

Ideal Versus Ought Predilections for Approach and Avoidance: Distinct Self-Regulatory Systems

E. Tory Higgins, Christopher J. R. Roney, Ellen Crowe, and Charles Hymes

Two studies using different paradigms activated either ideal self-guides (a person's hopes or wishes) or ought self-guides (a person's sense of duty and responsibility) and measured Ss' concern with different forms of self-regulation: approaching matches to desired end states or mismatches to undesired end states and avoiding mismatches to desired end states or matches to undesired end states. A 3rd study asked ideal versus ought discrepant Ss to select among alternative strategies for friendship. The results suggest that a concern with approach is greater for ideal than ought self-regulation, whereas a concern with avoidance is greater for ought than ideal self-regulation.

Psychologists have long been interested in the principles of self-regulation, especially the nature of motivated movement relative to represented end states (for recent discussions, see Bandura, 1986; Cantor & Kihlstrom, 1987; Carver & Scheier, 1990; Kuhl, 1984). Two basic distinctions regarding self-regulation have been made in the literature, one involving the *valence* of the end state that functions as the reference value for the movement (positive vs. negative) and one involving the *direction* of the motivated movement (approach vs. avoidance). Our studies examined whether people's predilections for distinct forms of self-regulation differ for regulation in relation to their ideal self-guides (i.e., their hopes and wishes) versus their ought self-guides (i.e., their sense of duty and obligations).

In regard to valence, the self-regulatory system can have either a desired end state (i.e., a positive reference value) or an undesired end state (i.e., a negative reference value) functioning as the standard. Both positive and negative reference values have been described in the literature (see Carver & Scheier, 1990). Various self theories have described positive selves as reference values in self-regulation, such as the type of person individuals would like to be (e.g., Cooley, 1902/1964; Higgins, 1987; James, 1890/1948; Markus & Nurius, 1986; Rogers, 1961; Schlenker & Weigold, 1989) or the type of person they believe they should be (e.g., Freud, 1923/1961; Higgins, 1987; James, 1890/1948; Schlenker & Weigold, 1989). Self theories have also described negative selves as reference values in self-regulation, such as Erikson's (1963) "evil identity," Sullivan's (1953) "bad me," and Markus and Nurius's (1986) "feared self."

In regard to the direction of the motivated movement, the literature distinguishes between approaching a positive self-state and avoiding a negative self-state. Carver and Scheier

(1990) proposed that when a self-regulatory system has a desired end state as a reference value, the system reduces discrepancies and involves attempts to move the currently perceived actual self-state as close as possible to the desired reference point. When a self-regulatory system has an undesired state as a reference value, the system amplifies discrepancies and involves attempts to move the currently perceived actual self-state as far away as possible from the undesired reference point. Carver and Scheier (1990) referred to the former (discrepancy-reducing) system as an *approach system* and the latter (discrepancy-amplifying) system as an *avoidance system*. In this case, approach and avoidance concern the direction of the movement in relation to either a desired end state or an undesired end state, respectively. Alternative ways of accomplishing these movements are unspecified. If specific means for accomplishing these overall movements are considered, additional modes of approach and avoidance can be identified.

In a discrepancy-reducing system, people are motivated to move their actual self as close as possible to the desired end state. There are two alternative means to reduce the discrepancy between the actual self and a desired end state: approach self-states that match the desired end state or avoid self-states that mismatch the desired end state. For example, a person who wants to get a good grade on a quiz (a desired end state) could either study hard at the library the day before the quiz (approaching a match to the desired end state) or turn down an invitation to go out drinking with friends the night before the quiz (avoiding a mismatch to the desired end state).

In a discrepancy-amplifying system, people are motivated to move their actual self as far away as possible from the undesired end state. There are, again, two alternative means to amplify the discrepancy between the actual self and an undesired end state: approach self-states that mismatch the undesired end state or avoid self-states that match the undesired end state. For example, a person who dislikes interpersonal conflict (an undesired end state) could either arrange a meeting with his or her roommates to work out a schedule for cleaning their apartment (approaching a mismatch to the undesired end state) or leave the apartment when the roommates start to argue (avoiding a match to the undesired end state).

Thus, by considering the alternative means for reducing dis-

E. Tory Higgins, Christopher J. R. Roney, Ellen Crowe, and Charles Hymes, Department of Psychology, Columbia University.

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Correspondence concerning this article should be addressed to E. Tory Higgins, Department of Psychology, Schermerhorn Hall, Columbia University, New York, New York 10027.

crepancies in relation to desired end states and amplifying discrepancies in relation to undesired end states, four different forms of self-regulation can be identified. Table 1 summarizes how "valence of end state as reference point" combines with "direction of means" to produce the four different regulatory forms. A major purpose of our studies was to investigate whether people's predilections for these different regulatory forms vary for ideal self-regulation versus ought self-regulation.

Self-discrepancy theory (Higgins, 1987, 1989) distinguishes between two basic types of guiding end states: (a) ideal self-guides, which are individuals' representations of someone's (self or other) hopes, wishes, or aspirations for them, and (b) ought self-guides, which are individuals' representations of someone's (self or other) demands regarding their duties, obligations, and responsibilities. The theory postulates that the ideal self-regulatory system focuses on the presence or absence of positive outcomes (e.g., love provided or withdrawn), whereas the ought self-regulatory system focuses on the presence or absence of negative outcomes (e.g., criticism administered or suspended). Thus, sensitivity to events involving the presence and absence of positive outcomes should be greater when ideal versus ought self-guides are activated, whereas sensitivity to events involving the absence and presence of negative outcomes should be greater when ought versus ideal self-guides are activated.

Higgins and Tykocinski (1992) recently tested this prediction at the chronic level of ideal versus ought activation by selecting subjects who either were predominant actual-ideal discrepancy persons (i.e., possessed high actual-ideal discrepancies and low actual-ought discrepancies) or were predominant actual-ought discrepancy persons (i.e., possessed high actual-ought discrepancies and low actual-ideal discrepancies). A few weeks after the selection procedure, all subjects read the same essay about the life of a target person in which different events reflecting each of the four different types of psychological situations occurred (e.g., the presence of a positive outcome). The target person's experiences were circumstantial and not personality related (e.g., finding money on the street). Ten minutes after reading the essay, the subjects were asked to reproduce it word for word. As predicted, events reflecting either the presence or the absence of positive outcomes were remembered better by predominant actual-ideal than by predominant actual-ought discrepancy persons, whereas the reverse was true for events reflecting either the absence or the presence of negative outcomes.

