be stated in an alternative manner. Subjects were more likely to confirm possession of central positive than peripheral positive traits, $t(58) = 11.00$, $p < .0001$ (a result predicted by the self-enhancement view), but were also more likely to confirm possession of central negative than peripheral negative traits, $t(58) = 4.11$, $p < .0001$. This latter finding (i.e., confirmation of central negative traits to a larger degree than peripheral negative traits) is discrepant from the findings of the previous three experiments and is predicted by the self-verification, but not the self-enhancement, perspective.

EXPERIMENT 5

It is possible that Experiments 1–4 stacked the deck against the self-assessment perspective. Specifically, instructions in these experiments did not provide subjects with any clues on how to engage in self-reflection. Subjects were informed that the experiments were studies of self-understanding and that one way to gain self-understanding is through self-questioning. However, subjects were not supplied with any pertinent criteria that could guide them in the question selection or question generation process.

The design of Experiment 5 was identical to that of Experiment 1, with one important exception. Experiment 5 included a condition in which subjects were instructed to conduct the self-reflection process as a scientist would. Subjects were encouraged to be as objective and accurate as possible in selecting questions. Subjects were explicitly told that they should ask themselves questions that would be most informative in detecting the trait under examination (for a similar manipulation, see Zukier & Pepitone, 1984). Thus, the major purpose of Experiment 5 was to explore whether an emphasis on objectivity, accuracy, and question informativeness would amplify the influence of self-assessment concerns on the self-reflection process.

Table 7
Mean Diagnosticity Scores and Response Type (Confirmatory Minus Disconfirmatory Responses) as a Function of Trait Centrality and Trait Valence in Experiment 4

	Central traits		Peripheral traits	
Dependent measure	Positive	Negative	Positive	Negative
Diagnosticity scores	7.66	6.60	6.44	6.60
Response type	7.40	4.73	2.00	−1.27

Method

Two hundred forty subjects participated in this experiment. The design was identical to that of Experiment 1, with the addition of a mode of thinking (nonscientific vs. scientific) variable. After selecting and answering three questions per trait under either a nonscientific or scientific mode of thinking, subjects completed a manipulation check. The manipulation check consisted of the following question: "In selecting the questions, how hard did you try to be objective, accurate, and scientifically minded?" Subjects responded on a single-item scale ranging from *not at all hard* (1) to *extremely hard* (9).

Results and Discussion

Manipulation Check

The manipulation of mode of thinking was effective: Subjects in a scientific mode reported striving harder toward accuracy ($M = 7.01$) than subjects in a nonscientific mode ($M = 6.35$), $F(1, 216) = 22.41$, $p < .0001$. Two matters require additional consideration. First, the manipulation, although effective, was not as powerful as expected. Second, the absolute means indicate that subjects generally tended toward the belief that they were being accurate.

Question Diagnosticity

Replicating previous findings, subjects selected higher diagnosticity questions while self-reflecting on central ($M = 6.98$) as opposed to peripheral ($M = 6.41$) traits, $F(1, 216) = 34.11$, $p < .0001$, a finding that fails to support the self-assessment view but is in line with the self-verification view. Furthermore, subjects chose higher diagnosticity questions when self-reflecting on positive ($M = 6.92$) as opposed to negative ($M = 6.45$) traits, $F(1, 216) = 21.37$, $p < .0001$, a finding that is consistent with the self-enhancement view. More pertinent to the objectives of this experiment, the mode of thinking main effect was not significant, $F(1, 216) = 0.05$, $p < .82$. Subjects tended to select equally diagnostic questions regardless of being in a scientific or nonscientific mode.

The Trait Centrality × Trait Valence interaction was significant, $F(1, 216) = 33.55$, $p < .0001$ (Table 8). Subjects selected

higher diagnosticity questions when self-reflecting on central positive rather than central negative traits, $t(118) = 7.55$, $p < .0001$, but selected equal diagnosticity questions when self-reflecting on peripheral positive and peripheral negative traits, $t(118) = -0.83$, $p < .41$. The interaction can be inspected in an alternative way. Subjects were more likely to choose higher diagnosticity questions when self-reflecting on central positive as opposed to peripheral positive traits, $t(118) = 10.30$, $p < .0001$, but likely to choose equal diagnosticity questions when self-reflecting on central negative and peripheral negative traits, $t(118) = 0.30$, $p < .98$. These patterns are generally consistent with the self-enhancement but not the self-verification view.

