Self-System Therapy (SST): A Theory-Based Psychotherapy for Depression

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This article introduces Self-System Therapy (SST), a brief, structured psychotherapy for the treatment of depression. SST conceptualizes depression as a failure of self-regulation and is intended for individuals whose depression and/or premorbid functioning are characterized by particular problems in self-regulation. This article provides an overview of SST, including its origins in basic and clinical research on self-discrepancy theory and self-regulation, the hypothesized etiological role of self-regulation in depression, the primary components of the treatment, and comparisons of SST with other psychotherapies for depression. The general structure of a course of treatment with SST is outlined, and a case example is presented to illustrate the goals and strategies of each phase.

Key words: **self-regulation, self-discrepancy, depression, psychotherapy, translational research.** ***[Clin Psychol Sci Prac 10:245–268, 2003]***

Unipolar depression represents an enormous public health concern, with incalculable economic and psychological costs. On the basis of data from the National Comorbidity Survey, Blazer, Kessler, McGonagle, and Swartz (1994) estimated that almost one out of five American adults will experience an episode of depression during her/his lifetime. The probability of suffering a depressive episode is influenced by a number of factors, including gender, parental loss, pathogenic rearing practices, personality, a history of traumatic experiences, previous episodes of depression, low social support, recent stressful events, and genetic influences (Kupfer & Frank, 1997). However, translating this knowledge into treatment models that target etiological factors within particular individuals remains a formidable challenge (Fisher, Beutler, & Williams, 1999). Nonetheless, a public health problem of this magnitude deserves the fullest possible commitment of scientific resources to develop improved treatment and prevention strategies.

Self-System Therapy (SST) is a brief, structured psychotherapy that focuses on the role of self-regulation in depression. As recent reviews illustrate (Segal & Blatt, 1993; Strauman & Kolden, 1997), there is an extensive literature documenting the association between self-regulatory cognition and vulnerability to distress. However, to date there has been no treatment for depression based on the psychology of self-regulation. The concepts that make up the foundation of SST emerged from two decades of research on the motivational and cognitive bases of self-regulation, and the structure and strategies of SST were developed to address depressive symptoms in individuals manifesting specific problems in self-regulation.

The purpose of this article is to describe the rationale and structure of SST. The paper is organized into five sections: (a) an overview of principles of self-regulation and self-discrepancy theory, concluding with a discussion of how failure in self-regulation may trigger or maintain depression; (b) a comparison of the conceptual model that underlies SST with the conceptual models underlying Cognitive Therapy (CT) and Interpersonal Therapy (IPT); (c) a description of the goals, structure, and primary interventions of SST; (d) an outline of a typical course of treatment, including a case illustration; and (e) a brief discussion of selecting patients for SST.

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SELF-REGULATION, SELF-DISCREPANCY, AND DEPRESSION

Principles of Self-Regulation Underlying SST

Theorists have consistently proposed an association between how individuals evaluate themselves and their vulnerability to depression (e.g., Karoly, 1999; Segal & Blatt, 1993). It is well known that the perception of inconsistency or discrepancy between an individual's current status and her/his goals or standards leads to distress (Carver, Lawrence, & Scheier, 1996; Strauman & Higgins, 1993). In this discussion, *self-regulation* refers to the continuous process of determining whether one's behaviors and personal attributes are congruent with one's goals or standards in order to either modify or maintain those attributes (Carver & Scheier, 1990). Self-regulation involves cognitive processes such as categorization, appraisal, and memory as well as the basic motivational systems that underlie approach and avoidance responses. As such, self-regulation is a potential locus for the proximal influence of a number of distal factors on the individual's emotional state (Matthews, Derryberry, & Siegle, 2000).[1]

The SST approach to treatment of depression incorporates four principles of self-regulation (Strauman, 1996a). The principles, in turn, are derived largely from Higgins' theory of self-regulation (e.g., Higgins, 1997) as well as from developmental, social, and clinical research examining the antecedents and consequences of self-regulation. Together, the principles emphasize the *adaptive significance* of self-regulation and the potential role of problems in self-regulation as contributory causal factors for emotional disorders.

Principle 1: The capacity for self-regulation emerges during childhood as a function of cognitive maturation, socialization experiences, and underlying temperament. Developmental research over the past decade has shown that children are "prepared" to learn how to self-regulate (Ryan & Deci, 2000). That is, children possess the neurophysiological, motivational, cognitive, and affective means to regulate their behaviors and emotions and so learn quickly from interactions with parents and other caregivers (Mischel, Cantor, & Feldman, 1996). To ensure that they receive adequate nurturance and security, children must strive to maintain their relationships with their caregivers by behaving in the ways they are directed and encouraged (Bowlby, 1988). Although temperament plays a significant role in the development of self-regulation, our research suggests that the goals that children begin to acquire and the ways they go about pursuing these goals are determined primarily by interactions with parents and other socialization agents (Manian, Papadakis, Strauman, & Essex, 2002).

Principle 2: Self-regulation is based in part on two cognitive/motivational systems: the promotion and prevention systems. Higgins (1997) described two hypothetical systems underlying self-regulation. In Higgins' model, the promotion system is concerned with advancement, growth, achievement, and accomplishment; self-regulation with a promotion focus involves the maximization of positive outcomes, or, in everyday terms, striving to make good things happen. In contrast, the prevention system is concerned with protection, obligation, safety, and responsibility; self-regulation with a prevention focus involves the minimization of negative outcomes, or, in everyday terms, striving to keep bad things from happening. Extending this model, Strauman (2002) proposed that the behavioral activation (approach) and behavioral inhibition (avoidance) systems as conceptualized in motivation and personality research could be more comprehensively conceptualized as self/brain/behavior systems. In this extended view of human motivation, the promotion system is a coordinated set of psychological processes operating in the service of pursuing promotion goals (making good things happen) and the neurophysiological mechanisms that enable those psychological processes. Table 1 lists variables associated with the promotion system. Similarly, the prevention system is a coordinated set of psychological processes operating in the service of pursuing prevention goals (keeping bad things from happening) and the neurophysiological mechanisms that enable those psychological processes. Table 2 lists variables associated with the prevention system.

Promotion-based self-regulation has its origins in specific kinds of caregiver/child-contingent interactions (Higgins, 1989). When a parent hugs a child for behaving in a certain way, she/he is providing the child with a positive outcome, and the child experiences emotions signifying that she/he has made something good happen (e.g., happiness). When a parent takes away a child's toy for refusing to share with others, she/he is removing a positive outcome, and the child experiences emotions signifying that something good is no longer happening (e.g., disappointment, dejection, frustration). In either case, the parent's message to the child is that behaving a certain way—being a particular kind of person—influences the likelihood that

Table 1. Hypothesized Features of the Promotion System

Feature	Explanation
CNS substrates	Left frontal and prefrontal cortex, ascending dopaminergic system
Motivational impetus	Maximizing positive outcomes
Personality/temperament antecedents	Extraversion, openness
Parenting/socialization antecedents	Nurturance, encouragement
Goals and self-evaluation	Strong ideal standards (high chronic accessibility, strong motivational commitment)
Strategic orientation	Approach; insure hits, insure against errors of omission
Interpersonal orientations	Agency and communion
Situational triggers	Gain/non-gain
Affective states	Cheerfulness (when goal attained), dejection/frustration (when goal not attained), eagerness (when pursuing goal)

Note. Table adapted from Strauman (2002).

Table 2. Hypothesized Features of the Prevention System

Feature	Explanation
CNS substrates	Right frontal cortex, septohippocampal system and associated neocortical structures
Motivational impetus	Minimizing negative outcomes
Personality/temperament antecedents	Neuroticism, constraint
Parenting/socialization antecedents	Punishment, control
Goals and self-evaluation	Strong ought standards (high chronic accessibility, strong motivational commitment)
Strategic orientation	Avoidance; insure correct rejections, insure against errors of commission
Interpersonal orientations	Security and responsibility
Situational triggers	Loss/non-loss
Affective states	Quiescence (when goal attained), agitation (when goal not attained), vigilance (when pursuing goal)

Note. Table adapted from Strauman (2002).

good things will happen. Promotion-based self-regulation is associated with the acquisition and use of *ideal* standards, which represent goals for "being the best that one can be" (Higgins, 1987).

Prevention-based self-regulation has its origins in different kinds of caregiver/child-contingent interactions (Higgins, 1989). When a parent yells at a child who doesn't listen, or criticizes the child for making a mistake, she/he is providing the child with a negative outcome, and the child experiences emotions signifying that something bad is happening (e.g., agitation, guilt, anxiety, fear). When a parent teaches the child manners or trains the child to be alert to certain dangers, she/he is preventing negative outcomes, and the child experiences emotions signifying that she/he has prevented something bad from happening (e.g., calmness, quiescence, relief). In either case, the parent's message to the child is that behaving a certain way—being a particular kind of person—influences the likelihood that bad things will happen. Prevention-based self-regulation is associated with the acquisition and use of *ought* standards, goals for "being the kind of person that one is supposed to be" (Higgins, 1987).