The results of the Higgins and Tykocinski (1992) study support the notion that regulation in relation to an ideal self-guide involves an orientation toward positive outcomes, whereas regulation in relation to an ought self-guide involves an orientation toward negative outcomes. In a recent article, Higgins (in press) proposed that the distinction between ideal self-regulation and ought self-regulation represents one case of a more general distinction between two different ways of regulating pain and pleasure. One system for regulating valence has a positive outcome focus and attempts to maximize the presence of positive outcomes and minimize the absence of positive outcomes. The other system has a negative outcome focus and attempts to maximize the absence of negative outcomes and minimize the presence of negative outcomes. In terms of Bowlby's (1969, 1973) perspective on people's fundamental survival needs, the former system would be responsive to people's nurturance needs and the latter system would be responsive to their security needs. All people possess both systems, but different socialization experiences could make one system predominant in self-regulation. For example, a disciplinary history of receiving or losing warmth and affection from one's parents contingent on one's actions could strengthen the positive outcome focus system, whereas a history of receiving or escaping punishment and criticism from one's parents could strengthen the negative outcome focus system (see Higgins, 1991).

Higgins (in press) suggested that these two distinct systems for regulating pain and pleasure might vary in their predilections for the different forms of self-regulation identified earlier. Specifically, one might expect that a positive outcome focus would be associated with a predilection for self-regulatory forms involving approach, whereas a negative outcome focus would be associated with a predilection for self-regulatory forms involving avoidance. This would also be reasonable if, as suggested earlier, the positive outcome focus system is responsive to nurturance-like needs (e.g., obtaining nourishment) and the negative outcome focus system is responsive to survival-like needs (e.g., escaping danger). Given that ideal self-regulation is a positive outcome focus system and ought self-regulation is a negative outcome focus system, it follows that regulation in relation to ideal self-guides would involve approach-related self-regulatory forms, whereas regulation in relation to ought self-guides would involve avoidance-related self-regulatory forms. There is more than one possibility, however, for how ideal self-regulation would involve approach forms and ought self-regulation would involve avoidance forms.

From the perspective of self-discrepancy theory, which has considered only desired end states as reference points, ideal self-regulation would involve a predilection for approaching matches to desired end states, whereas ought self-regulation would involve a predilection for avoiding mismatches to desired end states. When one considers both desired and undesired end states as reference points, a second possibility would follow from Carver and Scheier's (1990) distinction between overall directional movements. They suggested that the ideal self might be associated with desired end states and that the ought self might be associated with undesired end states. From this perspective, then, ideal self-regulation would involve a concern with any means for reducing discrepancies to desired end states (i.e., a predilection for both approaching matches and avoiding

Table 1
Summary of Regulatory Forms as a Function of Valence of End State as Reference Point and Direction of Means

Direction of means	Valence of end state as reference point	
	Desired (discrepancy reducing)	Undesired (discrepancy amplifying)
Approach	Approaching matches to desired end states	Approaching mismatches to undesired end states
Avoidance	Avoiding mismatches to desired end states	Avoiding matches to undesired end states

mismatches to desired end states [approach at the system level]), whereas ought self-regulation would involve a concern with any means for amplifying discrepancies to undesired end states (i.e., a predilection for both avoiding matches and approaching mismatches to undesired end states [avoidance at the system level]).

Our first two studies were designed to examine these alternative possibilities. Subjects' predilections regarding the different regulatory forms (see Table 1) were measured in two converging ways. In Study 1, the subjects were given statements beginning with the phrase "What really matters to me is to try . . ." followed by instances of each of the regulatory forms, and they were asked to judge the degree to which the statement expressed what they would do. High predilection for a particular regulatory form would be revealed in judging that a statement expressing the importance of that form was "very much like me." In Study 2, the subjects read about various episodes involving another person that exemplified each of the regulatory forms and were later asked to recall the episodes. High predilection for a particular regulatory form would be revealed in better recall of episodes exemplifying that form.

Both studies manipulated whether the ideal or the ought regulatory system was activated. Study 1 accomplished this by exposing subjects to attributes that were either distinctive to a subject's ideal self-guide or distinctive to a subject's ought self-guide. Study 2 accomplished this by having subjects either think about hopes and wishes (activating ideal self-guides) or think about duties and obligations (activating ought self-guides). Both studies presented subjects with instances of all four regulatory forms combining valence of stated end state (desired end state vs. undesired end state) and direction of stated means (approach vs. avoidance), which they either evaluated (Study 1) or recalled (Study 2).

The prediction derived from self-discrepancy theory for how ideal self-regulation would involve approach forms and ought self-regulation would involve avoidance forms would be supported by a Type of Self-Guide Activated \times Direction of Stated Means interaction for the half of the design involving desired end states (a higher predilection for approaching matches to desired end states when ideal vs. ought self-guides are activated and a higher predilection for avoiding mismatches to desired end states when ought vs. ideal self-guides are activated). The prediction derived from Carver and Scheier's (1990) analysis of overall directional movements would be supported by a Type of Self-Guide Activated \times Valence of Stated End State interaction (a higher predilection for approaching matches and avoiding mismatches to desired end states when ideal vs. ought self-guides are activated and a higher predilection for approaching mismatches and avoiding matches to undesired end states when ought vs. ideal self-guides are activated). It should be noted that these are not competing predictions. Thus, the results could support both proposals.

Study 1

The first study was designed to examine whether and how activation of ideal versus ought self-guides influences subjects' predilections for different regulatory forms. Several weeks before the experimental session, the subjects filled out a question-

naire that measured the attributes in their ideal and ought self-guides. In an "unrelated" study a few weeks later, subjects' predilections were measured by having them judge whether a statement expressing "what really matters to me is to try to (use a particular regulatory form)" was like them or unlike them. Each regulatory form appeared four times, twice instantiated by attributes that were distinctive to a subject's ideal self-guide and twice instantiated by attributes that were distinctive to a subject's ought self-guide (which manipulated ideal and ought activation, respectively). We expected that activating either the ideal or ought regulatory system would increase subjects' predilection for particular regulatory forms, as revealed in judging that a statement expressing the importance of these forms was "like me."

Method

Subjects

The original sample of subjects included 44 Columbia University undergraduates. Four of these subjects were dropped for reasons described later, leaving a final sample of 40 (16 men and 24 women). (No significant sex differences were found in the study.) In the final sample, 33 of the subjects participated as partial fulfillment of a course requirement in introductory psychology and 7 subjects were paid for their participation.