Most important, none of the interactions involving mode of thinking was significant: Mode of Thinking × Trait Centrality, $F(1, 216) = 0.06$, $p < .82$; Mode of Thinking × Trait Valence, $F(1, 216) = 1.33$, $p < .25$; and Mode of Thinking × Trait Centrality × Trait Valence, $F(1, 216) = 0.67$, $p < .42$. Instructions to subjects to be objective and accurate did not alter the strength of the influence of self-enhancement concerns on self-reflection.

Response Type

The trait centrality main effect was marginally significant: Subjects evidenced a tendency to confirm central traits ($M = 0.45$) and disconfirm peripheral traits ($M = -0.12$), $F(1, 216) = 3.08$, $p < .08$, thus providing weak support for the self-verification perspective. Paralleling previous findings, subjects confirmed possession of positive traits ($M = 3.60$) and disconfirmed possession of negative traits ($M = -3.27$), $F(1, 216) = 452.25$, $p < .0001$, thus lending support to the self-enhancement view. Furthermore, subjects were equally likely to confirm or disconfirm the traits regardless of mode of thinking, main effect $F(1, 216) = 2.73$, $p < .11$.

The Trait Valence × Trait Centrality interaction reached significance, $F(1, 216) = 341.47$, $p < .0001$ (Table 8). Subjects confirmed the possession of central positive traits and disconfirmed the possession of central negative traits, $t(118) = 33.14$, $p < .0001$. Subjects also manifested a tendency toward confirming the possession of peripheral positive traits and disconfirming the possession of peripheral negative traits, $t(118) = 1.73$, $p < .08$. The interaction pattern can be looked at differently: Subjects were more likely to confirm positive traits when these traits were central rather than peripheral, $t(118) = 16.49$, $p < .0001$, and more likely to disconfirm negative traits when these traits were central rather than peripheral, $t(118) = -10.57$, $p < .0001$. These results are in agreement with the self-enhancement, but not the self-verification, view.

Most important, mode of thinking did not interact with trait centrality or trait valence: Mode of Thinking × Trait Centrality, $F(1, 216) = 0.52$, $p < .47$; Mode of Thinking × Trait Valence, $F(1, 216) = 1.54$, $p < .22$; and Mode of Thinking × Trait Centrality × Trait Valence, $F(1, 216) = 0.27$, $p < .61$. Again, it appears that instructions attempting to sensitize subjects to accuracy concerns did not reduce people's inclination to self-enhance while self-reflecting.

Table 8
Mean Diagnosticity Scores and Response Type (Confirmatory Minus Disconfirmatory Responses) as a Function of Trait Centrality and Trait Valence in Experiment 5

	Central traits		Peripheral traits	
Dependent measure	Positive	Negative	Positive	Negative
Diagnosticity scores	7.49	6.47	6.35	6.46
Response type	6.87	−5.97	0.33	−0.57

EXPERIMENT 6

Arguing in favor of the operation of self-enhancement concerns during self-reflection requires additional validation. Specifically, for this argument to be plausible, one should demonstrate that self-enhancement concerns are operative when thinking about the self but inoperative when thinking about a nonsignificant other. The purpose of Experiment 6 was to provide such validational data.

Method

Two hundred forty subjects participated in this experiment. The experimental design was the same as in previous experiments, with the addition of the referent (self vs. other) variable. Specifically, half of the subjects reflected on traits pertinent to the self, whereas the remaining half reflected on traits pertinent to an acquaintance of theirs, a "person they had met only once or twice."

Results and Discussion

Question Diagnosticity

Significant trait centrality and trait valence main effects replicated previous results. Subjects selected higher diagnosticity questions when self-reflecting on central ($M = 7.15$) as opposed to peripheral ($M = 6.77$) traits, $F(1, 216) = 35.56$, $p < .0001$ (support for self-verification), and selected higher diagnosticity questions when self-reflecting on positive ($M = 7.04$) rather than negative ($M = 6.88$) traits, $F(1, 216) = 6.81$, $p < .0001$ (support for self-enhancement). However, the referent main effect did not approach significance, $F(1, 216) = 1.75$, $p < .19$.