Individual differences in promotion and prevention, and in the importance of ideal and ought goals, result from differences in socialization (Manian et al., 2002). Both the experiences that contribute to the development of each system and subsequent life experiences in which promotion (ideal) or prevention (ought) goals are engaged represent what the social psychologist Kurt Lewin (1951) called *psychological situations:* situations experienced in terms of their significance for one's goals. Children develop working sets of psychological situations that enable them to respond to a range of interactions as fundamentally similar because they share the same regulatory focus (promotion or prevention) and lead to similar outcomes (Higgins & Tykocinski, 1992). Through these sets of psychological situations, children acquire expectations about, and behavioral and emotional responses to, interpersonal interactions, along with beliefs about themselves in relation to the important people in their lives.

Principle 3: People continuously (and automatically) engage in self-regulatory cognition. Self-regulation is an ongoing process that is both pervasive and automatic (i.e., it does not

require conscious control or intent). The self-evaluative components of the two regulatory systems constitute much of what often is regarded as personality (Carver & Scheier, 1990; Bandura & Cervone, 2000). Given the nature of the two regulatory systems, it is practically impossible for people to refrain from self-regulatory cognition or to escape the immediate motivational and emotional consequences of self-regulation (Bargh & Ferguson, 2000).

If self-regulation is both ubiquitous and emotionally/motivationally potent, then individual differences in self-regulation—in terms of goals, ways of pursuing goals, and the affective consequences of success or failure—will influence emotional vulnerability. Higgins (1989) noted that self-regulation inevitably involves *tradeoffs,* both during childhood and throughout the adult years. That is, variations in the kinds of promotion and prevention goals people hold, the availability and accessibility of their goals (i.e., the likelihood that particular goal representations will be active), the perceived importance of their goals, and the motivational and emotional consequences of achieving or not achieving these goals will be more adaptive under certain circumstances and less adaptive under others. Having the goal of being the smartest person in the class or the most productive salesperson in the company is not inherently good or bad. Rather, such a goal will have both advantages (e.g., it motivates us to work hard) and disadvantages (e.g., it increases the likelihood of experiencing failure). In this way, emotional vulnerability need not depend upon extreme trauma or deprivation, but rather can emerge over time as a consequence of tradeoffs in self-regulation—the relative benefits and costs of an individual's regulatory style.

Principle 4: Chronic or catastrophic failure of self-regulation results in significant distress, potentially leading to or maintaining a clinical disorder. As an ongoing cognitive/motivational process, self-regulation is a locus for the influence of a number of well-established contributory causes of depression (Strauman, 1996a). Self-regulation via the promotion and prevention systems implies a continuous evaluation of oneself against one's own goals as well as perceived interpersonal demands. Failure to achieve a salient promotion (ideal) goal leads to feelings of dejection. Of course, such experiences typically serve the adaptive purpose of motivating us to increase our efforts or try alternative strategies (Carver & Scheier, 1990). However, chronic or catastrophic failure to achieve promotion goals leads to intense, prolonged dejection and decreased incentive motivation (Tomarken & Keener, 1998; Watson, Wiese, Vaidya, & Tellegen, 1999). Such failure could constitute a "final common pathway" leading to a depressive episode (Akiskal & McKinney, 1973).

Similarly, failure to achieve a salient prevention (ought) goal leads to feelings of agitation. Although the typical response to such a scenario is to increase or shift one's efforts, chronic or catastrophic failure to achieve prevention goals leads to an intense, prolonged state of agitation as well as a significant increase in apprehension and vigilance. In turn, this state appears to be associated with a number of anxiety disorders (Mineka, Watson, & Clark, 1998).

Implications of the four principles. Because self-regulatory cognition is inherently linked with basic motivational systems, failed self-regulation can lead to emotional and motivational dysregulation. Self-evaluation and self-regulation are fundamental psychological activities in a social environment; we learn to evaluate ourselves—continuously and automatically—and either modify or maintain our personal characteristics or behaviors dependent upon whether they lead to satisfactory outcomes. Self-regulation is typically implicit and automatic, but it is nonetheless a major ongoing determinant of an individual's emotional and motivational states. Although acute failure of self-regulation usually leads to increased or shifted efforts and eventual positive consequences, chronic or catastrophic failure is likely to be maladaptive and associated with significant distress. By conceptualizing depression in terms of these principles, it should be possible to help individuals recover from depression by increasing successful self-regulation. This hypothesis represents the primary rationale for the development of SST.

Self-Discrepancy Theory

Self-discrepancy theory (SDT; Higgins, 1987) is a model of self and affect which proposes that the relation between an individual's perceived behavior or personal attributes and different kinds of self-regulatory standards can have both momentary and chronic influences on the individual's emotional state. The theory distinguishes between two types of goals or desired outcomes (referred to as *self-guides*), which have distinct motivational significance and are associated with different positive and negative states. *Ideal* self-guides are people's representations of the attributes that someone (themselves or another person) would like them ideally to possess—someone's hopes, wishes, or aspirations for them. *Ought* self-guides are people's repre-

sentations of the attributes that someone (themselves or another) believes they should or ought to possess—someone's beliefs about their duties, obligations, or responsibilities.

SDT proposes that discrepancies between actual-self beliefs and ideal versus ought self-guides have different psychological significance and are associated with distinct emotional states. *Actual:ideal* discrepancies (AI) represent the absence of a positive outcome (i.e., a failure to attain an ideal state, associated with loss of approval or affection), and result in dejection-related emotional states such as sadness, disappointment and frustration. *Actual:ought* discrepancies (AO) represent the presence of a negative outcome (i.e., a failure to meet a significant obligation or responsibility, associated with punishment or sanction), and hence result in agitation-related emotional states like fear, anxiety, and worry.

The main predictions of SDT have been supported by both correlational and experimental research in analog as well as clinical samples (for a review, see Strauman & Higgins, 1993). For example, Higgins, Bond, Klein, and Strauman (1986) found that the type and magnitude of self-discrepancy predicted the type and intensity of negative affect that individuals experienced when their discrepancies were activated by a cognitive priming manipulation (having people write or talk about their self-guides in a non-self-referential context). Activation of an AI discrepancy led to increased dejection-related affect, whereas activation of an AO discrepancy led to increased agitation-related affect. Other studies found that acute as well as chronic failure of self-regulation (operationalized as high levels of self-discrepancy) were associated with chronic distress and clinically significant symptoms of depression and anxiety (e.g., Strauman, 1989). Activation of self-discrepancy has been shown to increase dejection and agitation even when individuals are not aware that their self-discrepancies are being activated (Strauman & Higgins, 1987; Strauman, 1989). In addition, self-discrepancy at one time point has been shown to predict subsequent clinical symptoms, even controlling for initial symptomatology (Strauman, 1996b; Strauman & Higgins, 1988). These findings illustrate the emotional consequences of self-discrepancies, including their association with clinical disorders (Scott & O'Hara, 1993; Strauman et al., 2001).

Perceived Failure in Self-Regulation as a Pathway to Depression

Given the evidence that magnitude and type of self-discrepancy are stable in the absence of effective treatment (Strauman, 1996b), under what conditions does failure of self-regulation lead to depression? SST is based on the hypothesis that *chronic or catastrophic failure to meet promotion goals is a contributory causal factor in the onset and maintenance of depressive episodes for individuals with a strong promotion focus.* A strong promotion focus entails the following: (a) promotion goals are chronically and highly accessible; (b) promotion goals are highly interconnected as representations, so that activation of one promotion goal is likely to activate associated goals; and (c) promotion goals are associated with intense emotional and motivational responses to success or failure feedback. Approximately 25–35% of clinically depressed individuals (individuals with major depressive disorder and/or dysthymic disorder) fit the criteria for self-regulation-based depression specified by the SST model (high AI self-discrepancy and a strong promotion focus) (Strauman et al., 2001).

In general, the greater the magnitude of perceived discrepancy between one's actual behavior or attributes and one's promotion goals, the greater the likelihood that such discrepancies will be activated or 'primed' by incidental social stimuli. Acute activation of self-discrepancy is associated with momentary negative affect but is likely to be adaptive because it usually results in increased efforts to achieve the particular goal (Higgins, 1997). However, chronic perceived discrepancy between one's actual behavior/characteristics and promotion goals can lead to a downward spiral in which negative self-evaluation causes dejection and frustration, which leads to decreased effectiveness in achievement and/or interpersonal domains, feeding back into further, more generalized negative self-evaluation (Carver, 1998).