Materials

The subjects filled out two questionnaires at least 1 week apart. The first one was the Selves Questionnaire, which asks respondents to list attributes that describe themselves either from their own standpoint or from the standpoint of a significant other (Higgins, Bond, Klein, & Strauman, 1986). The questionnaire was displayed on 35.6-cm (14-in.) color monitors (IBM-compatible microcomputers with standard keyboards were used). On the first screen, subjects were asked to list the attributes that they believe they actually possessed. On the second screen, subjects were asked to list the attributes of the kind of person they would ideally like to be (i.e., their hopes and wishes for themselves). On the third screen, subjects were asked to list the attributes of the kind of person that they believe they ought to be (i.e., what they believe to be their duties, obligations, and responsibilities). On the fourth and fifth screens, the subjects were asked to list the attributes of the kind of person their mother (the fourth screen) or father (the fifth screen) would ideally like them to be. On the sixth and seventh screens, the subjects were asked to list the attributes of the kind of person their mother (the sixth screen) or father (the seventh screen) believes they ought to be.

The responses of each subject were used to identify attributes from the ideal self-guides (ideal/own, ideal/mother, or ideal/father) that were not listed as attributes in any ought self-guide (ought/own, ought/mother, or ought/father). Two attributes were selected from among this set of distinctive ideal attributes. By the same procedure, two distinctive ought attributes were selected for each subject. So as not to confound self-guide domain (ideal vs. ought) with self-guide standpoint (self vs. other), an ideal/own, ideal/other, ought/own, and ought/other attribute were selected for each subject. One subject in our original sample of 44 had only distinctive ideal/other attributes, and 3 had only distinctive ought/own attributes. These 4 subjects were dropped from the study.

Several weeks later, subjects returned to the lab to complete a second questionnaire developed for this study, the Ways of Behaving Questionnaire, which was also displayed on computer monitors with the same apparatus as for the Selves Questionnaire. This questionnaire, purportedly involving concerns in daily life, consisted of a set of statements in the first person expressing a way of behaving in regard to some aspect of

life. Each statement began with the words "What really matters to me is to try . . ." This initial phrase was completed with one of four types of phrases representing each of the four different regulatory forms, as follows (where x is the desired endpoint and y is the undesired endpoint of a bipolar attribute dimension): (a) ". . . to be x (e.g., to be smart; approaching a match to a desired end state), (b) ". . . to avoid being not x " (e.g., to avoid being not smart; avoiding a mismatch to a desired end state), (c) ". . . to be not y (e.g., to be not stupid; approaching a mismatch to an undesired end state), and (d) ". . . to avoid being y (e.g., to avoid being stupid; avoiding a match to an undesired end state). For each statement, subjects selected a number on a 6-point scale, ranging from *very much unlike me* (-3) to *very much like me* (3), with zero excluded, to indicate the degree to which the statement expressed what they would do.

Each of the four attributes selected for subjects from their responses to the Selves Questionnaire was used to generate statements representing each of the four types of strategic means, thus yielding 16 statements. Because the attributes listed in subjects' ideals and oughts on the Selves Questionnaire are desired end states (i.e., x on the dimension), *Roget's Thesaurus* was used to select appropriate antonyms to represent the undesired end states (i.e., y on the dimension). In addition to the 16 idiographic experimental statements, the questionnaire began with the same two general practice statements for all subjects ("What really matters to me is to try to behave in a way that my parents would approve of" and "What really matters to me is to try to behave in a way that is consistent with my own beliefs").

Four different presentation orders were constructed for the 16 idiographic statements (varying the order of the statements representing each of the four different types of strategic means as well as the order of the four types of attributes). The different orders were included as a variable in the overall analysis and yielded no significant main effects or interactions.

Procedure

The experiment took place in two half-hour sessions a week or more apart. Between 1 and 4 subjects participated in each session. Each subject had his or her own cubicle. When subjects arrived for the first session, they were told that they would be asked some questions about themselves. They were seated in front of a computer terminal and were instructed to follow the instructions on the terminal and to respond using the keyboard. The Selves Questionnaire was then administered by the computer. The study was over when subjects had completed the questionnaire, and the experimenter thanked them for participating.

Subjects arrived a week or more later for a supposedly unrelated experiment on "concerns in daily life." They were seated in front of a computer terminal and were again instructed to follow the instructions on the terminal and to respond using the keyboard. The Ways of Behaving Questionnaire was then administered by the computer. Only one statement appeared at a time on the upper half of the screen, and the 6-point response scale appeared on the lower half of the screen. By pressing the left or right arrow keys, subjects could highlight the response number they wanted. Once they pressed the "enter" key, their response was registered, the statement was cleared, and the next statement appeared. Once subjects had completed the questionnaire, they were fully debriefed and thanked for their participation.

Results and Discussion

To test the predictions described earlier, an overall Type of Self-Guide Activated (ideal vs. ought) \times Valence of Stated End State (desired vs. undesired) \times Direction of Stated Means (approach vs. avoidance) \times Statement Order analysis of variance was performed on subjects' ratings of the extent to which a

statement expressing a particular regulatory form resembled them. The first three variables were within-subject variables, and the fourth was a between-subjects variable. For this analysis, subjects' scores on the rating scale from -3 to 3 were transformed into scores from 1 to 6 , with higher scores indicating a judgment that a statement expressing a particular regulatory form was more like them.

This analysis revealed a marginal effect for valence of stated end state, $F(1, 36) = 3.16, p < .10$, that reflected the fact that subjects generally judged statements to be more like them when they expressed the importance of regulatory forms with desired end states ($M = 4.28$) than when they expressed the importance of regulatory forms with undesired end states ($M = 4.13$). There was also a main effect for direction of stated means, $F(1, 36) = 5.10, p < .05$, that reflected the fact that subjects generally judged statements to be more like them more when they expressed the importance of regulatory forms with approach means ($M = 4.30$) than when they expressed the importance of regulatory forms with avoidance means ($M = 4.11$).

In addition to these two main effects, the analysis revealed a Type of Self-Guide Activated \times Valence of Stated End State interaction, $F(1, 36) = 4.74, p < .05$. Consistent with the prediction derived from Carver and Scheier's (1990) analysis for how ideal self-regulation would involve approach forms and ought self-regulation would involve avoidance forms, subjects judged statements expressing the importance of regulatory forms with desired end states to be more like them when ideal self-guides were activated ($M = 4.37$) than when ought self-guides were activated ($M = 4.20$), whereas they judged statements expressing the importance of regulatory forms with undesired end states to be more like them when ought self-guides were activated ($M = 4.21$) than when ideal self-guides were activated ($M = 4.05$).