The Trait Centrality × Trait Valence interaction reached significance, $F(1, 216) = 12.63$, $p < .0001$ (Table 9). Subjects selected higher diagnosticity questions when self-reflecting on central positive as opposed to central negative traits, $t(118) = 4.12$, $p < .0001$, but selected equal diagnosticity questions when self-reflecting on peripheral positive and peripheral negative traits, $t(118) = -0.58$, $p < .56$. Viewed somewhat differently, subjects were more likely to choose higher diagnosticity questions when self-reflecting on central positive as opposed to peripheral positive traits, $t(118) = 5.74$, $p < .0001$, but likely to choose equal diagnosticity questions when self-reflecting on central negative and peripheral negative traits, $t(118) = 1.59$, $p < .12$. The pattern of means is generally in line with the self-enhancement but not the self-verification perspective.

The interaction just described was qualified by a reliable triple interaction among trait centrality, trait valence, and referent, $F(1, 216) = 15.48$, $p < .0001$. Simple Trait Centrality × Trait

Table 9
Mean Diagnosticity Scores and Response Type (Confirmatory Minus Disconfirmatory Responses) as a Function of Trait Centrality and Trait Valence in Experiment 6

	Central traits		Peripheral traits	
Dependent measure	Positive	Negative	Positive	Negative
Diagnosticity scores	7.34	6.95	6.73	6.80
Response type	4.27	−3.40	1.07	−0.07

Valence ANOVAs conducted within each referent condition disclosed a significant interaction when the referent was the self, $F(1, 108) = 23.05$, $p < .0001$, but not when the referent was the other, $F(1, 108) = 0.09$, $p < .76$ (Figure 1). These findings demonstrated that self-enhancement concerns were present when subjects reflected on themselves but absent when subjects reflected on an acquaintance.

Response Type

The trait centrality main effect was not significant: Subjects were equally likely to confirm their central ($M = 0.44$) and peripheral ($M = 0.50$) traits, $F(1, 216) = 0.03$, $p < .87$, thus failing to support the self-verification view. A significant trait valence main effect, $F(1, 216) = 116.94$, $p < .0001$, revealed that subjects confirmed possession of positive traits ($M = 2.67$) and disconfirmed possession of negative traits ($M = -1.74$), thus advocating self-enhancement. More pertinent to the objectives of this experiment, the referent main effect was not significant, $F(1, 216) = 0.24$, $p < .63$.

The Trait Valence × Trait Centrality interaction was significant, $F(1, 216) = 64.46$, $p < .0001$ (Table 9). Subjects confirmed the possession of central positive traits and disconfirmed the possession of central negative traits, $t(118) = 9.57$, $p < .0001$. Subjects also manifested an inclination toward confirming the possession of peripheral positive traits and disconfirming the possession of peripheral negative traits, $t(118) = 1.86$, $p < .07$. Alternatively, subjects were more likely to confirm positive traits when they were central as opposed to peripheral, $t(118) = 4.49$, $p < .0001$, and were more likely to disconfirm negative traits when they were central as opposed to peripheral, $t(118) = -4.69$, $p < .0001$. The interaction pattern is in line with the self-enhancement, but not the self-verification, view.

Most important, the three-way interaction among trait centrality, trait valence, and referent was significant, $F(1, 216) = 59.30$, $p < .0001$. Simple Trait Centrality × Trait Valence ANOVAs conducted within each referent condition revealed a significant interaction when the referent was the self, $F(1, 108) = 175.54$, $p < .0001$, but not when the referent was the other, $F(1, 108) = 0.04$, $p < .84$ (Figure 2). Again, it appeared that the motive to self-enhance was evoked when subjects reflected on the self but not evoked when they reflected on an acquaintance.

GENERAL DISCUSSION

This investigation used a new paradigm, the self-reflection task, in an effort to understand the motivational antecedents of the self-evaluation process. Six experiments tested a total of 960 subjects to gauge comparatively the strength of the self-assessment, self-enhancement, and self-verification motives in regulating the self-evaluation process. The obtained results and their contribution to existing literature are highlighted next.

