Resolving Conflicts Among Self-Evaluative Motives: Positive Experiences as a Resource for Overcoming Defensiveness¹

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The present research investigates how undergoing a negative or positive experience subsequently influences feedback seeking regarding self-attributes varying in self-relevance. Participants were offered feedback from earlier testing regarding their assets or liabilities for attaining various personal goals (general life goals or specific careers). Overall, self-relevance of a goal increased interest in both assets- and liabilities-focused feedback regarding that goal. As predicted, however, the effect of self-relevance depended on whether participants initially failed or succeeded on an unrelated task. Specifically, after failure, the selfrelevance of a goal was more likely to increase interest in assets-focused feedback than interest in liabilities-focused feedback. In contrast, after success, the self-relevance of a goal was equally or more likely to increase interest in liabilities-focused feedback than interest in assets-focused feedback. These results suggest that undergoing a positive or negative experience subsequently influences the relative weight of ego-defensive and self-assessment motives in feedback-seeking decisions.

Situations that offer individuals self-relevant feedback often pose a decisional dilemma. On the one hand, individuals may want to acquire new

0146-7239/98/0300-0053\$15.00/0 © 1998 Plenum Publishing Corporation

¹Preparation of this article was supported by National Institute of Mental Health Grant 1-R01-MH45557-01A1 to the first author.

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and diagnostic information about themselves and thus enhance the accuracy of their self-assessments (see, Festinger, 1954; Trope & Brickman, 1975; Trope, 1986). On the other hand, individuals may want feedback that protects their self-esteem (see e.g., Brown, 1990; Pyszczynski & Greenberg, 1987; Taylor, 1991; Taylor & Brown, 1988; Tesser, 1988; Zuckerman, 1979) or their preexisting beliefs about themselves (see, e.g., Festinger, 1957; Swann, 1990).

For accurate self-assessment purposes, both positive and negative feedback may be valuable because both can provide individuals with new diagnostic information regarding their abilities. In contrast, for defensive (esteem- and consistency-related) motives, positive and negative feedback are asymmetric. Specifically, for esteem-related purposes, positive feedback should be desirable because it enhances one's self-esteem, whereas negative feedback should be undesirable because it threatens one's self-esteem. For consistency purposes, positive and negative feedback also have opposite values. In this case, the value of the feedback depends on whether it confirms or disconfirms preexisting beliefs. For individuals with positive self-beliefs, positive feedback should be desirable and negative feedback undesirable, whereas for individuals with negative self-beliefs, the opposite should hold true. Assuming that most people are more likely to hold positive self-beliefs than negative self-beliefs, then for both esteem- and consistency-related motives, positive feedback is likely to be desirable and negative feedback undesirable.

Personal Relevance of Self-Attributes

Personal relevance of an attribute reflects the importance one attaches to possessing the attribute and its centrality to one's self-concept (see e.g., Chaiken & Stangor, 1987; Dunning, 1995; Linville & Carlston, 1994; Pelham, 1991; Sedikides, 1993; Sedikides & Strube, 1997; Tesser, 1988). For assessment purposes, diagnostic assessment of one's (low or high) standing on important attributes enables one to predict and control a relatively wide range of critical future outcomes. Given that both positive and negative feedback can contribute to accurate assessment, the personal relevance of an attribute should increase the value of positive as well as negative feedback regarding that attribute (see Trope, 1980, 1986). Because negative feedback can be more diagnostic than positive feedback, it is even possible for self-relevance to increase interest in negative feedback more than interest in positive feedback.

Personally relevant attributes are also central to protecting one's selfesteem and self-beliefs (see Sedikides, 1993; Sedikides & Strube, 1997;

Tesser, 1988). Positive feedback regarding personally relevant attributes enhances feelings of self-esteem and self-consistency, whereas negative feedback regarding personally relevant attributes dampens such feelings. Hence, for defensive (esteem and consistency) motives, the personal relevance of an attribute should produce *opposite* effects on the value of positive and negative feedback. That is, personal relevance of an attribute should increase the desirability of positive feedback but decrease the desirability of negative feedback regarding that attribute.

In sum, the decisional implications of assessment and defensive motives are incompatible when negative feedback is being offered. For assessment motives, negative feedback becomes more attractive when it pertains to an important self-attribute. In contrast, for defensive motives, negative feedback becomes more unattractive when it pertains to important self-attributes.

Overcoming Defensiveness: The Role of Prior Experiences

What determines, then, whether the personal relevance of an attribute will increase interest in diagnostic negative feedback regarding the attribute (in line with assessment motives) or decrease interest in such feedback (in line with defensive motives)? Trope (1986) suggested that conflicts between assessment and defensive motives pose a self-control dilemma. Individuals may want to attain the long-term assessment benefits of negative feedback regarding self-relevant attributes. That is, they may want to know what skills they need to improve, what kinds of tasks to choose or avoid, and how much effort and preparation to invest in the tasks they choose. At the same time, individuals may be deterred by the emotional costs of negative feedback. These costs involve negative esteem-related feelings such as shame, dejection, and disappointment (see Weiner, 1986; Higgins, 1987) and the general discomfort that accompanies self-inconsistency (see Cooper & Fazio, 1984; Steele, 1988; Swann, 1990). Indeed, research on task choice has found that people expect diagnostic failure to improve the accuracy of their self-knowledge, but also to make them feel shameful and dejected; in contrast, people expect diagnostic success to promote their self-knowledge as well as feelings of pride and gratification (see Trope, 1979, 1980; Trope & Brickman, 1975).