If an individual with chronic perceived failure to achieve promotion goals *also* possesses a strong promotion focus, she/he will experience intense distress in response to perceived failure to achieve a promotion goal because of the motivational significance of the goal. Although initially motivated to increase her/his efforts to reduce the discrepancy, should the perceived failure continue, the individual is likely to experience prolonged, increasingly intense dysphoric affect and negative self-evaluation. The individual is at risk for loss of motivation to pursue promotion goals as well as a decreased subjective sense of their desirability and achievability (Abramson, Metalsky, & Alloy, 1988). Such a downward trajectory of failure in self-regulation can both culminate in depression and/or maintain a depressive episode (Endler & Kocovski, 2000). Even in cases where self-regulatory failure does not contribute substantially to

the emergence of depression, the symptoms of depression interfere with subsequent self-regulation, rendering the process even less effective and thereby contributing to the maintenance of the depressive episode.

A self-regulation-based model can help to account for the high degree of comorbid anxious symptoms observed in clinical depression (Mineka et al., 1998). Following from the predictions of self-discrepancy theory, individuals manifesting *both* AI and AO discrepancy will experience both dejection-related and agitation-related distress. Furthermore, the combination of high chronic AO discrepancy and a strong prevention focus are hypothesized to predispose individuals to panic, social anxiety, and/or generalized anxiety (Strauman & Higgins, 1988). Data from clinical samples (e.g., Scott & O'Hara, 1993; Strauman, 1989; Strauman et al., 2001) suggest that depressed individuals with substantial comorbid anxiety have higher levels of AO discrepancy than their nonanxious counterparts.

Findings of discriminant associations between AI versus AO discrepancy and depressive versus anxious symptoms (e.g., Scott & O'Hara, 1993; Strauman, 1992) are not inconsistent with other theories of depressive/anxious comorbidity. Specifically, our model is consistent with the tripartite model advanced by Clark and Watson (1991) and is consistent with the more recent exposition by Watson et al. (1999). Those investigators proposed that the behavioral approach and avoidance systems normally operate in a mutually inhibitory fashion, but when the approach system becomes hypoactive (as in depression) the resulting loss of inhibition can lead to a hyperactive behavioral inhibition system. Thus, problems within the prevention system may contribute to anxious and agitated symptoms in depressive episodes, as well as to the rigidity and perfectionism often found in depressed individuals (Blatt, 1995).

COMPARISON OF CONCEPTUAL MODELS FOR SST, CT, AND IPT

SST was developed for a specific group of depressed patients, namely individuals whose current episodes and premorbid functioning are characterized by perceived failures in self-regulation. What critical elements should be present in a therapy targeting self-regulation-based depression? First, the therapy should examine and modify the patient's beliefs about the kind of person she/he is—what Higgins (1987) has called the *actual self.* For example, if a patient perceives himself as selfish, the therapist might work with the patient to reduce the likelihood that this particular self-representation is active (i.e., reduce the *chronic accessibility* of the belief) or might encourage the consideration of alternative, more accurate, beliefs (i.e., increase the *availability* of other beliefs). Second, the therapy should attempt to identify, and if necessary change, problematic aspects of the patient's goals and standards. For instance, if the patient believes that it is his obligation to be generous, then therapist and patient might consider the origins of such a standard and whether it is more appropriate in some contexts (e.g., nursing a sick child back to health) than others (e.g., a pickup basketball game). Third, the therapy should provide analysis and correction of the strategies the patient uses to pursue goals. For example, if the patient attempts to achieve his goal of being generous by donating all of his disposable income to charity, the therapist might help him explore alternative strategies with fewer negative consequences (i.e., retaining a portion of these funds for emergencies or retirement).

Effective psychotherapies for depression share a number of critical elements (Beutler, Clarkin, & Bongar, 2000). SST incorporates specific techniques from several empirically supported psychotherapies, most notably cognitive therapy (CT; Beck, Rush, Shaw, & Emery, 1979) and interpersonal therapy (IPT; Klerman, Weissman, Rounsaville & Chevron, 1984). However, whereas at the tactical level these components are common across a number of treatments, the strategies guiding the interventions differ considerably from treatment to treatment. The purpose of this section is to compare and contrast the SST treatment model with the treatment models for CT and IPT. In later sections we will comment on similarities and differences between SST and other treatment models for depression.

CT and SST share an emphasis on the affective consequences of knowledge representation and use. In CT, depressed affect is believed to be caused by inaccurate or distorted thinking about oneself, one's world, and one's future. In SST, depressed affect is viewed as resulting from a perceived failure to achieve (or make progress toward) promotion goals. In either case, the way individuals represent and use knowledge about themselves is a prime determinant of negative affect and associated symptomatology.[2]

Nonetheless, CT and SST differ in several ways. First, self-knowledge is not the primary focus of CT (DeRubeis, Evans, Hollon, Garvey, et al., 1990), and relatively little attention in CT is devoted to maladaptive self-regulation (as described in the SST model) as a potential source of affec-

tive vulnerability. Second, self-regulation is fundamentally as much a motivational process as a cognitive one; SST seeks to identify and alter cognition only to the extent that it interferes with effective self-regulation. Third, because of the explicit emphasis on the origins of goals and standards, SST is a more developmentally focused treatment than is CT (which emphasizes the current consequences of maladaptive beliefs). Finally, whereas CT was developed prior to the emergence of a strong research base, SST emerged from a well-established research literature.[3]

The main similarity between SST and IPT is that both therapies emphasize the interpersonal contexts associated with depressive symptoms. Both interpersonal therapy and self-discrepancy theory are based in part on Sullivan's (1953) perspective regarding the emotional significance of an interpersonally derived self-system. However, whereas the IPT model focuses primarily on current interpersonal roles and problems, SST focuses on the individual's goals and standards and attempts to identify and address underlying patterns of problematic self-regulation with respect to these goals/standards. Another similarity between SST and IPT is their relative flexibility, in terms of the range of specific techniques available as well as the timing of interventions. Such flexibility is an advantage in that the treatment may be tailored easily to the specific circumstances and progress of each patient. However, this same degree of flexibility also complicates the evaluation of treatment outcome within research designs using a fixed number of therapy sessions (Shea & Elkin, 1996).

SST borrows a number of specific interventions from both CT and IPT. However, because SST was designed to target self-regulation, it differs from CT and IPT in several practical respects. Unlike CT and IPT, SST at present is not intended as a general approach to treating depression, but rather targets a particular hypothesized etiology. As a consequence, SST defines its target problem differently (i.e., motivational dysfunction rather than cognitive or interpersonal dysfunction) and is characterized by a different model of treatment-induced change (e.g., more effective self-regulation vs. the ability to recognize and successfully challenge faulty thinking/beliefs or the resolution of interpersonal problems).

The Goals and Primary Therapeutic Techniques of SST

Self-System Therapy is a brief, structured therapy for depression (averaging 20–25 sessions in research conducted to date) intended for individuals for whom problematic self-regulation is a primary factor in the onset and maintenance of depression. SST was constructed as a treatment for depression in individuals characterized by high chronic actual:ideal (AI) discrepancy combined with a strong promotion focus—individuals who are likely to see themselves as continually failing to achieve promotion goals and, as a result, to manifest substantial dysphoric affect and diminished incentive motivation. SST is intended for individuals meeting *DSM-IV* criteria for major depressive episode and/or dysthymic disorder.

The development of SST was an effort to translate knowledge concerning self-regulation and affective vulnerability into strategies and tactics for assessment, exploration, symptom reduction, and relapse prevention. SST includes a number of techniques from existing therapies, but offers a distinct problem conceptualization and set of therapeutic goals. Whereas cognitive, behavioral, and interpersonal techniques figure prominently in SST, self-regulation is conceived primarily as a motivational process; therefore, the treatment focuses on the hypothetical promotion and prevention systems as instantiated within each individual.

This section provides an overview of SST, including underlying principles, primary goals of treatment, hypothesized mechanisms of change, primary therapeutic techniques, and the nature of the therapeutic relationship. In the next section, these topics will be discussed in the context of one patient's experience with SST.

SST as a Translational Intervention

A recent National Institute of Mental Health (NIMH) task force noted that assessment and intervention studies in mental health seldom incorporate knowledge and methods developed from basic behavioral science (1999). SST is based on a well-established research literature supporting self-discrepancy theory and its more recent elaboration as a model of self-regulation. The design and initial testing of SST were supported by an NIMH treatment development grant, and contributions to the SST treatment model and manual were made by behavioral scientists as well as practicing clinicians.

How have the research findings in self-regulation and emotional vulnerability been translated into a set of interventions? When we began to develop SST, no systematic guide for translating basic science into psychotherapy was available. As a result, we began by articulating a series of conceptual guidelines. These guidelines, outlined below,

were then used to identify existing strategies and techniques with relevance to self-regulation, as well as to generate ideas for interventions based on self-discrepancy theory.