Relative Strength of the Self-Assessment and Self-Enhancement Motives

Past literature favored the thesis of the self-assessment perspective that the self-evaluation process aims at uncertainty reduction. People seek diagnostic information primarily in reference to relatively little-known characteristics (Sorrentino & Hewitt, 1984; Trope, 1979). The evidence favorable to the self-assessment perspective was gathered in independent tests. However, no evidence for this perspective was obtained in the comparative tests used in the present investigation. To begin with, these tests (five experiments) demonstrated that people prefer higher diagnosticity information when evaluating themselves on positive as opposed to negative traits, a finding congruent with the self-enhancement view (see also Alicke, 1985; Bradley, 1978; Greenwald, 1980).

Past literature is mixed on whether people are equally likely to prefer tasks of high success and high failure diagnosticity (self-assessment view) or whether people find high success diagnosticity tasks more attractive than high failure diagnosticity tasks (self-enhancement view). Trope (1980) showed that task attractiveness increases both with diagnosticity of success and

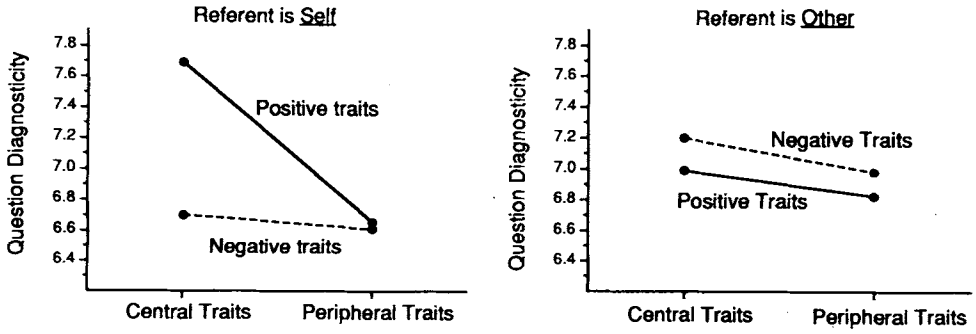

Figure 1. Question diagnosticity as a function of trait centrality, trait valence, and referent.

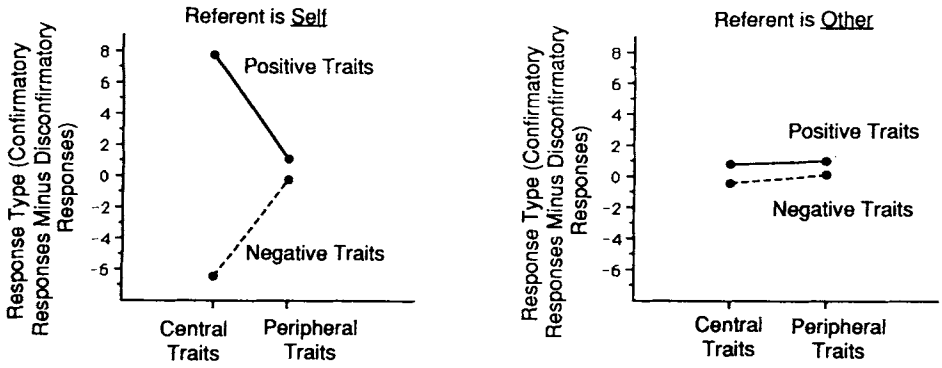

Figure 2. Response type as a function of trait centrality, trait valence, and referent.