Thus, the decision to accept negative feedback that is diagnostic of self-relevant attributes entails a trade-off between long-term information gain and immediate emotional costs (see Banaji & Prentice, 1994; Crocker & Major, 1989; Taylor, Wayment, & Carrillo, 1996). As argued by Trope (1986), this decisional dilemma can be viewed as an instance of a general

class of self-control dilemmas in which immediate emotional obstacles may prevent one from enacting a preferred course of action (see Carver & Scheier, 1990; Gollwitzer, 1990; Lazarus & Folkman, 1984; Lowenstein & Thaller, 1989; Kuhl, 1984; Mischel, 1974,1984; Mischel, Cantor, & Feldman, 1996; Schelling, 1984). Trope and Neter (1994) further proposed that the relative importance of emotional costs and informational benefits of feedback depends on the kind of experiences individuals undergo prior to deciding whether to accept new feedback. Positive experiences presumably create positive mood that, in turn, serves as a buffer against the affective costs of negative feedback and enables individuals to focus on the informational implications of the feedback. The weight of long-term information gains relative to the weight of immediate affective costs should therefore be greater following a positive experience than a negative experience (see Aspinwall & Brunhart, 1996; Aspinwall & Taylor, 1993; Isen, 1993). This self-control analysis predicts, then, that the likelihood of accepting negative diagnostic feedback regarding a self-relevant attribute should be greater after undergoing a positive experience than after undergoing a negative experience.

Consistent with this analysis, Trope and Neter (1994) found that initial success (compared to failure) on one task subsequently increased participants' willingness to accept new negative feedback about their performance on an unrelated task. In fact, merely thinking about positive events (rather than negative events) from one's past was sufficient to increase participants' willingness to accept new negative feedback. Similarly, a study by Swann and colleagues (Swann, Wenzlaff, & Tarfarodi, 1992) found that initial positive rather than negative personality evaluations increased participants' interest in hearing about their weaknesses rather than their strengths in unrelated competence domains. This held true for both depressed and non-depressed participants. Moreover, as predicted by the self-control analysis, Trope and Neter found that before deciding whether to accept negative feedback, participants actively sought positive experiences, apparently in an effort to self induce a positive mood and thus boost their ability to cope with the unpleasantness of the offered feedback.

The Present Research

The present research tested the predictions of our self-control analysis in reference to the effect of prior experiences on feedback seeking regarding attributes varying in self-relevance. Theoretically, positive experiences should increase the likelihood that self-relevance will produce symmetric

effects on feedback seeking. That is, positive experiences should increase the likelihood that self-relevance will enhance interest in both positive feedback and negative feedback.

Participants were offered feedback regarding their ability to attain life goals (e.g., to be independent, to have a particular occupational career) that varied in self-relevance. The offered feedback concerned either participants' assets, namely, characteristics that facilitate goal attainment, or participants' liabilities, namely, characteristics that impede goal attainment. Our preliminary Experiments 1 and 2 offered this feedback under neutral conditions. The question was how would self-relevance of a goal influence interest in assets-focused feedback and liabilities-focused feedback regarding that goal. When assets-focused feedback is offered, the answer is simple: Self-relevance should make this feedback more desirable both for assessment motives and defensive motives. Hence, the self-relevance of a goal should increase willingness to accept assets-focused feedback regarding that goal.

However, when liabilities-focused feedback is offered, the self-relevance of a goal should make this feedback more desirable for assessment motives, but less desirable for defensive motives. Thus, the effect of selfrelevance of a goal on participants' willingness to accept liabilities-focused feedback regarding that goal should depend on the weight of assessment and defensive motives in participants' decisions. If assessment motives are more important, then the self-relevance of a goal should increase interest in liabilities-focused feedback about that goal; but if defensive motives are more important, then the self-relevance of a goal should decrease interest in liabilities-focused feedback about that goal.

Using the paradigm of Experiments 1 and 2, our main study, Experiment 3, was designed to investigate how prior success or failure experiences influence subsequent feedback seeking. The experiment consisted of two ostensibly unrelated sessions. In the first, participants performed an anagram task and received either failure or success feedback. In the second, participants were offered feedback regarding their ability to attain personal goals as in Experiments 1 and 2. The present self-control analysis predicts that after failure, self-relevance is more likely to increase interest in assets-focused feedback than interest in liabilities-focused feedback. According to this analysis, however, success experiences may attenuate or even reverse this asymmetric effect of self-relevance. Following success, then, the likelihood that self-relevance will increase interest in liabilitiesfocused feedback should become more nearly equal to. or even greater than, the likelihood that self-relevance will increase interest in assetsfocused feedback.

EXPERIMENTS 1 AND 2

Method

Experiment 1: Life Goals

Participants. Thirty-nine Tel-Aviv University undergraduates (29 females; 10 males) participated in Experiment 1 as part of a requirement for introductory psychology. The experiment was conducted individually or in groups of two or three participants.

Procedure. Experiment 1 was designed to examine participants' interest in feedback, under neutral conditions, regarding their ability to achieve life goals. Participants were asked to indicate their interest in assets- and liabilities-focused feedback for each of 29 life goals (e.g., to have a successful career, to be organized, to be responsible, to be fashionable). Specifically, participants were told, "Over the years, tests have been developed for assessing people's ability to achieve life goals. Our lab would like to know how interested students are in feedback from these kind of tests. Psychologists have developed a large variety of tests that measure how people cope with life goals. What we would like you to tell us is how interested you are in feedback from tests that measure the strong (weak) points you have in coping with various life goals. Feedback from such tests can tell you what kinds of specific strengths (weaknesses) you may have for coping with different life goals." Participants were then asked to indicate their interest in receiving feedback about some of their assets (liabilities) for each of the 29 life goals on a 9-point scale (1 = not at all interested; 9 = extremelyinterested). The order in which participants indicated their interest in assetsvs. liabilities-focused feedback was counterbalanced across participants; and participants indicated their interest in one type of feedback (e.g., assets focused) for all the goals and then their interest in the other type for all the goals. Self-relevance was assessed by asking participants to make ratings of personal importance for each of the 29 life goals. After indicating their interest in assets- and liabilities-focused feedback, participants rated on a 9-point scale how important it was to them that they accomplish each goal (1 = not at all important; 9 = extremely important).