• *The Self.* The self is a complex system of representations, including trait knowledge, goals, standards, beliefs, and memories. All of these representations can operate within the promotion and prevention systems, and all can be involved in the experience of emotion. The self develops through the influences of socialization and temperament, and although the specific goals that are most salient at a particular point in life vary, the structure of the self retains much of its original character through adulthood (Strauman, 1996b).

• *Self-Regulation.* Self-regulation is a fundamental and continuous motivational process that begins to develop early in childhood. The development of self-regulation reflects the patterns of socialization contingencies that each individual experiences as well as her/his temperament. The relation between a person's perceived characteristics and his or her personal goals and standards is a critical influence on the individual's emotional state.

• *The Promotion and Prevention Systems.* Self-representations are organized around two motivational systems: a promotion system (focused on "making good things happen") and a prevention system (focused on "keeping bad things from happening"). These systems are concerned with different kinds of goals, and success and failure within each system are associated with distinct emotional consequences. Likewise, promotion and prevention goals are pursued using different kinds of strategies, and the likelihood of achieving a goal is influenced by the characteristics of the goal itself (e.g., extremity), the individual's current life context, and her/his strategies for pursuing the goal.

• *Patient Selection.* SST originally was designed for patients whose depression involves a dominant promotion focus and high chronic AI self-discrepancy. We hypothesized that for these individuals, depression is triggered and maintained by the chronic negative affect, negative self-evaluation, and decreased incentive motivation that results from the repeated activation of AI self-discrepancies. A depressive episode also may be characterized by significant anxious and agitated symptoms, particularly if there is a coexisting high level of actual:ought (AO) self-discrepancy in combination with a strong prevention focus.

Treatment Goals

The following constitute the primary goals of SST. The order of presentation approximates the order in which they become salient during a course of SST.

• *Education.* The first goal of SST is to help the patient learn about depression (e.g., symptoms, course, potential for recurrence) as well as the hypothesized role of problematic self-regulation in the onset and maintenance of her/his depressive episode.

• *Reinitiation of Promotion-Focused Behavior.* Individuals appropriate for SST will be experiencing a loss of motivation to pursue promotion goals. Furthermore, some individuals also will manifest excessive prevention-oriented behavior, because problems within the promotion system affect the mutual inhibition between the two motivational systems. Therefore, one goal of SST is to reinitiate promotion-focused behaviors—behaviors that help the individual "move toward" one or more promotion goals, thus increasing her/his hedonic capacity and motivation.

• *Evaluation.* SST includes evaluation of the patient's regulatory style, her/his characteristic psychological situations, and the nature and regulatory consequences of her/his self-beliefs and self-guides. This is accomplished through the examination of current and past relationships as well as the analysis of emotionally significant day-to-day interactions.

• *Identifying Treatment Targets.* Based on assessment of the patient's self-regulatory style, goals, and life situation, the therapist and patient identify specific targets for intervention.

• *Change/Compensation.* The final goal of SST is to help the patient modify the patterns of problematic self-regulation that have contributed to the onset and maintenance of depressive symptoms. To the extent that modifying these patterns is not feasible, a related goal—helping the patient compensate for self-regulatory problems—is emphasized.

Mechanisms of Change

Effective psychotherapies share a number of generic components that contribute to their effectiveness (Kopta, Lueger, Saunders, & Howard, 1999). In addition to such components, therapeutic change in SST is hypothesized to occur via the mechanisms outlined below. These mechanisms are unlikely to be independent, so a particular

intervention may promote change in self-regulation via multiple pathways. The hypothesized mechanisms of change guide the interventions used in SST as well as research to determine how and for whom SST works.

Changing the availability of self-knowledge. One of the ways that SST can promote change is by helping the patient modify the set of self-beliefs or goals that are used in the process of self-regulation. For instance, SST may help the patient acquire new beliefs and/or goals that are more accurate or more adaptive (e.g., less self-discrepant, more self-congruent). In turn, having more accurate self-knowledge and more appropriate goals should lead to increased success in pursuing promotion and prevention goals.

Changing the accessibility of self-knowledge. Another way that SST can bring about change is by altering the accessibility of the patient's self-beliefs and self-guides. Accessibility refers to the likelihood that a particular representation (e.g., a goal, a belief, a memory) from among the individual's entire set of representations will be used in self-regulation (Bruner, 1957; Higgins & King, 1981). All other things being equal, the greater the accessibility of a particular construct, the greater influence it will have on self-evaluation, motivation, affect, and behavior. Specific interventions within SST are designed to increase the accessibility of adaptive goals or self-beliefs and/or decrease the accessibility of maladaptive ones.

Changing the perceived importance/consequences of self-knowledge. A third mechanism of change in SST is modifying the perceived importance or consequences of a self-belief or goal. The SST therapist may encourage a patient to question the "fit" of a belief or goal in the patient's current life circumstances, help the patient recognize situations where particular self-beliefs or goals are more or less relevant, or explore the positive and negative consequences of adhering to a particular self-belief or pursuing a particular goal.

Primary Therapeutic Techniques

The three primary therapeutic techniques of SST represent methods for exploring the patient's goals and her/his ways of pursuing them. Each is related to, but distinguishable from, techniques used in other brief psychotherapies. In this section, we will describe these techniques briefly and contrast them with techniques from IPT, brief dynamic psychotherapy, and CT.

Self-in-Context Assessment (SCA). The Self-in-Context Assessment occurs during the first phase of treatment and takes from 3 to 6 sessions to complete. This technique is a direct application of the developmental postulates of self-regulation, which hypothesize that dominant regulatory orientations and characteristic self-beliefs develop from patterns of self/other contingency experiences. The purpose of the SCA is to generate an initial "data base" from which the therapist and patient can develop hypotheses regarding the patient's problems in self-regulation. A well-conducted SCA also contributes to the establishment of the therapeutic alliance as the therapist responds empathically to the patient's story of her/his life.

In the SCA, the therapist and patient systematically assess the major relationships, current and former, in which the patient learned that being a particular kind of person was good or bad by experiencing positive or negative emotions for behaving (or not behaving) in particular ways. Interactions with parents and other caregivers invariably constitute a primary focus. To guide their assessment, the therapist and patient concentrate on questions such as the following:

- What kind of person were you in that relationship, i.e., how would you describe your behavior, your demeanor, or your way of interacting with the other person?
- What kind of person did you want to be? What kind of person did you *not* want to be? What kind of person did the other individual want you to be, and *not* want you to be?
- What would happen when you did, or did *not,* behave a certain way?

Occasionally, examination of the patient's significant relationships may be hampered due to the patient's difficulty recognizing and/or articulating the expectations that were placed on her/him at a young age, or because certain important standards, expectations, and/or goals did not originate in the most familiar relationships. In such cases, the SCA may be expanded so that the therapist and patient also consider the patient's salient life events (e.g., being embarrassed in front of an entire school assembly, being complimented by a stranger). Like the analysis of significant

relationships, the analysis of salient life events is intended to serve as a source for hypotheses about the patient's self-regulatory history and current style of pursuing promotion and prevention goals, as well as the apparent strength of the promotion and prevention systems.

The logic of the SCA is similar to that of the Interpersonal Inventory used in early sessions of IPT. Both the Interpersonal Inventory and the SCA involve a review of the significant relationships in the patient's life. However, whereas IPT focuses on roles and the relation between interpersonal roles and depressive symptoms, SST uses information about the individual's characteristic interactions to help identify underlying patterns of self-regulation. The patient's self-regulatory style becomes the target of therapeutic change, rather than the patient's interpersonal roles. Because it is grounded in a developmental perspective, the logic of SCA is also similar to the conceptualizations of contemporary psychodynamic therapists like Benjamin (1999) and Blatt (Blatt & Auerbach, 2000), who emphasize the significance of relationships and relationship patterns for the development of self-concept and self-evaluation.

Psychological Situation Analysis (PSA). Psychological Situation Analysis occurs during the middle phase of SST, and typically lasts from four to six sessions. PSA is based on the concept of the *psychological situation* as articulated by Lewin (e.g., 1951). PSA involves the therapist and patient examining current or past interpersonal encounters to illuminate the patient's experiences of the interactions, the goal(s) that were operative in the situations, the strategies the patient used to pursue them, and the outcomes of goal pursuit. By examining a number of specific instances, the therapist and patient work to identify the patient's modal psychological situations and her/his self-regulatory style. Not all "situations" reviewed during the PSA need be actual interpersonal interactions. Even solitary experiences like dreaming or recalling a childhood event have an implicit interpersonal context and so may be relevant to analyzing the patient's patterns of self-regulation.

In conducting PSA, the therapist and patient review a series of emotionally significant interactions and pose several questions about each:

•What was your goal in that situation (i.e., what did you want to accomplish or avoid)?

•How did you try to attain the goal (i.e., what did you do, or *not* do)?