This interaction, as well as a Valence of Stated End State \times Direction of Stated Means interaction, $F(1, 36) = 7.82, p < .01$, was qualified by a higher order Type of Self-Guide Activated \times Valence of Stated End State \times Direction of Stated Means interaction, $F(1, 36) = 4.06, p = .05$. As shown in Table 2, this three-way interaction reflects the fact that there was a significant Type of Self-Guide Activated \times Direction of Stated Means interaction for desired end states, $F(1, 36) = 4.48, p < .05$, as predicted by self-discrepancy theory, but no significant interaction for undesired end states ($F < 1$).

Subjects judged statements expressing the importance of ap-

Table 2
Mean Judgments of Statements as Resembling Self as a Function of Type of Self-Guide Activated, Valence of Stated End State, and Direction of Stated Means

Type of activation	Desired end state		Undesired end state	
	Approach matches	Avoid mismatches	Approach mismatches	Avoid matches
Ideal guide	4.62	4.11	4.06	4.04
Ought guide	4.28	4.11	4.22	4.19

Note. Judgments could range from *very much unlike me* (1) to *very much like me* (6).

proaching matches to desired end states to be more like them when ideal self-guides were activated ($M = 4.62$) than when ought self-guides were activated ($M = 4.28$), $t(36) = 2.62$, $p < .02$, two-tailed, whereas there was no difference in how subjects judged statements expressing the importance of avoiding mismatches to desired end states as a function of the type of self-guide activated.

Half of the prediction derived from self-discrepancy theory for how ideal self-regulation would involve approach forms and ought self-regulation would involve avoidance forms was not supported by these results. The subjects did not judge statements expressing the importance of avoiding mismatches to desired end states to be more like them when ought versus ideal self-guides were activated. The phrasing for avoiding mismatches to desired end states (e.g., “. . . to avoid being not smart”) may have been less standard or more awkward than the phrasing for approaching matches to desired end states (e.g., “. . . to be smart”), and this may have produced a kind of floor effect that reduced the likelihood of revealing differences from type of self-guide activation. There was certainly a strong overall tendency for subjects to judge statements as being less like them when they involved the former phrasing ($M = 4.11$) than when they involved the latter phrasing ($M = 4.45$), $F(1, 36) = 9.57$, $p < .005$. On the other hand, the phrasing for avoiding a match to an undesired end state (e.g., “. . . to avoid being stupid”) was also more standard and less awkward than the phrasing for avoiding mismatches to desired end states, and yet there was no overall tendency for subjects to judge statements as being more like them when they involved the former phrasing ($M = 4.12$) than when they involved the latter phrasing ($M = 4.11$). This suggests that factors other than simply form of speech may have reduced the likelihood of obtaining the predicted effect of ought self-guide activation.

The paradigm of Study 1 was unusual in another respect that might have reduced the impact of activating ought self-guides. In previous studies, the manipulation of ideal versus ought self-guide activation has been a between-subjects variable. In Study 1, it was a within-subject variable. Activation of both the ideal and the ought self-regulatory systems in the same subject during the experimental session may have produced some competition between these systems. This could have reduced the impact of activating each system on subjects' predilection for particular regulatory forms. The within-subject method used in Study 1 to activate ideal versus ought self-guides may have been sufficiently sensitive to detect the effects of activating the ideal regulatory system but not to detect the effects of activating the ought regulatory system. The paradigm used in Study 2 overcame this potential problem by manipulating ideal versus ought self-guide activation as a between-subjects variable.

A possible alternative explanation for the results of Study 1 regarding the effects of activating ideal versus ought self-guides also needs to be considered. Because, for each subject, different “distinct” attributes were used to activate the ideal self-guide than to activate the ought self-guide, it is possible that the ideal and ought attributes generally represented different regions of life that also happen to be associated with differences in strategic inclinations. It should be noted, however, that most of the ideal and ought attributes selected (59%) represented the same regions of life. Still, there were some general differences between

the ideal and ought attributes selected, with ideal-only attributes being overrepresented in the intelligence, popularity, confidence, and optimism regions and ought-only attributes being overrepresented in the effort, selfless, respectful, and responsible regions. To control for any possible effects of these differences, the overall analysis was performed again excluding subjects whose ideal attributes involved the overrepresented ideal regions or whose ought attributes involved the overrepresented ought regions (10 subjects were excluded on this basis). All previously significant effects remained significant.

Study 2

Study 2 was also designed to examine whether and how activation of ideal versus ought self-guides influences subjects' predilections for different regulatory forms. In this study, a between-subjects manipulation of self-guide activation was used. The manipulation was based on a technique used in a previous study by Higgins et al. (1986, Study 2). Subjects are asked either to report on how their hopes and goals have changed over time (activating ideal self-guides) or to report on how their sense of duty and obligation has changed over time (activating ought self-guides). Although the manipulation of self-guide activation used in Study 1 has the advantage of activating the different types of self-guides indirectly and idiographically, without any mention of ideal or ought self-guides per se, it has disadvantages as well. As noted earlier, it is a within-subjects manipulation that could produce competition over the session between the ideal and ought regulatory systems, and subjects could be exposed to different content areas when the ideal versus the ought self-guide is activated (although this does not account for any of the significant differences obtained in Study 1). The manipulation of self-guide activation used in Study 2 addressed both of these limitations.

Study 2 also differed from Study 1 in the technique used to reveal subjects' predilections for different regulatory forms. Study 1 had subjects make judgments of the extent to which statements expressing the importance of different regulatory forms were like them. This technique has the advantage of revealing subjects' concern with different regulatory forms rather directly. It has the disadvantage of involving conscious judgments that may be influenced more by extraneous variables, such as which speech phrase is more standard or less awkward. The technique used in Study 2 to reveal subjects' predilections for different regulatory forms did not require subjects to make a conscious judgment. Rather, a free recall technique similar to that used in the Higgins and Tykocinski (1992) study was employed. Subjects read about 16 episodes that occurred over 4 days in the life of another student. Each of the four regulatory forms was exemplified by four different episodes. We expected that activating either the ideal or ought regulatory system would increase subjects' predilection for particular regulatory forms, which, in turn, would make them more sensitive to, and thus more likely to recall, episodes that exemplified those particular forms.

Method

Subjects

The subjects were 39 Columbia University undergraduates (14 men and 25 women). (No significant sex differences were found in the study.)

Twenty-six of these subjects participated as partial fulfillment of a course requirement in introductory psychology, and 13 were paid for their participation. The subjects in each of these samples were randomly assigned to the two different activation conditions (i.e., ideal activation and ought activation). During debriefing, 2 of the subjects (1 man and 1 woman from the introductory psychology sample) stated that they had guessed that the study was a memory study and had tried to figure out the hypotheses (unsuccessfully). These 2 subjects were excluded, leaving 37 subjects for the analyses.