Experiment 2: Occupational Goals

Participants. Sixty-one New York University undergraduates (40 females; 21 males) participated in Experiment 2 as part of a requirement for

introductory psychology. The questionnaires described below were embedded in a larger set of questionnaires.

Procedure. Like Experiment 1, Experiment 2 examined participants' interest in feedback under neutral conditions, but this time in reference to their ability to achieve occupational goals. Participants were told that the researchers would like to know how interested college students are in feedback from tests that assess suitability for different occupations. Participants then indicated their interest in receiving feedback about their assets and liabilities for each of 22 occupations (e.g., accountant, biologist, fashion merchandiser, pharmacist, writer) on a 9-point scale, as in Experiment 1. The order in which participants indicated their interest in assets- vs. liabilities-focused feedback was again counterbalanced across participants; and participants indicated their interest in one type of feedback (e.g., assets focused) for all the occupations and then their interest in the other type for all the occupations. The 22 occupations were chosen from pilot testing in which undergraduates were asked to indicate occupations they would like to pursue.

As in Experiment 1, we assessed self-relevance by asking participants to make personal importance ratings for each of the 22 occupations. After indicating their interest in assets- and liabilities-focused feedback, participants rated on a 9-point scale how important it was to them that they eventually enter each of the occupations. As an additional measure of self-relevance, we also obtained participants' perceptions of their suitability for each occupation. For each occupation, participants rated "relative to others who might be suitable for this occupation, how suitable would you be for the occupation" on a 10-point scale (1 = bottom 5%; 10 = upper 5%).

Results and Discussion

We examined the relation between feedback seeking and self-relevance with both an idiographic and a nomothetical approach.³ The idiographic approach involved intraparticipant correlations between the feedback-seeking and self-relevance measures across goals, whereas the nomothetical approach involved intragoal correlations between these two measures across participants. We describe the results yielded by the idiographic approach

³In addition to the analyses reported here, we also conducted a set of supplementary analyses in which the indexes of self-relevance were dichotomized on the basis of median splits and used as independent variables in Self-Relevance (high vs. low) \times Feedback Valence (asset vs. liabilities focused) ANOVAs on participants' ratings of interest in feedback. These analyses yielded similar results to those reported here. These results may be obtained from the first author.

and then the results yielded by the nomothetical approach. The intraparticipant correlations employed in the idiographic approach provide information about variations in feedback seeking and self-relevance between goals but within individuals. These correlations were obtained by correlating for each participant interest in each type of feedback and personal importance across the 29 life or 22 occupational goals. For the occupational goals, we also correlated interest in the two types of feedback and perceived suitability.⁴ All subsequent analyses used z-transforms of these intraparticipant correlation coefficients.⁵

It was expected that interest in assets-focused feedback about a life or occupational goal would be positively related to the self-relevance of that life or occupational goal, because self-relevance should make such feedback more valuable for both assessment and defensive motives. As shown in Table I, the data supported this hypothesis. The mean intraparticipant correlations between interest in assets-focused feedback and selfrelevance were always moderately high and significantly different from zero, ps < .001. The relation between interest in liabilities-focused feedback and self-relevance was expected to be positive if assessment concerns were more important in participants' feedback preferences but negative if defensive concerns were more important. Consistent with the former possibility, the mean intraparticipant correlations between interest in liabilities-focused feedback and the self-relevance indices were always positive and significantly different from zero, ps < .001 (see Table I). Although all correlations of feedback seeking with self-relevance were positive, there was also some evidence for the influence of defensive concerns in that the correlations involving interest in assets-focused feedback tended to be higher than those involving liabilities-focused feedback. Specifically, for occupational goals, interest in assets-focused feedback was more positively related to importance and suitability than was interest in liabilities-focused feedback, t(60) = 1.67, p = .10, t(60) = 2.23, p < .05, respectively. For life goals, the difference was in the same direction, but nonsignificant.

The nomothetical approach employed intragoal, instead of intraparticipant, correlations. These correlations examine variations in feedback seeking and self-relevance between participants but within goals. The intragoal correlations were obtained by correlating for each goal interest in

⁴Although importance and suitability are both indicators of self-relevance, the two represent distinct aspects of self-relevance. Thus, we analyzed the two separately. Importance represents desirability, whereas suitability represents attainability. Consistent with this view, the two were only moderately correlated (.65 for Experiment 2 and .68 for Experiment 3).

⁵We also computed intraparticipant correlations between interest in assets-focused feedback and interest in liabilities-focused feedback. For all three experiments, the mean correlations were high (.65 for Experiment 1, .87 for Experiment 2, and .79 for Experiment 3, ps < .001).