•How did your strategy work (i.e., what was the outcome)?

•How did you end up feeling about yourself in relation to the other(s) involved?

By reviewing such experiences, the therapist and patient begin to identify the standards, expectations, and/or goals that influence how the patient construes interactions with significant others, the strategies the patient typically uses to meet those expectations or goals, and the emotions and self-beliefs resulting from those experiences.

In several respects, PSA resembles the Core Conflictual Relationship Theme (CCRT) method that is employed in brief supportive-expressive dynamic psychotherapy (Luborsky et al., 1995). The CCRT method is used to formulate hypotheses regarding relationship patterns that may be contributing to the onset and/or maintenance of depression. A CCRT consists of (a) a wish (e.g., to be approved of); (b) an anticipated response from other (e.g., the withholding of approval); and (c) a corresponding response of self (e.g., feelings of unworthiness). Both the PSA and the CCRT, as methods to identify important life themes, are critical for problem conceptualization in therapy. However, the theoretical emphases of the PSA and CCRT differ. Whereas CCRT is intended to identify a persistent pattern of conflict between wish and reality, the aim of the PSA is to identify chronically accessible goals as well as the individual's characteristic style of self-regulation.[4]

Self-Belief Analysis (SBA). Self-Belief Analysis also takes place during the middle phase of SST, taking two to five sessions on average. This technique is based directly on self-discrepancy theory and principles of knowledge activation, which hold that distress can result from the activation of patterns of beliefs about the self (with particular emphasis on goals). The primary purpose of SBA is for the therapist and patient to identify and examine the origins, content, and functions of the patient's beliefs about her/himself in relation to others, and to determine how these beliefs may contribute to the patient's depressive symptoms.

During the SBA, the therapist and patient may use a wide range of questions:

• What is the standpoint of the belief (i.e., whose belief is it)?

• What is the valence of the belief (i.e., positive or negative)?

• Does it refer to the actual self (the kind of person I believe, or someone else believes, I actually am), a standard, goal, or expectation (e.g., the ideal self, the ought self), or the undesired self (the kind of person I or someone else believes I must not be)?

• How long has the patient held the belief?

• What are the perceived importance and consequences of the belief?

• What evidence suggests that the belief is factual or objective?

• What does the belief imply about the patient's regulatory style?

Each of these questions concerns a potentially significant aspect of self-knowledge, and the analysis of each belief can proceed using whatever combination of questions is appropriate.

There are obvious parallels between SBA and the analysis of automatic thoughts and core beliefs in CT. Both are intended to help the patient identify, understand, and evaluate beliefs that have a broad impact on her/his emotional state. However, whereas CT targets the patient's negative cognitive triad and underlying depressogenic schemas, SST focuses on the role of beliefs and goals in maladaptive self-evaluation, motivational failure, and the resulting depressive symptomatology. We hypothesize that to the extent that a patient's depression reflects a particular etiological pathway, the apparently subtle differences between SBA and the analogous CT techniques will be crucial for achieving optimal treatment outcome.[5]

Self-in-Context Assessment, Psychological Situation Analysis, and Self-Belief Analysis illustrate the new therapy's distinct focus and level of analysis. All three techniques serve the dual purposes of exploring the patient's ways of evaluating her/himself and pursuing goals and identifying problems in self-evaluation and self-regulation. The change-oriented interventions that are used in the final phase of SST follow directly from SCA, PSA, and SBA.

The Therapeutic Relationship

The nature of the desired therapeutic relationship in SST incorporates aspects of the relationships prescribed in CT and IPT. First, the therapist should take a supportive and appropriately directive stance, consistent with other brief therapies that attempt to address a limited range of targets within a relatively short time. In addition, to help set the stage for the difficult work of therapy, the therapist should provide information about depression and help the patient to understand the impact of being depressed on her/his current and past functioning. Early in the course of treatment, the therapist should encourage the patient to focus on everyday interpersonal interactions with openness in order to help illuminate underlying patterns of self-regulation. Subsequently, the therapist and patient should work collaboratively to use newly emerging knowledge about the patient's self-regulatory style to identify targets for change and to implement change or compensatory strategies.

In the style of CT, the SST therapist should assume a collaborative-educational stance, encouraging the patient to identify, test, and challenge beliefs and assumptions (e.g., the importance of particular goals) and modeling these skills as needed. Mutually constructed homework assignments should be incorporated into the therapy process from the earliest stages. Likewise, based on the therapist stance in both IPT and CT, the therapist should share her/his observations with the patient whenever the patient's dominant psychological situations and/or problems in self-regulation become active within the therapy itself. The treatment context constitutes a safe and convenient "laboratory" to explore the patient's reactions to certain situations or ideas, with the therapist's presence making such exploration potentially informative.

OUTLINE OF A COURSE OF TREATMENT USING SST

In this section we present the three phases of SST—the orientation phase, the exploration phase, and the transformation phase. After presenting the goals and strategies of each phase, we offer a case illustration in which typical interventions for that phase are described.

Orientation Phase

The initial phase of SST is referred to as the *orientation* phase because its overarching goal is to help the patient learn about depression, psychotherapy in general, and SST in particular. In this phase, the therapist attempts to establish a pattern of collaboration with the patient that demonstrates an adaptive regulatory style—the formulation of explicit, appropriate goals, and the use of effective strategies for meeting these goals.

The sessions of the orientation phase are designed to accomplish a number of specific objectives: accurately diagnosing and labeling the depression, beginning to explore the relation between ineffective self-regulation and current

and/or past depressive episodes, reinitiating effective promotion behaviors, and establishing a therapeutic contract and initial treatment plan. The tasks of the orientation phase occupy the first 5–7 sessions of a prototypical 25-session course of treatment. The goals of this phase are described briefly below. Several worksheets have been developed to help the patient learn the critical concepts of the orientation phase and to work toward achieving the relevant treatment goals.

Identifying the depression. The first goal of the orientation phase focuses on assessing for and educating the patient about her/his depression. The patient's symptoms are identified and she/he is provided with information about affective disorders, including the episodic nature of depression and what she/he can expect from treatment (e.g., the work required, the typical rate of symptom reduction). In addition, the therapist should encourage the patient to adopt a "sick role" (Klerman et al., 1984): taking steps to temporarily reduce her/his obligations and responsibilities early in treatment so that she/he can focus more fully upon her/his recovery. Generally, this goal should be addressed immediately, although it likely will need to be revisited.

Assessing the relation between depression and self-regulation. Like the goal of identifying the depression, this goal also contains a sizable educational component. First, the therapist introduces the concept of self-regulation ("the ongoing process of setting goals and attempting to achieve them") as well as the hypothesized relation between faulty self-regulation and depression ("sometimes this process breaks down so that we can no longer achieve our goals, and over time we may feel down and just not want to try anymore"). After the patient demonstrates an understanding of these basic ideas, the therapist and patient turn their attention to identifying situations in the patient's life where she/he was unable to achieve goals. This objective is accomplished in part by conducting the Self-in-Context Assessment.

Initiating/increasing promotion-focused activity. Given the emphasis in SST on self-regulation as a motivational process and depression as a consequence of a breakdown in that process—particularly in relation to promotion goals—it is important to engage the patient in promotion-focused behaviors throughout treatment. In SST, promotion-focused activity is established as early as possible in the orientation phase. Through in-session discussion and out-of-session monitoring exercises, the therapist and patient work to identify promotion-focused activities that have been affected by the patient's depression and to come to agreement about activities the patient will reinitiate or "step up" between sessions. Although physical activity per se is a useful part of recovery from depression, the SST framework suggests that the essence of promotion-focused activity is *the experience of moving closer to making something good happen.* The process of reinitiating this experience can begin with exercises as simple as having the patient choose between two desirable alternatives (e.g., choosing between two favorite breakfast foods). Often the therapist and patient must spend time carefully specifying and structuring these activities to increase the patient's chances of success, particularly in the first few sessions when the patient is likely to be most symptomatic. In addition, the patient is directed to attend to her/his mood both while engaging in the activity and after the fact, in order to highlight any resulting increases in satisfaction, thus increasing the likelihood that the patient will attempt promotion-focused activities in the future.

Formulating the presenting problem(s) and treatment plan. The final goal of the orientation phase involves reviewing the information obtained via worksheets, in-session discussions, and the SCA, and constructing a plausible formulation of the patient's depressive disorder. An example of such a preliminary formulation is as follows: "The fact that your top choices for law school have rejected your application has made it impossible for you to be the kind of person you want to be—not to mention the kind of person your *parents* want you to be. Also, recent conflict with one of your best friends has made it hard for you to engage in your usual social activities. These situations, together with the frustrations you described at work, have understandably had a big impact on how you feel—you feel dejected and helpless about your career and your social life, as though there's nothing you can do to achieve your goals. This helpless feeling has generalized, so it's difficult to motivate yourself overall."