diagnosticity of failure, a finding congruent with the self-assessment perspective. Similarly, Strube, Lott, Le-Xuan-Hy, Oxenberg, and Deichmann (1986, Experiment 1) found that task choice was a function of both success and failure diagnosticity. However, Strube et al. (1986, Experiment 1) reported an increase in task preference as a function of both success and failure diagnosticity but did not fully replicate this finding in Experiment 2: Only a marginally significant preference was found for high compared with low failure diagnosticity tasks. It should be noted, nonetheless, that Strube et al. (1986, Experiments 1 and 2) obtained an interaction between diagnosticity of success and diagnosticity of failure, such that the most desired task was high in both forms of diagnosticity. In another investigation, Strube and Roemmele (1985) reported that subjects preferred high over low diagnosticity of success tasks but manifested no preference for higher over lower diagnosticity of failure tasks, a finding favoring the self-enhancement perspective (the Diagnosticity of Success × Diagnosticity of Failure interaction was also present in this case). Finally, Brown (1990, Experiment 2) found that subjects were eager to seek more knowledge about their abilities after success, as test validity (a variable conceptually similar to test diagnosticity) increased, but were not concerned with additional opportunities for ability evaluation following failure, especially in the case of high test validity. These findings are compatible with the self-enhancement perspective.

The present results provided unequivocal support for the self-enhancement view. In all six experiments, subjects preferred higher diagnosticity questions when evaluating themselves on central positive as opposed to either central negative or peripheral negative traits.

In conclusion, the self-enhancement motive was found to be more influential than the self-assessment motive in guiding the self-evaluation process. Note that the self-enhancement motive predominated even when subjects were explicitly instructed to be self-assessing (Experiment 5).

Relative Strength of the Self-Enhancement and Self-Verification Motives

The present investigation afforded comparative testing of several aspects of the self-enhancement and self-verification views. A recapitulation of the main predictions and findings follows.

The self-enhancement view predicts that people will prefer more accurate (i.e., higher diagnosticity) information about their central positive than central negative traits, whereas the self-verification perspective predicts that people will prefer equally accurate information about their central positive and central negative traits. All six experiments favored the self-enhancement view, including Experiment 4, which examined idiographically subjects' preexisting central positive and central negative traits.

Furthermore, the self-enhancement view predicts that people will confirm their central positive traits and will disconfirm their central negative traits, whereas the self-verification view predicts that people will be equally likely to confirm their central positive and central negative traits. The results of all six experiments favored the self-enhancement view, including Experiment 4.

The self-enhancement perspective also predicts that people will prefer less accurate (i.e., lower diagnosticity) information about their central negative relative to their peripheral negative traits, whereas the self-verification perspective predicts that people will prefer more accurate information about their central negative relative to their peripheral negative traits. The self-enhancement perspective was not supported in any of the experiments: People generally preferred equal diagnosticity information pertaining to both their central negative and peripheral negative traits. The self-verification perspective was not supported in five of six experiments. The sixth experiment (Experiment 1) yielded results consistent with this perspective, but the results should be considered spurious because of lack of replicability.

Furthermore, the self-enhancement view predicts that people will disconfirm their central negative traits to a greater extent than their peripheral negative traits. In contrast, the self-verification view predicts that people will confirm their central negative traits to a greater extent than their peripheral negative traits. Five experiments (i.e., the ones that used subjects' collectively preexisting self-conceptions) supported the self-enhancement view. However, Experiment 4 (i.e., the one that used subjects' idiographically preexisting self-conceptions) furnished support for the self-verification view. Thus, it is likely that the relative lack of strong support for the self-verification perspective in this instance is due to the particular methodological procedures used.

In conclusion, the general trend of the comparative tests was

to support the notion that the self-enhancement motive is more influential than the self-verification motive in steering the self-evaluation process. Additional findings of the investigation (i.e., subjects selecting higher diagnosticity questions to self-reflect on positive as opposed to negative traits and subjects tending to confirm their peripheral positive traits to a greater degree than their peripheral negative traits) were consistent with this notion.

However, an important qualification is in order. Arguably, a most stringent test of the self-enhancement versus self-verification perspectives would require that two additional conditions be met. First, subjects' central negative traits should be as important to them as their central positive traits. Second, subjects should be as certain of their central negative traits as they are of their central positive traits. None of the present experiments collected data directly relevant to the first condition; Experiment 4 assumed importance equivalence but did not test this assumption. Furthermore, only Experiment 4 gathered data pertaining to the second condition. The condition was not met: Subjects were less certain of their central negative traits (M = 6.70) than their central positive traits (M = 7.22), $F(1, 119)$ = 9.17, $p < .003$.