Self-Relevance: Life and Occupational Goals (Experiments 1 and 2) ^{a}				
	Interest in Assets M(SD)		Interest in Liabilities M(SD)	
Life goals (Experiment 1) Importance				
Intraparticipant	.58a (.29)	Ξ	.51 _a (.31)	
Intragoal	.38 _a (.23)	=	.35ª (.19)	
Occupational goals (Experiment 2) Importance				
Intraparticipant	.67 _a (.18)	>	.62a (.29)	
Intragoal	.65 _a (.26)	>	.60 _b (.26)	
Perceived suitability	• •			
Intraparticipant	.64 _a (.18)	>	.58b (.29)	
Intragoal	.62 _a (.31)	>	.56ь (.29)	

Table I. Mean Correlations Between Interest in Feedback and

^aAll mean correlations are significantly different from zero (p < .001). Mean correlations with different subscripts within a row are significantly different from one another (p < 05), except in the case of the intraparticipant mean correlations for importance where the difference is only marginal (p = .10). All significance tests are two tailed.

each type of feedback with self-relevance across participants; The z-transforms of these correlations were used in subsequent analyses which averaged across occupational or life goals instead of participants. As shown in Table I, these analyses yielded almost identical results to those reported above. All mean intragoal correlations between interest in assets-focused feedback and the self-relevance indices were positive and significant, ps <.001. The correlations between interest in liabilities-focused feedback and self-relevance were also positive and significant, ps < .001. As in the intraparticipant analyses, however, the data for occupational goals showed that the mean correlations between interest in assets-focused feedback and self-relevance were higher than those between interest in liabilities-focused feedback and self-relevance, t(21) = 2.57, p < .05, t(21) = 5.49, p < .001, for importance and suitability, respectively. The corresponding difference for life goals was in the same direction, but nonsignificant.

In sum, these results suggest that both defensive and nondefensive motives play a role in feedback seeking. Defensive motives were reflected in the stronger effect of self-relevance on interest in assets-focused than in liabilities-focused feedback. However, it appears, that such motives were not the sole or even dominant consideration in participants' feedback seeking. For defensive purposes, interest in positive feedback should increase with its self-relevance, whereas interest in negative feedback should decrease with its self-relevance. The present findings that both interest in assets- and liabilities-focused feedback increase with self-relevance suggests that participants attached more weight to assessment than to defensive concerns.

EXPERIMENT 3

The main purpose of Experiment 3 was to examine how prior failure or success experiences may affect the relationships revealed in Experiments 1 and 2 between interest in assets- and liabilities-focused feedback and selfrelevance. We hypothesized that self-relevance should have more symmetric effects on interest in assets- and liabilities-focused feedback after success experiences than after failure experiences.

Method

Overview

In a mass testing session prior to the experiment, participants indicated the self-relevance of 26 occupations by completing measures of personal importance and perceived suitability. The experiment consisted of two ostensibly unrelated sessions. In the first, participants received either failure or success feedback regarding their performance on an anagram task. In the second, participants indicated their interest in assets- and liabilities-focused feedback for each of the 26 occupations. Subsequently, they listed the type of assetsand liabilities-focused feedback they expected to receive for each occupation.

Participants

Sixty-eight New York University undergraduates (47 females; 21 males) participated as part of a requirement for introductory psychology individually or in groups of two to five.

Procedure

Measuring Self-Relevance. As in Experiment 2, we assessed self-relevance by asking participants to rate how important it was to them that they enter each of the occupations and how suitable they were for each occupation. Unlike Experiments 1 and 2, these measures were administered in

a mass testing session *prior* to the experiment to rule out any potential influence of feedback seeking on self-relevance judgments. The procedure was the same as that described in Experiment 2, except for the addition of four occupations. Participants made the personal importance and perceived suitability ratings in a battery of questionnaires administered to all students taking introductory psychology.

Prior Outcome. Prior outcome was manipulated during the "first session" of the experiment. Participants were told that a graduate student had just asked the experimenter if she would help him by having the participants complete an anagram task. In the failure condition, participants were told that "there is a time limit but most people finish before the time limit is up, but you should still work as quickly and accurately as possible." Participants were then given a long anagram task (28 items) that pretesting indicated was difficult for participants to complete in the allotted two minutes. In the success condition, participants were told that "there is a time limit in time so you should work as quickly and accurately as possible." Participant accurately as possible." Participants were told that "there is a time limit and most people do not finish in time so you should work as quickly and accurately as possible." Participants were then given a short anagram task (eight items) that pretesting indicated was easy for participants to finish in the allotted two minutes.

To ensure that the prior outcome manipulation was successful, at the very end of the experiment, participants indicated what percentage of the anagrams they thought they had completed correctly. Participants then rated their performance on the anagram task $(1 = not \ at \ all \ successful;$ $9 = extremely \ successful)$. Subsequently, participants rated how they felt after completing the anagram task on eight 9-point scales (*incompetent-competent; stupid-successful; unhappy-happy; bad-good; displeased-pleased; anxious-calm; uncomfortable-comfortable; depressed-elated*). Because of the high alpha for these items (.95), the mean of these items was used as an index of participants' affect following the anagram task.

Interest in Feedback. In the "second session," the experimenter told participants that the psychology department was working with career services to develop a program that provides students taking introductory psychology with information about their suitability for different occupations. Participants were further told that the psychology department and career services had designed a number of tests that assess people's suitability for different occupations, and that this year these tests were administered to students taking introductory psychology in the battery of questionnaires they completed at the beginning of the semester. At this point, the experimenter asked if everyone remembered completing the battery. All participants recalled completing the battery. The experimenter went on to say she would like to get their impressions of the information students will receive through a program the psychology department is developing with

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career services. The experimenter then indicated that because the psychology department had the results from the tests participants took in the battery, participants would be able to receive feedback about their suitability for the occupations the tests assessed. Due to limited time, however, they would only be able to receive feedback about some of the occupations. Thus, it was necessary for participants to indicate their interest in receiving feedback about each of the occupations.