Materials

Each story was written in the first person and described 16 episodes in the life of an individual that occurred over 4 consecutive days (4 episodes per day). In each of the episodes, the target was trying either to experience a desired end state or not to experience an undesired end state. To experience a desired end state, the target either used means that would decrease the discrepancy to a desired end state (approaching matches to desired end states) or used means that would avoid increasing the discrepancy to a desired end state (avoiding mismatches to desired end states). To not experience an undesired end state, the target either used means that would increase the discrepancy to an undesired end state (approaching mismatches to undesired end states) or used means that would avoid decreasing the discrepancy to an undesired outcome (avoiding matches to undesired end states). Examples of episodes exemplifying each of the regulatory forms follow:

1. Approaching matches to desired end states: "Because I wanted to be at school for the beginning of my 8:30 psychology class which is usually excellent, I woke up early this morning."

2. Avoiding mismatches to desired end states: "I wanted to take a class in photography at the community center, so I didn't register for a class in Spanish that was scheduled at the same time."

3. Approaching mismatches to undesired end states: "I dislike eating in crowded places, so at noon I picked up a sandwich from a local deli and ate outside."

4. Avoiding matches to undesired end states: "I didn't want to feel tired during my very long morning of classes, so I skipped the most strenuous part of my morning workout."

To control for content relations between valence of stated end state and direction of stated means, two versions of the story were constructed that combined different directions of stated means for the same valence of stated end state. For instance, Example 3 was transformed in the second version of the story from an approach means to an avoidance means for the same undesired end state, as follows: "I dislike eating in crowded places, so at noon I avoided eating at the school cafeteria." It should be noted that an avoidance means does not imply no action. A person could avoid eating at the school cafeteria, for example, by going home before lunchtime. Indeed, some of the episodes exemplifying avoidance means explicitly mentioned actions that were taken (e.g., "I don't like interpersonal conflict, so I left the apartment when two of my apartment-mates started to argue").

Story version, included as a variable in the overall analysis, yielded no significant main effects or interactions. In addition, for each of the two story versions, the order of the episodes was varied so that each type of strategic inclination appeared equally often in different positions. Event order, also included as a variable in the overall analysis, yielded only one uninterpretable five-way interaction.

Procedure

When subjects arrived, they were told that because the first study was so short it would be combined with a second unrelated study. They were told that the first study was on "how people's standards change over time" and that the second study concerned "the relation between the

perception of verbally described episodes and the perception of visual stimuli."

In the supposed first study, the subjects were randomly assigned to either the ideal or the ought activation condition. Subjects in both conditions were given a sheet of paper that was blank except for the instructions at the top. In the ideal activation condition, the instructions asked subjects to briefly describe their current hopes and goals and to include a discussion of how they differed from their hopes and goals as they were growing up. In the ought activation condition, the instructions asked subjects to briefly describe their current sense of duty and obligation and to include a discussion of how it differed from their sense of duty and obligation as they were growing up. The subjects spent approximately 5 min writing their responses.

In the supposed second "unrelated" study, the subjects were told that, for the task on "perception of verbally described episodes," they would be reading about episodes that occurred over 4 days in the life of a student and that they should form an impression of what these days were like from the verbal description. When the subjects had finished reading the story, they were given a "perception of visual stimuli" task in which they copied shapes. The subjects worked on this task, which functioned as a distractor, for 7 min. The experimenter then asked the subjects to recall the episodes in the previous story as precisely as possible, writing down the episodes on a blank sheet of paper. The subjects were told that the order in which the episodes were recalled was not important but that they should try to recall the episodes themselves as completely as possible. When the subjects had finished their recall, they were fully debriefed and thanked for their participation.

Results and Discussion

To test the predictions described earlier, an overall Type of Self-Guide Activated (ideal vs. ought) \times Direction of Stated Means (approach vs. avoidance) \times Valence of Stated End State (desired end state vs. undesired end state) \times Story Version \times Event Order analysis of variance was performed on the number of episodes subjects recalled for each type of episode in the story. The first variable was a between-subjects variable (as were the fourth and fifth control variables), and the second and third variables were within-subjects variables. Table 3 shows subjects' recall of each type of episode in the story as a function of the type of self-guide activated.

The Type of Self-Guide Activated \times Valence of Stated End State interaction was not significant ($F < 1$). Thus, the prediction derived from Carver and Scheier's (1990) analysis for how ideal self-regulation would involve approach forms and ought self-regulation would involve avoidance forms was not supported in this study. The overall analysis did reveal a Type of Self-Guide Activated \times Direction of Stated Means interaction,

Table 3
Mean Number of Episodes Recalled as a Function of Type of Self-Guide Activated, Valence of Stated End State, and Direction of Stated Means

Type of activation	Desired end state		Undesired end state	
	Approach matches	Avoid mismatches	Approach mismatches	Avoid matches
Ideal guide	1.75	1.37	1.50	1.39
Ought guide	1.19	1.96	1.38	1.75

$F(1, 18) = 7.27, p < .02$. As shown in Table 3, there was an overall tendency for subjects to remember better episodes exemplifying an approach direction of means when ideal self-guides were activated ($M = 1.63$) than when ought self-guides were activated ($M = 1.35$) but to remember better episodes exemplifying an avoidance direction of means when ought self-guides were activated ($M = 1.83$) than when ideal self-guides were activated ($M = 1.38$).

The prediction derived from self-discrepancy theory for how ideal self-regulation would involve approach forms and ought self-regulation would involve avoidance forms predicts a Type of Self-Guide Activated \times Direction of Stated Means interaction for desired end states alone. As evident in Table 3, the predicted interaction was obtained, $F(1, 18) = 4.37, p < .05$. Subjects remembered episodes exemplifying approaching matches to desired end states better when ideal self-guides were activated ($M = 1.75$) than when ought self-guides were activated ($M = 1.19$), planned contrast $t(18) = 1.96, p < .07$, two-tailed. In contrast, they remembered episodes exemplifying avoiding mismatches to desired end states better when ought self-guides were activated ($M = 1.96$) than when ideal self-guides were activated ($M = 1.37$), planned contrast $t(18) = 2.11, p < .05$, two-tailed. It should be noted that the Type of Self-Guide Activated \times Direction of Stated Means interaction was considerably weaker and nonsignificant for undesired end states ($p > .15$).