These qualifications, however, are tempered by rather formidable methodological difficulties. Is it possible to find people who have central negative self-conceptions that are equally important to them as are their central positive self-conceptions? Is it possible to find people who hold central negative self-conceptions with equal certainty as central positive self-conceptions? Stated otherwise, is it possible to equalize within individuals for importance and certainty of central negative versus central positive self-conceptions, controlling at the same time for valence? The present investigation (especially Experiment 4) represented a first attempt to address these issues, an attempt that ought to be followed up by future comparative tests.

Relative Strength of the Self-Assessment and Self-Verification Motives

The self-assessment perspective predicts that people will prefer knowledge about their poorly known attributes rather than their well-known attributes, whereas the self-verification perspective predicts the opposite. The present comparative tests (all six experiments) demonstrated that people prefer higher diagnosticity information when evaluating themselves on well-known or certain characteristics (i.e., central traits) relative to little-known or uncertain characteristics (i.e., peripheral traits), a finding that bolsters the self-verification view at the expense of the self-assessment view (see also Maracek & Mettee, 1972; Swann & Ely, 1984).

A Final Note on Relative Strength

The present results provided converging evidence in support of the self-enhancement perspective. The self-reflection process appears to be predominantly regulated by self-enhancement concerns. People are likely to form inferences favorable to the self even when pondering the self in the absence of external feedback.

These findings represent an addition to the recent wave of empirical evidence for, and theoretical emphasis on, the role of self-enhancement on self-perception. Self-enhancement biases have been shown to affect (among others) speed of processing of self-relevant information (Kuiper, Olinger, MacDonald, & Shaw, 1985; Kunda, 1987), memory for self-relevant information (Crary, 1966; Silverman, 1964), judgments regarding the self (Alicke, 1985; Brown, 1986; Weinstein, 1980), causal attributions implicating the self (Green & Gross, 1979; Taylor & Koivumaki, 1976), social comparison processes (Brickman & Bulman, 1977; Tesser, 1988; Wills, 1981), and strategic self-presentation (Baumeister & Jones, 1978; Cialdini & Richardson, 1980; Godfrey, Jones, & Lord, 1986; Schlenker, 1975; for thorough discussions of mechanisms responsible for the maintenance of self-enhancement biases, see Brown, 1991, and Taylor & Brown, 1988).

Implications and Limitations

Implications and potential limitations of the present investigation are considered next.

Implication: The Question of Awareness

Are people aware of their self-enhancing shading on the self-evaluation process? The manipulation check data of Experiment 5 suggest that they are not. People subjectively believe that they are being accurate when objectively they are self-enhancing. This implies that enhancing self-evaluative thinking may be quite difficult to eradicate. At the very least, simple instructions attempting to increase people's awareness of their self-enhancing thinking appear to be ineffective. This may be due either to people lacking access to their own cognitive processes (Nisbett & Wilson, 1977) or to people being unable to modify their chronic and habitual (Bargh, 1982; Lewicki, 1985; Paulhus & Levitt, 1987) self-enhancing thinking, which attests to the strength and pervasiveness of the self-enhancing motive.

The preceding discussion does not necessarily assume that it is desirable to eradicate self-enhancing tendencies. In fact, such tendencies are arguably functional for people and contribute to their mental health (Brown, 1991; Taylor & Brown, 1988).

Potential Limitations

Two potential limitations of the present investigation are considered: whether the diagnosticity questions were equivalent across experimental conditions and whether there is a need for an exclusive focus on people with chronically low self-esteem or negative self-concept.

Were the Diagnosticity Questions Equivalent Across Experimental Conditions?

One potential limitation concerns a methodological procedure, and more specifically the problem of equivalence of the diagnosticity questions. The diagnosticity questions appearing in Table 1 were generated through pilot testing. Were the questions pertaining to central traits equivalent, in terms of their preratings, to the questions pertaining to peripheral traits? Also, were the questions referring to positive traits equivalent to the questions referring to negative traits?

It is unlikely that the equivalence problem affected the results of the present investigation for at least two reasons. First, prerating differences in questions were very small. Second, and most important, two of the six experiments (i.e., Experiments 3 and 4) did not use the prerated questions but used questions that subjects generated. The results of these two experiments were generally in agreement with the findings of the four experiments that used the prerated questions.