The experimenter distributed to participants a booklet informing them that one of the tests they took in the battery can tell people about their assets (liabilities) for each of the 26 occupations. Examples of specific assets (liabilities) were provided for an occupation not listed (administrative assistant). Participants then indicated their interest in assets-focused (liabilities-focused) feedback for each of the 26 occupations on a 9-point scale, as in Experiment 2. The order in which participants indicated their interest in assets- vs. liabilities-focused feedback was counterbalanced across participants; and participants indicated their interest in one type of feedback for all the occupations before doing so for the other type. Postexperimental interviews indicated that participants saw this task as quite natural and believable. Moreover, upon hearing that they would not actually receive feedback, a large number of participants showed spontaneous displays of disappointment.

To determine whether participants actually expected to hear about their specific assets when receiving assets-focused feedback and their specific liabilities when receiving liabilities-focused feedback, participants were given a second booklet in which they were asked to indicate specific attributes they expected to hear from the test yielding assets-focused feedback and the test yielding liabilities-focused feedback for each of the 26 occupations. Participants were given two spaces after each occupation to write what they expected to hear for each type of feedback and were told that they did not need to fill up all the spaces. The order in which participants listed expected assets vs. liabilities was counterbalanced across participants; and participants listed their expectations for one type of feedback for all the occupations and then for the other type of feedback for all the occupations. A trained rater, blind to experimental conditions, coded the expected attributes on a 5-point scale for how much the attributes would inhibit vs. promote the achievement of the occupational goal (-2 = extremely inhibiting; +2 = extremely promoting). To establish reliability, another trained rater coded the expected attributes of 20% of the participants. The two raters agreed on the valence of the expected feedback for 96% of the ratings and on the exact rating for 83% of the ratings.

Results and Discussion

Manipulation Checks

Prior Outcome. Overall, participants receiving failure feedback on the anagram task were aware of their poor performance and participants receiving success feedback were aware of their good performance. Specifically, participants in the prior success condition perceived completing a significantly higher percentage of the anagrams than participants in the prior failure condition (Ms = 89.57 vs. 47.12), t(67) = 6.70, p < .001. Participants in the prior success condition also rated their performance on the anagram task as significantly better than their counterparts in the prior failure condition (Ms = 8.14 vs. 4.00), t(67) = 10.76, p < .001. Further, participants in the prior success condition also evidenced significantly more positive affect than participants in the prior failure condition (Ms = 7.33vs. 5.41), t(67) = 5.32, p < .001. Our measure of affect contained items assessing both mood (e.g., happy-unhappy) and feelings of competence (e.g., competent-incompetent). Analyses examining each of these aspects of affect separately indicated that both were significantly influenced by the prior feedback manipulation.

Expected Feedback. To examine participants' expectations about the occupational feedback, the coded attributes listed by participants for each occupation were summed. Because participants had an opportunity to list two attributes for each of the 26 occupations, and these attributes were subsequently coded on a scale ranging from -2 to +2, the sum of participants' expectations for each type of feedback (i.e., assets and liabilities focused) could range from -104 to +104. This index takes into account the number, valence, and extremity of the attributes participants listed. Participants expected assets-focused feedback to be fairly positive (m = 22.41) and liabilities-focused feedback to be fairly negative (M = -36.38), t(67) = -13.67, p < .001. In fact, analysis of the absolute value of participants' coded expectations indicated that participants expected the liabilities-focused feedback to be more extreme than the assets-focused feedback, t(67) = 5.36, p > .001. importantly, perceptions of the expected feedback did not vary as a function of prior feedback.⁶

⁶Although interest in assets-focused feedback was significantly correlated with expectations for this type of feedback (*M* correlation = .36, p < .01), there was no relation between interest in liabilities-focused feedback and expectation for this type of information (*M* correlation = 0.2, ns). Further, these correlations did not vary as a function of prior feedback.

Feedback Seeking

As in the first two experiments, we examined the relation between feedback seeking and self-relevance both idiographically and nomothetically. Again, our idiographic approach involved intraparticipant correlations. For each participant, we computed the correlation between interest in each type of feedback (assets and liabilities focused) and each measure of self-relevance (importance and suitability) across the 26 occupations. The z-transforms of these intraparticipant correlations were submitted to 2×2 mixed model analysis of variance (ANOVAs) with Prior Outcome (failure vs. success) as the between-participants factor and Feedback Valence (assets vs. liabilities focused) as the within-participants factor. We predicted that self-relevance would have more symmetric relations to interest in assetsand liabilities-focused feedback after success than after failure.

Consistent with this prediction, the ANOVA on the z-transforms of the intraparticipant correlations between interest in feedback and importance yielded only a significant Prior Outcome × Feedback Valence interaction, F(1, 66) = 4.04, p < .05, such that the mean correlation between interest in assets-focused feedback and importance was greater than that between liabilities-focused feedback and importance in the prior failure condition, t(32) = 2.05, p < .05, but not the prior success condition (see Table II). The relative magnitude of the two correlations in the prior success condition was the reverse of that in the prior failure condition, although the difference between the two was not significant. As shown in Table II, the ANOVA on the z-transforms of the intraparticipant correlations between interest in feedback and suitability yielded similar results. Again, there was only a significant Prior Outcome × Feedback Valence interaction, F(1, 66) = 4.98, p < .05, such that the mean correlation between interest in assets-focused feedback and suitability was significantly greater than that between liabilities-focused feedback and suitability in the prior failure condition, t(32) = 2.09, p < .05, but not in the prior success condition.