Study 3

Study 1, but not Study 2, found a significant Type of Self-Guide Activated \times Valence of Stated End State interaction. Thus, some support was found for the prediction derived from Carver and Scheier's (1990) analysis for how ideal self-regulation would involve approach forms and ought self-regulation would involve avoidance forms; specifically, ideal self-regulation would involve a concern with any means for reducing discrepancies to desired end states (i.e., a predilection for both approaching matches and avoiding mismatches to desired end states [approach at the system level]), whereas ought self-regulation would involve a concern with any means for amplifying discrepancies to undesired end states (i.e., a predilection for both avoiding matches and approaching mismatches to undesired end states [avoidance at the system level]).

Both Study 1 and Study 2 found a significant Type of Self-Guide Activated \times Direction of Stated Means interaction for the half of the design involving desired end states. These results support the prediction derived from self-discrepancy theory for how ideal self-regulation would involve approach forms and ought self-regulation would involve avoidance forms; specifically, ideal self-regulation would involve a predilection for approaching matches to desired end states, whereas ought self-regulation would involve a predilection for avoiding mismatches to desired end states.

More broadly, the results of both studies support the general prediction that follows from assuming that ideal and ought self-regulation reflect distinct systems for regulating pain and pleasure, namely, that ideal self-regulation, with its positive outcome focus, would be associated with self-regulatory forms involving approach, whereas ought self-regulation, with its negative outcome focus, would be associated with self-regulatory

forms involving avoidance. The significant results of both studies support the general conclusion that, either at the level of means or at the system level, a predilection for approach is greater when ideal versus ought self-guides are activated, whereas a predilection for avoidance is greater when ought versus ideal self-guides are activated.

Among the more specific predictions, the prediction derived from self-discrepancy theory received the most consistent support across the two studies: a higher predilection for approaching matches to desired end states when ideal versus ought self-guides are activated (found in both Study 1 and Study 2) and a higher predilection for avoiding mismatches to desired end states when ought versus ideal self-guides are activated (found in Study 2). The predicted Type of Self-Guide Activated \times Direction of Stated Means interaction for desired end states was reliable in both studies, despite their use of different measures of predilection. In Study 1, high predilection for a particular regulatory form was revealed in judging that a statement expressing the importance of that form was "like me." In Study 2, high predilection for a particular regulatory form was revealed in better recall of story episodes exemplifying that form.

There are at least a couple of limitations of these initial studies. First, the predilections for different regulatory forms were measured after either ideal self-guides or ought self-guides were made temporarily more accessible through recent activation. Although this method has the advantage of enhancing experimental control, it does not permit stable predilections associated with chronic differences in ideal versus ought orientation to be examined. Study 3 was designed to examine this issue by selecting subjects whose predominant orientation involved either ideal self-guides (i.e., subjects with predominant actual-ideal discrepancies) or ought self-guides (i.e., subjects with predominant actual-ought discrepancies). Second, the predilections that were studied were quite general regulatory forms, such as predilections for approaching matches or for avoiding mismatches to desired end states. Are these general predilections also revealed in specific strategies or tactics of self-regulation? Would individuals with a predominant ideal self-guide orientation versus a predominant ought self-guide orientation select different tactics for regulating an important region of their lives, such as friendship? Another aim of Study 3 was to begin to address this important question.

Study 3 involved three phases. Phase 1 was designed to elicit different strategies that undergraduates might use regarding friendship. To elicit both approach and avoidance strategies, subjects were asked different questions framed either to create a positive outcome focus for friendship or a negative outcome focus for friendship, respectively. From subjects' answers to these questions, three approach strategies and three avoidance strategies were selected to be used in the next two phases of the study. The purpose of Phase 2 was to test experimentally whether the approach strategies would be selected more when friendship was framed with a positive outcome focus versus a negative outcome focus, whereas the avoidance strategies would be selected more when friendship was framed with a negative outcome focus versus a positive outcome focus. Obtaining this pattern of results would indicate that type of strategy selection was related to type of outcome focus. It would then be possible to conduct Phase 3 of the study. As discussed earlier, self-discrepancy the-

ory proposes that ideal self-regulation involves a positive outcome focus and that ought self-regulation involves a negative outcome focus. Using the same Phase 2 approach and avoidance strategies found to be related to outcome focus, the purpose of Phase 3 of the study was to test whether approach strategies would be spontaneously selected more by individuals with a predominant ideal versus ought self-guide orientation, whereas avoidance strategies would be selected more by individuals with a predominant ought versus ideal self-guide orientation.

Phase 1: Strategy Elicitation

Method

Subjects. The subjects were 150 Columbia University undergraduates (84 men and 66 women) who were paid for their participation.

Procedure. The question about friendship that each subject answered was included as part of a half-hour battery of questions on a variety of different issues. The battery was administered in a large dormitory lounge, where several students participated simultaneously. The subjects did not interact with one another and remained quiet throughout the session. The subjects were randomly assigned to answer one of two different questions about friendship, with half of the subjects answering each question. The question framed with a positive outcome focus was as follows: "Imagine that you are the kind of person who would like to be a good friend in your close relationships. What would your strategy be to meet this goal?" The question framed with a negative outcome focus was as follows: "Imagine that you are the kind of person who believes you should try not to be a poor friend in your close relationships. What would your strategy be to meet this goal?" After completing the battery, subjects were paid for their participation, debriefed, and thanked.

Results

Although a few subjects provided only one strategy in response to the question they received, most subjects offered several. A rough classification system was developed to group the strategies into different types. Most of the proposed strategies (75%) fell into nine category types, and there was high agreement (94%) between two judges about the strategies' membership in these categories. Subjects in the positive outcome focus framing condition responded with some of these strategy types more than subjects in the negative outcome focus condition, and vice versa. Six strategy types that most differentiated subjects in the two framing conditions were selected (three that were used more by subjects in the positive outcome focus condition and three that were used more by subjects in the negative outcome focus condition).

For each of these six strategy types, one or more sentences that best captured the strategy were written; the subjects' original words were used to the extent possible. The strategies associated more with the positive outcome focus framing condition were (a) "Be generous and willing to give of yourself"; (b) "Be supportive to your friends. Be emotionally supportive"; and (c) "Be loving and attentive." The strategies associated more with the negative outcome focus framing condition were (a) "Stay in touch. Don't lose contact with friends"; (b) "Try to make time for your friends and not neglect them"; and (c) "Keep the secrets friends have told you and don't gossip about friends."

Three independent raters were then given these six strategies in random order and were asked to identify which ones involved an approach orientation and which ones involved an avoidance orientation. The raters identified all three of the positive outcome focus strategies as approach strategies and all three of the negative outcome focus strategies as avoidance strategies. On the basis of these Phase 1 results, the positive outcome focus strategies were selected as the approach strategies and the negative outcome focus strategies were selected as the avoidance strategies.