After reaching a tentative agreement about the problem formulation, the therapist and patient work to choose initial goals for treatment. For example, in the case above, the therapist and patient might agree to work on getting the patient to increase his level of activity with other friends, talk to his supervisor at work about his difficulties there,

and re-examine his career goals. After coming to agreement about these goals, it is critical that the therapist and patient discuss the manner in which these goals will be addressed, and that the patient commit to this plan. In the case above, the therapist and patient might agree that the patient keep logs of his social activities to go over briefly during each session, solving problems as necessary. In addition, they might agree to devote most of one session to considering ways the patient may most effectively communicate his work concerns to his supervisor, and to rely on the PSA and SBA to gather more information about the patient's career-related beliefs and goals. In securing the patient's commitment to the initial treatment plan, the therapist should describe the structure and major tasks of the upcoming exploration phase so that the patient feels involved and informed.

Readers familiar with IPT will recognize similarities between the structure and goals of the orientation phase of SST and the initial sessions of IPT. Similarities also may be observed between the promotion-focused activity of SST and Jacobson's behavioral activation treatment for depression (BA; Jacobson, Martell, & Dimidjian, 2001), as well as the behavioral activation components of CT (e.g., J. Beck, 1995). Indeed, the importance of "antidepressant behavior" for recovery from depression is recognized across therapeutic orientations. However, although similar exercises may be assigned in the context of BA, CT, and SST, there is a critical difference in the rationale for their effectiveness. BA arises from a strictly behavioral model; the primary intent of the activation exercises in this treatment modality is to provide the patient with the experience of positive reinforcement (Jacobson et al., 2001). In CT, the purpose of activation exercises is as much to provide objective evidence of mastery—evidence that may be used to modify cognitions—as it is to provide pleasure (J. Beck, 1995). SST takes a motivational perspective; the intent of promotion-focused activity is to *re-engage the motivational system that underlies promotion-focused behavior.* The act of choosing treatment goals is itself an exercise in pursuing promotion goals, consistent with the rationale for SST.

Case study—orientation phase. M was a 48-year-old Caucasian female who entered therapy following three months of significant sleep disturbance, fatigue, depressed mood, moderate anhedonia, high levels of anxiety, and memory and concentration problems that interfered with her work as an administrative assistant for a market research firm. Her pretreatment Beck Depression Inventory score was 22, and her 27-item Hamilton Rating Scale for Depression (completed by a research interviewer) was 24. On intake, M indicated that her symptoms had developed following a change of bosses at work as well as a downturn in her mother's health that left her mother more dependent on her. Five months earlier, M's previous boss, with whom she had enjoyed an excellent relationship, left the firm, and her current boss was both more demanding and less flexible about M's schedule. In addition, four months prior to intake, M's mother, who was widowed and living alone, suffered a stroke that left her with a mild left-sided weakness and rendered her unable to drive. Therefore, M's mother was now relying on M and her sister for regular transportation and assistance.

With regard to psychiatric history, M recalled one probable episode of depression around age 20 after she was forced to quit college due to her parents' inability to finance the remainder of her schooling. This episode remitted spontaneously after several months. M also reported two panic attacks in her early-to-mid-twenties—once while in a crowded bar with friends, and once during a turbulent airline flight. M spontaneously described herself as "somewhat of a perfectionist." M had never sought treatment for her concerns, although she had tried St. John's Wort for two weeks about a month prior to her intake interview.

M was married to her husband of 22 years, and they had one son, age 19, who was attending college in a neighboring state. M described her relationship with her husband, an engineer for a local defense firm, as "generally good." She indicated that their son was "a great kid" and she remarked several times that she had missed his presence in the house since he'd left for college two years before.

During the orientation phase, M was provided with information about depression, including its symptoms and typical course. Information about depressive symptoms also was shared by providing her with a blank copy of the Beck Depression Inventory and discussing the symptoms corresponding to each item. She was given a fact sheet that contained information on prevalence, risk factors, and course for the disorder. The concept of "sick role" was explained, and after much encouragement, M agreed to cut back on her regular house-cleaning schedule while she was in the early stages of treatment.

M had all but stopped attending a late afternoon exercise class in order to transport her mother to her various appointments, and she had been unable to meet one of

her good friends for a regular lunch due to her new boss's expectation that she work through her lunch. M reported having very little free time, and when she did she spent it guiltily reading "trashy" magazines and watching television shows that were of little interest to her. After discussing the importance of reinitiating promotion-focused activities, M and her therapist agreed she would spend a portion of the time she had been watching TV either calling a friend or sprouting seedlings to plant in her garden in the spring.

In assessing the relation between self-regulation and depression, M was clearly able to link her current depression (as well as her past depressive episode) to difficulties living up to her personal standards. Due to the demands that had emerged over the last several months, M was feeling "stressed," disconnected from her husband and friends, and resentful of her sister, who was taking minimal responsibility for their mother's needs. She was also feeling dissatisfied with work. Although she had fantasies of leaving her job, she knew that doing so was not feasible from a financial standpoint.

During the Self-in-Context Assessment, much attention was devoted to M's early relationship with her father. M's father expected her to excel in school and expressed quiet but obvious disappointment whenever she did not meet his expectations. Because both of her parents worked, they also relied on M to handle what appeared to the therapist to be an inordinate number of responsibilities around the house from an early age, including watching her younger sister. Although M worked hard to earn her father's approval, he rarely expressed such approval. Furthermore, he had never expressed regret about being unable to finance the remainder of her college education, a circumstance that came about because he was laid off from his job.

M's mother was a warm and accepting but passive figure. In contrast, M's younger sister had relied on M continually since their childhood, frequently seeking her counsel and even borrowing money on occasion. M spoke in positive terms about her relationship with the mother of her best friend during senior high school. She described this woman as supportive and highly praising. It was this woman who encouraged M to attend college, whereas it had not been expected by her parents. Finally, M described her relationship with her husband as generally happy and mutually supportive, although she felt that he relied on her to do most of the housework, stay in touch with their son and his needs, and maintain their social life.

Based upon the information M provided about her family of origin during the SCA, it appeared that during her childhood, pursuing (and even attaining) promotion goals frequently did not "make good things happen" or make M feel more like the person she ideally wished to be. It was hypothesized that due to the lack of contingent positive responses from significant others during her youth, M's self-regulation with regard to promotion goals was not particularly effective (although this had improved to a limited degree during her adulthood). M's self-regulation with regard to prevention goals, on the other hand, had been reasonably effective since childhood, until recent decreases in her mother's ability to function independently had overwhelmed M's resources for attending to obligations/responsibilities. The perfectionistic tendencies M acknowledged suggested to the therapist that M probably did not experience the satisfaction that usually accompanies the successful pursuit of promotion goals.

M and her therapist arrived at an initial formulation of her depression, as follows: M was depressed because she was having difficulty attaining her promotion goals and significant discrepancies had developed between her actual self and her ideal standards. For instance, M held a promotion goal of being a valued employee, but despite her efforts, her new boss was providing her with feedback contrary to this ideal. Likewise, she held a promotion goal of being physically fit, yet she had gained weight and lost fitness over the last few months. M and her therapist also hypothesized about the recent increase in her general anxiety level: M was having a difficult time meeting her prevention goals, and discrepancies had developed between her actual self ("behind on everything") and her ought standards ("completely on top of things"), resulting in a hypervigilant style. In addition, M believed that she should be helpful and unresentful of family members, yet she found herself feeling more and more frustrated with her sister and her husband for not offering to help her fulfill her additional obligations. Exacerbating her depressive and anxious symptoms was M's perfectionism, which caused her goals (both promotion and prevention) to be more extreme and thus more difficult to achieve.

M and her therapist agreed to focus the next several weeks of therapy upon working to reduce her depressive symptoms, building more promotion-focused activities into her schedule (so that she could experience the psychological situation of achieving or at least approaching promotion goals, and because doing so would help to

counteract the hypervigilant style she assumed when stressed), examining and evaluating specific self-standards, expectations, and goals, and assisting her with handing over some of her responsibilities to others.

Exploration Phase

The middle phase of SST is termed the *exploration* phase because its primary goal is to explore two critical aspects of the patient's self-regulation: goals and regulatory style. This is accomplished mainly through Psychological Situation Analysis (PSA) and Self-Belief Analysis (SBA). PSA identifies the patient's characteristic ways of experiencing emotionally significant interactions and regulating her/his behaviors and attributes. SBA investigates the origins, content, function, and adaptiveness of the patient's beliefs about her/himself in relation to others. The exploration phase, which may span 8 to 12 sessions of a prototypical 25-session treatment, culminates in a detailed reformulation of the role of self-regulation in the current depressive episode and negotiation of a specific set of targets for intervention during the final phase of treatment. The therapist may choose to focus exclusively on PSA for several sessions before switching to SBA, or to alternate between PSA and SBA.