Is There a Need for an Exclusive Focus on People With Chronically Low Self-Esteem or Negative Self-Concept?

The methodology of the present research may raise another concern: Can self-enhancement and self-verification be unequivocally distinguished if the experimental focus is not exclusively on people with chronically low self-esteem or negative self-concept? Using exclusively low self-esteem or negative self-concept subjects would allow one to draw and test clear-cut predictions regarding the two perspectives: The self-enhancement perspective predicts that subjects will prefer to learn or confirm favorable information about themselves, whereas the self-verification perspective predicts that subjects will prefer to learn or confirm unfavorable information about themselves.

First, as an aside, the variable of self-esteem was not used in the present investigation because it is not exactly clear how to conceptualize global self-esteem and its relation with the self-concept. In fact, this may be one reason why research involving global self-esteem sometimes fails to produce informative results even within the domain of the self-enhancement versus self-verification controversy (e.g., Swann, Pelham, & Krull, 1989; see also Krosnick & Sedikides, 1990). Thus, it is preferable to focus on the self-concept (i.e., a person's cognitive representation of his or her attributes) rather than self-esteem. Indeed, the results of the present investigation illustrated that focusing on properties of people's self-conceptions (i.e., their centrality and valence) can afford a sufficiently rigorous comparative test of the two perspectives.

Second, given that subjects were randomly assigned to the experimental conditions, it is reasonable to assume that an equal proportion of negative self-concept and positive self-concept subjects were represented in the experimental cells. Hence, the obtained results qualify as a general law of human self-evaluation: People, in general, favor and subsequently confirm the discovery of positive characteristics rather than negative characteristics.

Nevertheless, self-concept valence (as well as self-esteem valence) is an individual differences variable, and as such it is certainly likely to moderate aspects of the self-evaluation process. Still, however, the viability of a given theoretical conclusion does not necessarily depend on moderator variables. In the present case, the right to draw general theoretical conclusions about the relative strength of the self-enhancement versus self-verification motive does not necessitate the presence or absence of moderator variables. It is only the "when" question that demands discussion of moderator variables, a question to which I now turn.

The When Question

A profitable approach for future research is the when question (Brown, 1990), namely, What are the circumstances under which one motive is likely to be more effective than another in influencing the self-evaluation process? Recent empirical and theoretical contributions have identified several moderators of the self-evaluation process (Sedikides & Strube, 1993; Swann, 1990). For example, task or attribute ambiguity may qualify as such (Brown, 1986). In cases of self-evaluation on unambiguous tasks or attributes (as in research reported by Trope and his colleagues), assessment concerns should predominate, whereas in instances of self-evaluation on ambiguous tasks or self-attributes, enhancement concerns should be prevalent (Dunning, Meyerowitz, & Holzberg, 1989). Attribute modifiability or controllability may also be a determinant of the emergence of self-assessment versus self-enhancement concerns (Brown, 1990). People may seek accurate feedback when evaluating modifiable attributes (e.g., skills) but seek self-flattering feedback when evaluating relatively fixed attributes (e.g., aptitudes). Finally, mood may also qualify as a moderator. Sad mood is likely to lead to negative self-perception and evaluation, whereas happy mood is likely to produce positive self-perception and evaluation (Sedikides, 1992). Thus, people in a sad mood may be prone to self-assessment, whereas people in a happy mood may be prone to self-enhancement.

Concluding Remarks

The results of the present investigation show that the self-enhancement motive is relatively the most powerful determinant of the self-evaluation process, followed by self-verification. However, in acknowledgment of people's ability to draw flexibly on alternative motives given different settings, tasks, prior experiences, and personal orientations, future research will need to concentrate not only on the when question, but also on an attempt to integrate the existing literature. An integrational model could be either at a microlevel (e.g., Are the three motives implicated in different stages of the self-evaluative sequence?) or at a macrolevel (e.g., Are the three motives involved in different developmental stages?). Regardless, research on the three self-evaluation motives has a promising future.

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Received July 31, 1991
Revision received December 21, 1992
Accepted January 1, 1993 ■