Phase 2: Experimental Test of Outcome Focus Framing

Method

Subjects. The subjects were 48 Columbia University undergraduate and graduate students who were paid for their participation. Thirty of the subjects were men, and 18 were women. (No sex differences were found in the study.)

Procedure. Students registering for classes were asked to participate in the study. If they agreed to participate, they were sent to a nearby table and answered a single question. The subjects were randomly assigned to answer one of two different questions about friendship strategies, with half of the subjects answering each question. The question framed with a positive outcome focus was as follows: "When you think about strategies for *being a good friend* in your close relationships, which THREE of the following would you choose?" The question framed with a negative outcome focus was as follows: "When you think about strategies for *not being a poor friend* in your close relationship, which THREE of the following would you choose?" After completing the battery, subjects were paid for their participation, debriefed, and thanked.

Results

An independent-sample *t* test was performed on the number of approach strategies chosen by subjects in the two framing conditions. There was a significant difference between the two framing conditions, $t(46) = 2.41, p < .02$, two-tailed, with subjects in the positive outcome focus framing condition choosing more approach strategies ($M = 1.88$) than subjects in the negative outcome focus framing condition ($M = 1.25$). Because each subject chose three of the six presented strategies, the same statistical results are obtained when testing for the number of avoidance strategies chosen, with subjects in the negative outcome focus framing condition choosing significantly more ($p < .02$) avoidance strategies ($M = 1.75$) than subjects in the positive outcome focus framing condition ($M = 1.12$).

Phase 3: Ideal Versus Ought Predilections

Method

Subjects. The subjects were 54 Columbia University undergraduates who were paid for their participation. On the basis of a classification system (described next), 19 of these subjects were included in the analysis. Of these, 10 were men and 9 were women. (No significant sex differences were found in the study.)

Classification of subjects. All subjects, in an initial session, completed a pencil-and-paper version of the Selves Questionnaire used in Study 1, with the addition that subjects rated the extent of each attribute listed on a scale ranging from *slightly* (1) to *extremely* (4). Following the procedure described in Higgins et al. (1986), the attributes that subjects

listed for their actual self were compared with the attributes that they listed for each of their self-guides (i.e., their ideal/own, ought/own, ideal/mother, ought/mother, ideal/father, and ought/father self-guides). For each actual self-self-guide pair, synonymous and antonymous relations between actual self attributes and self-guide attributes were scored. A match involved a synonymous relation between attributes and a difference in extent ratings of one or less. A synonymous mismatch involved a synonymous relation between attributes but a difference in extent ratings of two or more. An antonymous mismatch involved an antonymous relation between attributes. Matches and synonymous mismatches were weighted 1, and antonymous mismatches were weighted 2. The magnitude of a particular actual self-self-guide pair was calculated by combining the mismatches and then subtracting the matches.

All six possible actual self-self-guide discrepancies were calculated for each subject. These scores were reviewed to identify, for this subject sample, which type of actual-ideal discrepancy had the highest average discrepancy and which type of actual-ought discrepancy had the highest average discrepancy. These types of actual-ideal and actual-ought discrepancies were then selected to represent actual-ideal and actual-ought discrepancies, respectively. In this way, we increased the likelihood that our final predominant ideal discrepancy subjects and predominant ought discrepancy subjects would be truly oriented toward their respective self-guides. For actual-ideal discrepancies, the actual-ideal/own discrepancy was selected. For actual-ought discrepancies, the actual-ought/mother and actual-ought/father discrepancies were both selected and averaged together because they tied for having the highest average actual-ought discrepancy. (An additional analysis, described later, controlled for the difference in standpoint between the actual-ideal and actual-ought discrepancies selected.)

For the full sample of 54 subjects, median splits were performed on subjects' actual-ideal discrepancy scores to classify them as either high or low in actual-ideal discrepancy and on their actual-ought discrepancy scores to classify them as either high or low in actual-ought discrepancy. Subjects who were high in actual-ideal discrepancy and low in actual-ought discrepancy were classified as predominant ideal discrepant subjects ($n = 8$). Subjects who were high in actual-ought discrepancy and low in actual-ideal discrepancy were classified as predominant ought discrepant subjects ($n = 11$). These 19 subjects were used to test the hypothesis.

Procedure. The Selves Questionnaire was included as part of a half-hour battery of unrelated pencil-and-paper measures. The battery was administered in a large dormitory lounge, where several subjects filled out the measures simultaneously. The subjects did not interact and remained quiet throughout. A subset of these subjects was contacted by phone more than 2 months later and asked to participate in a study ostensibly unrelated to anything represented in the battery. In the second session, each subject was placed in a private cubicle within a laboratory where up to 5 subjects could be run simultaneously. Each subject was asked the same, unframed question about friendship: "When you think about strategies for *friendship*, which THREE of the following strategies would you choose?" This question was followed by the same six choices of strategies used in the Phase 2 framing study. At the end of the study, subjects were paid, debriefed, and thanked for their participation.

Results

An independent-sample t test was performed on the number of approach strategies chosen by predominant ideal discrepant and predominant ought discrepant subjects. There was a significant difference between the two groups, $t(17) = 2.42$, $p < .05$, two-tailed, with predominant ideal discrepant subjects choosing more approach strategies ($M = 2.38$) than predomi-

nant ought discrepant subjects ($M = 1.73$). Again, because each subject chose three of the six presented strategies, the same statistical results are obtained when testing for the number of avoidance strategies chosen, with predominant ought discrepant subjects choosing significantly more ($p < .05$) avoidance strategies ($M = 1.27$) than predominant ideal discrepant subjects ($M = 0.62$). This study also revealed a significant general tendency for subjects to choose more approach strategies than avoidance strategies, $t(18) = 3.27$, $p < .01$.

To ascertain whether subjects' choice of strategies might be related to their self-guide attributes, the content of subjects' self-guides was compared with the content of the different strategies. Of the attributes listed by the subjects for their self-guides, only 6.5% were related in any way to the content of the strategies. Most of this overlap (92%) came from the attributes caring, loving, and giving that appeared in subjects' self-guides and in the approach strategies. It is notable that the percentage of these attributes was actually slightly higher in the self-guides of the predominant ought discrepant subjects ($M = 7.3\%$) than in the self-guides of the predominant ideal discrepant subjects ($M = 5.4\%$). Thus, the results of this study were not due to content overlap between subjects' self-guide attributes and the presented strategies.