As in the first two experiments, our nomothetical approach involved intragoal correlations. For each occupation, we computed the correlations between interest in each type of feedback and each measure of self-relevance of the occupation across participants. The z-transforms of these intragoal correlations were used in subsequent analyses that averaged across occupations instead of participants. As shown in Table II, these analyses yielded similar results to those examining the intraparticipant correlations. As predicted, the ANOVA on the intragoal correlations between interest in feedback and importance yielded a significant Prior Outcome × Feedback Valence interaction, F(1, 24) = 20.42, p < .001. The mean correlation between interest in assets-focused feedback and importance was signifi-

Table II. Mean Correlations Between Interest in Expected Feedback and Self-Relevance as a Function of Prior Feedback (Experiment 3)

			1 .,
	Interest in Assets M(SD)		Interest in Liabilities M(SD)
Prior failure			
Importance			
Intraparticipant	.60a (.19)	>	.56b (.28)
Intragoal	.56a (.26)	>	.496 (.26)
Perceived suitability	- ()		
Intraparticipant	.58a (.20)	>	.52 _b (.28)
Intragoal	.51a (.25)	>	.44b (.25)
Prior success	- ()		
Importance			
Intraparticipant	.57 _a (.22)	=	.59a (.28)
Intragoal	.48a (.20)	<	.50b (.21)
Perceived suitability			. ,
Intraparticipant	.48a (.24)	=	$.52_{a}$ (.24)
Intragoal	.42a (.20)	<	.466 (.20)

^aAll mean correlations are significantly different from zero (p < .001). Mean correlations with different subscripts within a row are significantly different from one another (p < .05). All significance tests are two tailed.

cantly greater than that between liabilities-focused feedback and importance in the prior failure condition, t(25) = 3.81, p < .001, whereas in the prior success condition, the reverse pattern was evident, t(25) = 2.44, p < .05. Almost identical results were obtained by the 2 \times 2 mixed model ANOVA conducted on the intragoal correlations between interest in feedback and suitability. As predicted, there was a significant Prior Feedback \times Feedback Valence interaction, F(1, 24) = 25.96, p < .001; and in the prior failure condition, the mean correlation between interest in assetsfocused feedback and suitability was significantly greater than that between liabilities-focused feedback and suitability, t(25) = 4.69, p < .001, but in the prior success condition the reverse was true, t(25) = 2.46, p < .05.

GENERAL DISCUSSION

The present results are consistent with the general view that characterizing people as either defense motivated or accuracy motivated oversimplifies self-evaluation processes (Banaji & Prentice, 1994; Fiske & Taylor, 1990; Jussim, Yen, & Aiello, 1995; Kunda, 1989; Dunning, 1995; Pyscszynski & Greenberg, 1987; Sedikides & Strube, 1997; Sorrentino & Short, 1986; Taylor *et al.*, 1996; Trope, 1986; Trope & Neter, 1994). To a certain degree,

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both types of motives influence any given self-relevant information search. In some cases the motives converge. For example, positive feedback, feedback pertaining to one's assets, can satisfy esteem-related motives as well as self-assessment motives. In other cases, defensive and accuracy motives have opposite decisional implications. Specifically, negative feedback may provide novel information about one's weaknesses, but it may also threaten one's self-esteem and disconfirm positive self-beliefs. The self-relevance of the attribute to which the feedback pertains should intensify the conflict. Negative feedback regarding central self-attributes offers valuable selfassessment gains, but these gains often come at the expense of pronounced esteem- and consistency-related costs.

The question is how do individuals resolve such conflicts. We proposed a self-control analysis to answer this question. Theoretically, negative feedback regarding self-relevant attributes has long-term benefits of enhancing predictability and control by telling individuals how to improve themselves and how to make future choices. The costs of accepting such feedback are immediate feelings of shame, disappointment, and dejection (see Baumeister & Scher, 1988; Crocker & Major, 1989; Taylor *et al.*, 1996; Trope, 1986). We further proposed that the weights of the immediate affective costs and long-term informational benefits of negative feedback depend on the nature of the experiences individuals undergo prior to making a decision. Specifically, positive experiences should reduce the weight of immediate costs relative to the weight of long-term benefits (see Trope & Neter, 1994).

The results of the present experiments are consistent with this analysis. Overall, participants wanted more positive as well as more negative feedback regarding goals that were high rather than low in self-relevance. This replicated in different countries (United States and Israel) and with different goals (occupational and life goals), indicating considerable generality of the finding across participant characteristics and types of goals. Importantly, participants knew that the negative feedback would be quite unflattering-that it would reveal personal shortcomings that may prevent them from achieving their goals. This suggests that participants' interest in finding out what might prevent them from achieving their important goals came at the expense of immediate self-esteem. Moreover, Experiments 2 and 3 suggest that feedback seeking was also at variance with consistency needs. Specifically, these experiments showed that the higher the participants' perceived suitability for an occupation, the greater was their interest in finding out their liabilities for that occupation. This means that participants were willing to obtain negative feedback that would be incongruent with their occupational self-beliefs. In short, it seems that by seeking highly self-relevant negative feedback our participants had to give up satisfaction of their esteem- and consistency-related needs.

As expected, however, the effect of self-relevance on feedback seeking depended on whether participants had initially succeeded or failed on an unrelated task. After failure, self-relevance increased interest in positive feedback more than it increased interest in negative feedback. After success, this asymmetry was attenuated and even reversed, so that self-relevance increased interest in negative feedback at least as much as it increased interest in positive feedback. Again, the effect of prior failure and success was independent of what participants expected to hear. Participants expected the negative feedback to reveal their liabilities even more than they expected the positive feedback to reveal their assets, and these expectations did not vary systematically as a function of prior experiences or the self-relevance of the feedback.