The exploration phase includes written and behavioral homework assignments to develop and test hypotheses regarding the patient's characteristic psychological situations and self-knowledge. Brief descriptions for each goal of this phase are provided below. In addition, worksheets have been developed to aid in the achievement of these goals.

Psychological Situation Analysis. The objective of Psychological Situation Analysis (PSA) is to identify the ways in which the patient experiences, and attempts to self-regulate within, daily interactions. Typically, the therapist first ensures that the patient is able to adequately monitor her/his thoughts and feelings by assigning basic self-monitoring exercises as in CT. Then the patient is directed to analyze interactions (or *memories* of interactions) each week, identifying her/his goals for each situation, the strategies she/he used to achieve her/his goals, the outcome, and her/his emotional reactions to the outcome. From the accumulated data, the therapist and patient attempt to identify the patient's characteristic psychological situations—patterns of experience potentially associated with the current depression.

Self-Belief Analysis. Self-Belief Analysis, or SBA, is the other primary activity of the exploration phase. SBA is similar to PSA in that both analyses begin by examining, systematically, the patient's positive or negative daily interactions. However, instead of focusing upon strategies for meeting one's goals and the effectiveness of these strategies, SBA focuses upon the patient's *beliefs about her/himself in relation to others,* including goals and their consequences. In SBA, the therapist and patient first identify the "standpoint" of the beliefs in question (self or other), the valence of these beliefs (positive or negative), and their possible developmental origins. Then they work to evaluate the accuracy and regulatory significance of the beliefs/standards in question (i.e., the importance of the beliefs to the patient's sense of her/himself, and the consequences of adhering or failing to adhere to them).

Revise problem formulation/identify targets for change. Periodically reviewing the work of therapy and revising treatment goals is an important activity, regardless of modality. The present goal formalizes such a practice at the end of the exploration phase. After analyzing representative life situations via PSA and SBA, the therapist and patient will have more detailed information about the patient and therefore will be able to revise their initial problem formulation. Frequently the therapist and patient review hypotheses generated during the PSA and SBA, particularly those that differ from the initial formulation, and construct a revised formulation based on all the information available. Like the initial formulation, the revised problem formulation should be couched in terms of the patient's specific difficulties with self-regulation, or her/his problems pursuing specific promotion and/or prevention goals. In addition, effective aspects of the patient's self-regulation should be recognized, both to strengthen rapport and the patient's commitment to treatment and to increase the patient's experiences of success.

Following the problem reformulation, the therapist and patient must determine the specific goals for the final phase of therapy. They may elect to continue working toward goals that were established at the end of the orientation phase, or they may shift their efforts toward goals in other domains. In some instances it may not be feasible to modify the patient's beliefs, standards, expectations, goals, or strategies for achieving goals; for example, the patient may not be invested in doing so or the goals may be held too rigidly. In these cases, the therapist and patient may benefit

from considering compensatory interventions, or ways the patient may better adapt to the specific challenges of her/his self-regulatory style.

Build and maintain the therapeutic relationship. Like revisiting treatment goals, attending to and maintaining the quality of the therapeutic relationship is important regardless of treatment modality. Within SST, ways to enhance the therapeutic relationship include providing clear rationales for the therapy and its tasks/interventions, collaboratively establishing consistently beneficial homework assignments, setting appropriate (attainable) goals within the treatment itself, and making meaningful progress toward these goals. Another important ingredient in maintaining the therapeutic relationship is inviting the patient's feedback each session, and responding to it in a thoughtful and genuine manner. Each of these strategies helps to maintain the patient's commitment to the difficult work of psychotherapy.

Case study—exploration phase. When M and her therapist moved to the exploration phase, they first focused on helping M to recognize and analyze situations where she felt either good or bad about herself. They spent five sessions applying and building on this skill in the context of Psychological Situation Analysis. Using PSA and the associated worksheets, M and her therapist ultimately extracted the following themes:

- At work, M was trying very hard to establish a friendlier relationship with her new boss (e.g., by trying to anticipate his every need). However, as a rule, her boss did not respond positively to her efforts, which left M feeling unappreciated and incompetent.
- On the days that she was scheduled to take her mother shopping, etc., M's goals usually went beyond running these errands. She also believed she should spend additional time with her mother to buoy her spirits. To accomplish this, she would stay at her mother's home for an hour or more after completing the day's tasks. Her mother appeared pleased by the visits, and as a result, M felt like she was being a "good daughter." However, she also felt anxious about losing the time she needed for her many other activities and responsibilities.
- When M spoke with her sister to coordinate their mother's care, she did not ask her sister directly to accept more responsibility for their mother's needs. As a consequence, her sister rarely offered additional time, and M was left feeling frustrated and resentful.

Although PSA is primarily an information-gathering exercise, it can render the consequences of a particular way of pursuing a goal so salient that the patient becomes motivated to change the strategy immediately. This happened notably in the case of M. Recall that because of her newly acquired responsibilities for her mother, M was unable to attend her exercise classes with any degree of regularity. As a consequence, every time M looked in the mirror, she noticed that she felt negatively about herself, and made it her goal to exercise for longer periods of time on the weekends. However, when the weekend approached, she felt that she could not allot such large blocks of time to exercise; furthermore, when she actually managed to complete a marathon exercise session, she was fatigued for the remainder of the weekend and felt even worse about her level of conditioning. This faulty strategy was identified very soon after embarking on the PSA, and M and her therapist suggested that instead she go to the gym for moderate workouts two evenings a week, asking her husband to prepare his own dinner on these nights. Within a few weeks, M was exercising at least twice a week and was feeling more positive about her fitness. Thus, in addition to its primary function as a period of detailed assessment, the exploration phase also can involve the start of meaningful change.

On the basis of the information collected during the PSA, M and her therapist drew some tentative conclusions about her characteristic psychological situations for both promotion and prevention. When approaching a promotion goal (for instance, pleasing others), it was evident that M tended to go to extremes, without first evaluating the probable reactions of the other individuals involved. In some relationships (her mother, her husband and son, her former boss, various friends), her efforts were repaid with gratitude and/or approval. However, within others (her father, her sister, her current boss), M received little or no acknowledgment, and felt unappreciated as a result. M and her therapist agreed that her tendency to "go to extremes" in these cases stemmed, in part, from her perfectionism.

In general, M was successful at setting and achieving her prevention goals (e.g., handling her work obligations competently and efficiently, managing the household). However, during times of greater stress, such as her son's infancy, a career shift in her mid-30s, and recent circumstances with her mother and job, M acknowledged that she was unable to meet all of her responsibilities. Instead of "adjusting down" her goals accordingly or asking others for help, M tended to push herself harder, even if it meant depriving

herself of sleep or cutting leisure activities out of her schedule. Although M recognized that these strategies depleted her energy and motivation, she felt as though she "should be able to handle it."

After several weeks, M and her therapist shifted from PSA to Self-Belief Analysis. Like PSA, SBA focuses on day-to-day encounters, but aims to gather information about the patient's beliefs concerning her/himself in relation to the world. On the basis of the SBA, M and her therapist identified several themes about her actual-self beliefs and her goals and standards. For example, M believed that she was a good daughter to her mother. This belief was extremely important to her, had been present since childhood, and was reinforced every time she spent extra time with her mother. M believed that it was selfish to want more time for herself, and that this selfishness was primarily responsible for both her resentment of others and her depression.

M and her therapist identified the fact that M possessed strong prevention goals ("ought" standards) for taking care of family members, including her mother, son, and husband. These goals appeared to have developed from early-life patterns of interaction with her parents and younger sister. In addition, she avoided "imposing" on others to assist her. Up until a few months before she entered therapy, M reported a high level of congruency between her ought standards and her actual behaviors; however, more recently she noted marked self-discrepancy. M and her therapist also identified a strong promotion goal ("ideal" standard) of maintaining excellent relationships with family members, friends, and coworkers under all circumstances. Although the origins of this standard were not obvious, her problematic interactions with her boss and sister contributed to a high level of perceived self-discrepancy.

M and her therapist also explored how her perfectionistic style caused significant problems in self-regulation. M believed she should do her best at almost every endeavor, whether it was completing a project at work, maintaining her home, exercising, or caring for her mother. However, due to her changing life circumstances it was becoming increasingly difficult for M to perform at such a high level, and the distress she felt from this perceived self-discrepancy was magnified by the belief that she used to be able to meet most of her standards.