In selecting actual-self-guide discrepancies to classify our subjects, we selected the type of actual-ideal discrepancy that had the highest average discrepancy and the type of actual-ought discrepancy that had the highest average discrepancy. This had the advantage of increasing the likelihood that our final predominant ideal discrepancy subjects and predominant ought discrepancy subjects would be truly oriented toward their respective self-guides. We selected actual-ideal/own discrepancies to represent actual-ideal discrepancies and actual-ought/mother and actual-ought/father discrepancies combined to represent actual-ought discrepancies. The disadvantage of this selection procedure is that the actual-ideal discrepancies were represented by the "own" standpoint and the actual-ought discrepancies were represented by the "other" standpoint. Many studies have found differences between ideal and ought discrepancies that are independent of standpoint (e.g., Higgins et al., 1986; Higgins & Tykocinski, 1992). Nevertheless, to ensure that the basic pattern of results found in this study was not dependent on standpoint, we recalculated, for the full sample of 54 subjects, the average actual-ideal and actual-ought discrepancy scores for the "own," "mother," and "father" standpoints combined. The median splits were performed again, and the subjects were reclassified as predominant ideal discrepant and predominant ought discrepant. With these new classification criteria, 9 subjects qualified as predominant ideal discrepant and 9 subjects qualified as predominant ought discrepant. With self-guide standpoint now controlled, the same pattern of results was found at only a slightly reduced level of reliability ($p < .06$).

General Discussion and Conclusions

The purpose of the present research was to examine whether orientation toward different types of self-guides (ideal self-guides vs. ought self-guides) involves differences in self-regulatory predilections. Both the self-regulatory model underlying self-discrepancy theory (see Higgins, 1991, in press) and Carver

and Scheier's (1990) self-regulatory model propose that an orientation toward ideal self-guides would involve a predilection for approach, whereas an orientation toward ought self-guides would involve a predilection for avoidance. The results of all three studies support this general prediction.

Self-discrepancy theory, which considers only desired end states as reference points, proposes that ideal self-regulation would involve a predilection for approaching matches to desired end states, whereas ought self-regulation would involve a predilection for avoiding mismatches to desired end states (approach and avoidance, respectively, at the level of means). Carver and Scheier's (1990) model, which considers both desired and undesired end states as reference points, proposes that ideal self-regulation would involve a predilection for reducing discrepancies to desired end states (by any means), whereas ought self-regulation would involve a predilection for amplifying discrepancies to undesired end states (by any means), (approach vs. avoidance, respectively, at the overall system level).

Although the current studies found at least some support for both proposals, the self-discrepancy prediction received the most consistent support. In Study 1, high predilection for a particular regulatory form was revealed in judging that a statement expressing the importance of that form was "like me." In Study 2, high predilection for a particular regulatory form was revealed in better recall of story episodes exemplifying that form. Both Study 1 and Study 2 found a higher predilection for approaching matches to desired end states when ideal versus ought self-guides were activated, and Study 2 found a higher predilection for avoiding mismatches to desired end states when ought versus ideal self-guides were activated. Study 3 examined individuals' choice of means for self-regulation more directly by asking them to think about strategies for friendship and then to select, from among a set of presented strategies, those strategies that they would personally choose. This study found that individuals oriented toward ideal self-guides (predominant actual-ideal discrepant subjects) were more likely to choose approach strategies than individuals oriented toward ought self-guides (predominant actual-ought discrepant subjects), whereas ought-oriented individuals were more likely to choose avoidance strategies than ideal-oriented individuals.

Other findings of these studies are worth noting. Contributing to both the significant Type of Self-Guide Activated \times Valence of Stated End State interaction found in Study 1 and the significant Type of Self-Guide Activated \times Direction of Stated Means interaction found in Study 2 was a tendency for higher predilection for avoiding matches to undesired end states when ought versus ideal self-guides were activated. This consistent tendency needs to be reliably confirmed in further research. It is intriguing because it suggests that the ought self might be represented in terms of both desired end states (I ought to be x) and undesired end states (I ought to avoid being y). The notion of the ought self as an undesired end state is related to Carver and Scheier's (1990) suggestion that the ought self is associated with a discrepancy-amplifying system for which the reference value is an undesired state. It is also related to Erikson's (1963) "evil identity," Sullivan's (1953) "bad me," and Markus and Nurius's (1986) "feared self" because each of these selves suggests both an undesired end state and the violation of norms and prescriptions (i.e., a concern with oughts). If the ought self were repre-

sented in terms of both desired and undesired end states, ought self-regulation should involve different predilections: a concern with avoiding mismatches to desired end states (e.g., resisting taking a drink when "on the wagon") and a concern with avoiding matches to undesired end states (e.g., avoiding drinking so heavily as to become "blind drunk").

From Study 3, it is worth noting that the greater predilection of ought-oriented individuals than ideal-oriented individuals to choose avoidance strategies for friendship was particularly strong for the avoidance strategy "Stay in touch. Don't lose contact with friends." This strategy was chosen by 46% of the predominant ought discrepant individuals but only 13% of the predominant ideal discrepant individuals. The goal of this strategy is to avoid losing contact with friends, and the means for attaining this goal is to stay in touch. What is significant is that this avoidance strategy involves taking action. Thus, an avoidance strategy does not imply inhibition, suppression, or inaction. Indeed, as in the case of animals escaping electric shock, it can require vigorous action.

The present studies extend previous research on self-discrepancy theory in a number of major ways. They show that the distinction between ideal and ought self-regulatory systems extends to differences in predilections for different regulatory forms, with the ideal system being concerned with approach (particularly approaching matches to desired end states) and the ought system being concerned with avoidance (avoiding mismatches to desired end states and avoiding matches to undesired end states). The studies also revealed that the difference in self-regulatory predilections between the ideal and ought systems holds both for the case of individuals differing in chronic levels of ideal versus ought orientation and for the case of temporary differences in ideal versus ought orientation induced by contextually activating either ideal or ought self-guides, respectively. The latter finding suggests not only that people can possess both systems (cf. Higgins et al., 1986, Study 2) but that these distinct systems can be contextually activated to induce temporary predilections for different regulatory forms.

The results of Study 3 indicate that the difference in self-regulatory predilections between the ideal and ought systems extends even to individuals' choices of specific tactics. That is, when one system or the other is engaged, not only do individuals have different general strategic orientations (i.e., approach vs. avoidance) but these different strategic orientations translate into distinct behavioral tactics. This new finding raises interesting questions for future research. For example, are the tactics associated with one regulatory system more successful in attaining goals than the tactics associated with the alternative system? What are the trade-offs for these different tactics? By addressing such questions, self-discrepancy theory can begin to relate previous research on emotion and motivation to future research on performance and action.

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