The present research also addresses the possibility that positive experiences produce symmetric feedback seeking by biasing the interpretation of feedback (see, e.g., Forgas, 1995). That is, the present findings show that participants expected the assets-focused feedback to be positive and the liabilities-focused feedback to be quite negative, regardless of whether they had initially undergone a positive or a negative experience. This is not to deny that positive experiences may elicit other goals such as preserving the induced positive mood (see, e.g., Wegener & Petty, 1994). Positive mood may signal general well-being and thus diminish individuals' interest in systematic processing of negative self-relevant information (see, e.g., Martin, Ward, Achee, & Wyer, 1993; Schwarz, 1990; Edwards & Weary, 1993). Such goals may indeed govern feedback seeking behavior when the feedback has little diagnostic value or long-term significance. The present research suggests, however, that when the feedback is diagnostic regarding one's long-term goals (e.g., choosing an occupational career), positive experiences increase the likelihood of accepting the feedback even when it can spoil one's immediate positive mood. It is possible that in real life decisions, positive experiences often serves as a resource or mean rather than an end in and of itself, thus improving long-term rather than shortterm adaptation (see Isen, 1993).

Finally, the present research is relevant to the question of substitutability among self-evaluative motives (see Steele, 1988; Tesser, Martin, & Cornell, 1996). According to Tesser and colleagues, the same tension state underlies different self evaluative motives, so that satisfying one self-evaluative motive reduces the need to satisfy other such motives. Consistent with this idea, Tesser and Cornell (1991) found that an opportunity to satisfy self-consistency needs (by affirming one's values) reduces the motivation for self-esteem maintenance, as evidenced by reduced engagement in defensive social comparisons. Our hypothesis that positive experiences diminish the importance of ego-defensive concerns is compatible with the substitutability notion. However, the present self-control analysis would suggest that the opportunity to affirm oneself not only reduces defensive social comparisons, but also enhances diagnostic social comparisons—comparisons from which one can gain useful self knowledge (see Aspinwall & Taylor, 1993). Thus, to fully understand self-evaluative processes, we need a theory that can explain the impact of ego-defensive goals as well as the impact of self-knowledge and self-improvement goals. We hope the present research is a step in this direction.

REFERENCES

- Aspinwall, L. G., & Brunhart, S. M. (1996). Distinguishing optimism from denial: Optimistic beliefs predict attention to health threats. *Personality & Social Psychology Bulletin, 22*, 993-1003.
- Aspinwall, L. G., & Taylor, S. E. (1993). Effects of social comparison direction, threat, and self-esteem on affect, self-evaluation, and expected success. *Journal of Personality and Social Psychology*, 64, 708-722.
- Banaji, M. R., & Prentice, D. A. (1994). The self in social contexts. Annual Review of Psychology, 45, 297-332.
- Baumeister, R. F., & Scher, S. J. (1988). Self-defeating behavior patters among normal individuals: Review and analysis of common self-destructive tendencies. *Psychological Bulletin*, 104, 3-22.
- Brown, J. D. (1990). Evaluating one's abilities: Shortcuts and stumbling blocks on the road to self-knowledge. Journal of Personality and Social Psychology, 50, 149-167.
- Carver, S. C., & Scheier, M. F. (1990). Origins and functions of positive and negative affect. Psychological Review, 97, 19-35.
- Chaiken, S., & Stangor, C. (1987). Attitudes and attitude change. Annual Review of Psychology, 38, 575-630.
- Cooper, J., & Fazio, R. H. (1984). A new look at dissonance theory. In L. Berkowitz (Ed.), Advances in experimental social psychology (Vol. 17, pp. 229-266). New York: Academic Press.
- Crocker, J., & Major, B. (1989). Social stigma and self-esteem: The self-protective properties of stigma. *Psychological Review*, 96, 608-630.
- Dunning, D. (1995). Trait importance and modifiability as factors influencing self-assessment and self-enhancement motives. Personality and Social Psychology Bulletin, 21, 1297-1306.

Festinger, L. (1954). A theory of social comparison processes. *Human Relations, 7,* 117-140. Festinger, L. (1957). A theory of cognitive dissonance. Palo Alto, CA: Stanford University Press.

- Fiske, S., & Taylor, S. E. (1990). Social cognition. New York: McGraw-Hill.
- Forgas, J. P. (1995). Mood and judgment: The affect infusion model (AIM). Psychological Bulletin, 117, 39-66.
- Gollwitzer, P. M. (1990). Action phases and mind-sets. In E. T. Higgins & R. M. Sorrentino (Eds.), *Handbook of motivation and cognition: Foundations of social behavior* (Vol. 2, pp. 53-92). New York: Guilford.
- Higgins, E. T. (1987). Self discrepancy: A theory relating self and affect. Psychological Review, 94, 319-340.
- Isen, A. (1993). Positive affect and decision making. In M. Lewis & J. Haviland (Eds.), Handbook of emotion (pp. 61-89). New York: Guilford.
- Jussim, L., Yen, H., & Aiello, J. R. (1995). Self-consistency, self-enhancement, and accuracy in reactions to feedback. *Journal of Experimental Social Psychology*, 31, 322-256.

Kuhl, J. (1984). Volitional aspects in achievement motivation and learned helplessness: Towards a comprehensive theory of action control. In B. A. Maher, (Ed.), *Progress in experimental personality research* (Vol. 12, pp. 99-170). New York: Academic Press.

Kunda, Z. (1990). The case for motivated reasoning. Psychological Bulletin, 108, 480-498.

Lazarus, R. S., & Folkman, S. (1984). Stress, appraisal, and coping. New York: Springer.

- Linville, P. W., & Carlston, D. E. (1994). Social cognition of the self. In P. G. Devine, D. L. Hamilton, & T. M. Ostrom (Eds.), Social cognition: Its impact on social psychology (pp. 183-205). New York: Academic Press.
- Lowenstein, G., & Thaller, R. H. (1989). Anomalies: intertemporal choice. Journal of Economic Perspectives, 3, 181-193.
- Martin, L. L., Ward, D. W., Achee, J. W., & Wyer, R. S. (1993). Mood as input: People have to interpret the motivational implications of their moods. *Journal of Personality and Social Psychology*, 64, 317-326.
- Mischel, W. (1974). Processes in delay of gratification. In L. Berkowitz (Ed.), Advances in experimental social psychology (Vol. 7, pp. 249-292). New York: Academic Press.
 Mischel, W., Cantor, N., & Feldman, S. (1996). Principles of self-regulation: The nature of
- Mischel, W., Cantor, N., & Feldman, S. (1996). Principles of self-regulation: The nature of willpower and self-control. In E. T. Higgins & A. W. Kruglanski (Eds.), Social psychology: Handbook of basic principles (pp. 329-360). New York: Guilford.
- Mischel, W. (1984). Convergences and challenges in the search for consistency. American Psychologist, 39, 351-364.
- Pelham, B. W. (1991). On confidence and consequence: The certainty and importance of self-knowledge. Journal of Personality and Social Psychology, 60, 518-530.
- Pyszczynski, T., & Greenberg, J. (1987). Self-regulatory perseveration and the depressive selffocusing style: A self-awareness theory of reactive depression. *Psychological Bulletin*, 102, 122-138.
- Schelling, T. (1984). Self command in practice, in theory and in a theory of rational choice. American Economic Review, 74, 1-11.
- Schwarz, N. (1990). Feeling as information: Informational and motivational functions of affective states. In E. T. Higgins & R. M. Sorrentino (Eds.), Handbook of motivation and cognition: Foundations of social behavior (Vol. 2, pp. 527-561). New York: Guilford.
- Sedikides, C. (1993). Assessment, enhancement, and verification determinants of self-evaluation processes. Journal of Personality and Social Psychology, 65, 317-338.
- Sedikides, C., & Strube, M. J. (1997). Self-evaluation: To thine own self be good, to thine own self be sure, to thine own self be true, and to thine own self be better. In M. P. Zanna (Ed.), Advances in experimental social psychology (Vol. 29, pp. 209-270). New York: Academic Press.
- Sorrentino, R. M., & Short, J. C. (1986). Uncertainty orientation, motivation, and cognition. In R. M. Sorrentino & E. T. Higgins (Eds.), *Handbook of motivation and cognition* (pp. 379-403). New York: Guilford.
- Steele, C. M. (1988). The psychology of self affirmation: Sustaining the integrity of the self. In L. Berkowitz (Ed.), Advances in experimental social psychology (Vol. 21, pp. 249-292). New York: Academic Press.
- Swann, W. B., Jr. (1990). To be adored or to be known? The interplay of self-enhancement and self-verification. In E. T. Higgins & R. M. Sorrentino (Eds.), Handbook of motivation and cognition (Vol 2, pp. 409-447). New York: Guilford.
- Swann, W. B., Wenzlaff, R. M., & Tafarodi, R. W. (1992). Depression and the search for negative evaluations: More evidence of the role of self-verification strivings. *Journal of Abnormal Psychology 101*, 314-317.
- Taylor, S. E. (1991). Asymmetrical effects of positive and negative events: The mobilizationminimization hypothesis. *Psychological Bulletin, 103,* 193-210.
- Taylor, S. E. & Brown, J. D. (1988). Illusion and well-being: A social psychological perspective on mental health. *Psychological Bulletin*, 110, 67-83.
- Taylor, S. E., Wayment, H. A., & Carrillo, M. (1996). Social comparison, self-regulation, and motivation. In R. M. Sorrentino & E. T. Higgins (Eds.), Handbook of motivation and cognition (Vol. 3, pp. 3-37). New York: Guilford.

- Tesser, A. (1988). Toward a self-evaluation maintenance model of social behavior. In L. Berkowitz (Ed.), Advances in experimental social psychology (Vol. 21, pp. 181-227). New York: Academic Press.
- Tesser, A., & Cornell, D. P. (1991). On the confluence of self processes. Journal of Experimental Social Psychology, 27, 501-526.
- Tesser, A., Martin, L., & Cornell, D. (1996). On the substitutability of self-protective mechanisms. In P. M. Goliwitzer & J. A. Bargh (Eds.), Thought, motivation, and action (pp. 48-68). New York: Guilford.
- Trope, Y. (1979). Uncertainty-reducing properties of achievement tasks. Journal of Personality and Social Psychology, 37, 1505-1518.
- Trope, Y. (1980). Self-assessment, self-enhancement and task preference. Journal of Experimental Social Psychology, 16, 116-129.
- Trope, Y. (1986). Self-assessment and self-enhancement in achievement motivation. In R. M. Sorrentino & E. T. Higgins (Eds.), Handbook of motivation and cognition: Foundations of social behavior (Vol 1, pp. 350-378). New York: Guilford. Trope, Y. & Brickman, P. (1975). Difficulty and diagnosticity as determinants of choice among
- tasks. Journal of Personality and Social Psychology, 31, 918-925.
- Trope, Y., & Neter, E. (1994). Reconciling competing motives in self-evaluation: The role of self-control in feedback seeking. Journal of Personality and Social Psychology, 66, 646-657.
- Wegener, D. T., & Petty, R. E. (1994). Mood management across affective states: The hedonic contingency hypothesis. Journal of Personality and Social Psychology, 66, 1034-1048.
- Weiner, B. (1986). Attribution, emotion, and action. In R. M. Sorrentino & E. T. Higgins (Eds.), Handbook of motivation and cognition: Foundations of social behavior (Vol. 1, pp. 281-312). New York: Guilford.
- Zuckerman, M. (1979). Attribution of success and failure revisited, or: The motivational bias is alive and well in attribution theory. Journal of Personality, 47, 245-287.