In revising their problem formulation, M and her therapist retained a number of their original hypotheses. They agreed that M's depressive symptoms were being maintained by persistent perceived discrepancies between her actual self and ideal self, and that discrepancies between her actual self and ought self (and the associated perfectionistic tendencies) were creating anxiety and hypervigilance. Because they had already addressed M's concerns about her fitness, this was not included among the revised targets for treatment. However, M and her therapist retained the goals of building more promotion-focused activities (particularly contacts with friends) into her schedule, helping her hand over more responsibilities to both her sister and her husband, and modifying her standards for her relationship with her new boss. They also agreed to focus on the idea that due to the extremity of her goals and standards, M was unlikely to achieve them all and would benefit from altering and/or prioritizing them wherever possible.[6]

Throughout the exploration phase, M's therapist was careful to involve M in choosing homework assignments and negotiating targets for treatment. M's therapist also solicited her feedback on the perceived usefulness of the interventions that were used. Not only did involving M in basic treatment decisions promote her commitment to treatment, but it also reinforced M's feelings of self-efficacy—itself a promotion-reinstating activity. For M, therapy became a setting where she formulated and worked toward the achievement of meaningful promotion and prevention goals without undue self-criticism, helping to shape a more effective self-regulatory style, increase feelings of satisfaction, and reduce hypervigilance.

Transformation Phase

In the final phase of SST, the primary focus is on helping the patient to develop more effective self-regulation. Although a number of specific strategies and tactics are available, they can be classified into two broad categories: *altering* one or more maladaptive aspects of self-regulation, or *compensating* for those aspects that are resistant to change. The transformation phase spans approximately the last 8 sessions of a prototypical 25-session treatment. This phase should be construed as merely the starting point for bringing about lasting change in beliefs and self-regulatory style; such changes must be reinforced over longer periods of time in order to bring about more permanent change.

The transformation phase combines education and in-session and out-of-session assignments or "experiments" involving modification of or compensation for the patient's self-beliefs, promotion and/or prevention goals, and regulatory style. Because self-regulatory cognition always occurs in an interpersonal context, the therapeutic relationship serves as a safe environment for the patient's initial efforts

to modify goals and behaviors. In the final sessions, the therapist and patient review the course of treatment, summarize their formulation of the patient's difficulties with self-regulation, and focus on ways the patient might effect change/compensate for difficult situations in the future. The approaching conclusion of treatment provides an opportunity to work toward a successful resolution of the relationship with the therapist, further reinforcing the patient's perceived capacity for adaptive self-regulation.

The main goals and strategies of the transformation phase are described below. The interventions for this final phase are tailored to the specific needs of each patient. Therefore, not all of the following goals and strategies will be applicable for every patient receiving SST.

Reduce self-discrepancy/increase self-congruency. Reducing discrepancy/increasing congruency and modifying regulatory style (below) are the two key goals of the transformation phase. The first goal, similar to the therapeutic work of Rogers (1951), attempts to "narrow the gap" between the patient's actual self and her/his promotion and prevention goals. This may be accomplished by focusing upon either actual-self beliefs or the goals themselves. The therapist and patient may work to make new (positive) information available about the actual self—information that has gone unrecognized or has been dismissed by the patient. Similarly, the therapist may work with the patient to decrease the patient's focus on negative self-beliefs ("I am not as gifted as others within my field") and increase the patient's focus on positive self-beliefs ("I compensate for my limitations with hard work and dedication"). Another strategy for achieving this goal includes systematically evaluating the importance or consequences of various self-beliefs ("Why is it so important that I am not as gifted as others?" "What dire consequences arise from this?"). With regard to the self-guides, the therapist and patient may attempt to modify the availability or accessibility of particular goals, or evaluate the importance or consequences of meeting or failing to meet them ("Why is it important for me to do my best on every project for school?" "What would happen if I didn't do my absolute best every time?")

Modify regulatory style. The conceptual framework underlying SST postulates that all styles of self-regulation have both benefits and costs (Higgins, 1997). Whereas the first goal of the transformation phase emphasizes evaluating and modifying the patient's self-beliefs and standards, the second goal attempts to enhance the patient's achievement of her/his standards by examining and modifying the strategies used to achieve them. Often the therapist and patient will have identified aspects of the patient's regulatory style as targets for change or compensatory intervention on the basis of completing the PSA during the exploration phase of therapy. Once a reasonable understanding of the patient's style is achieved, the therapist may assist the patient in developing various skills (e.g., social skills, assertiveness skills) or help the patient come up with ways to compensate for a style that is not easily modified. For instance, a person who becomes highly anxious when presenting her/his ideas to groups may look for a job that requires fewer presentations, or may casually inform coworkers about her/his particular "quirk" so that they will be more understanding and supportive if and when the situation arises. An objection may be raised that encouraging the adoption of compensatory goals is short-sighted, because it relieves periodic or short-term distress at the cost of restricting long-term opportunity. In the context of SST, however, compensation is viewed as a long-term solution to a specific self-regulatory failure, to be used when change does not appear feasible. Ultimately, every individual is limited in at least some respect, and committing many of one's resources to an unattainable goal is not as efficient (or satisfying) as committing lesser resources to one that is feasible. In this respect, SST draws on the idea of acceptance that features prominently in recently developed treatments for severe emotional and behavioral disorders (e.g., Linehan, 1993).

The high comorbidity of depression and anxiety disorders is a challenge in the treatment of depression that may be amenable to SST. Because activation of the *promotion* system is hypothesized to result in a corresponding inhibition of the *prevention* system, another way to modify regulatory style is to help depressed individuals increase their use (and effective pursuit) of promotion goals and decrease their use of prevention goals. Worksheets corresponding to this objective direct the patient to set one promotion goal each day, to evaluate, after the fact, how well she/he was able to achieve her/his goal, and to identify any obstacles to its full achievement.

Manage perfectionism. Among patients appropriate for SST, a significant proportion are likely to manifest perfectionistic tendencies. Thus, a frequent goal for the final

stage of therapy is to help the patient manage her/his perfectionism. This goal is largely compensatory in nature; SST does not aspire to eradicate perfectionism as much as to help the patient recognize and balance the costs and benefits of this tendency. The therapist and patient collaborate on identifying domains within which the patient is perfectionistic, as well as possible origins of her/his perfectionistic standards. They then evaluate the attainability of each standard ("Can it be achieved?") as well as the consequences ("At what cost?"). The principle that self-regulation always involves *tradeoffs* becomes particularly salient when dealing with perfectionism. If the patient is amenable to altering the standard, she/he may be directed to apply a modified version of the standard in an upcoming situation, and to note both the outcome and her/his reaction to the exercise. Finally, the therapist and patient may discuss ways of compensating for the patient's perfectionism (e.g., reducing the number of domains within which she/he is perfectionistic; helping her/him to relax standards in the areas of lower priority; encouraging her/him to share information about her/her perfectionism with relevant family and coworkers, as a way of inoculating them against frustration).

Use mindfulness as a tool for relapse prevention. Mindfulness, or the practice of maintaining nonjudgmental attention on a specific focus, has received increasing attention in the psychology literature. Linehan (1993) has incorporated aspects of mindfulness into dialectical behavior therapy for borderline personality, and Teasdale et al. (2000) have documented the usefulness of mindfulness within CT for the prevention of relapse. The first tasks of the therapist are to introduce the notion of mindfulness and to relate the practice of mindfulness to the SST framework (e.g., to explain that mindfulness involves an emphasis on the *process* of pursuing goals, rather than the *outcomes;* mindfulness may help the patient to be more aware of self-discrepancies when they are activated). If the patient is amenable to exploring mindfulness, the therapist may assign relevant readings and provide instruction in mindfulness techniques. Ultimately, the therapist and patient may shift their focus toward integrating the practice of mindfulness into the patient's lifestyle.

Address relapse prevention/termination issues. The final goal of the transformation phase involves addressing relapse prevention and issues relevant to the end of treatment. The purpose of this goal is to prepare patients for "life after therapy" by teaching them how to detect incipient depressive symptoms and providing them with tools for reducing the risk of future depressive episodes. Relapse prevention exercises include reviewing progress in therapy as well as the concepts and techniques patients have learned over the course of treatment. Preparing written outlines of proven strategies is especially helpful for easy reference following termination. Another important component of relapse prevention is encouraging patients to engage in regular self-assessments of mood. As in CT, patients should be prepared for the possibility of setbacks in the future, taught to distinguish inevitable disappointments and setbacks from full-blown relapses, and assisted in generating systematic plans for anticipating and responding to situations in which they are experiencing depressive symptoms. Specific to SST, patients also should be encouraged to assess, periodically, the effectiveness of their self-regulation, and to use the strategies learned over the course of therapy to address any self-regulatory concerns. Finally, throughout the final phase of treatment, the therapist should actively solicit patients' concerns about termination (e.g., feelings of sadness over the end of the therapeutic relationship, fears that they will "slide" without the therapist's support). Although the therapist should respond to these concerns in a genuine and empathic manner, she/he should also strive to convey confidence and to bolster patients' beliefs about their ability to deal effectively with future challenges.

Case study—transformation phase. In the final phase of therapy, M and her therapist used several of the strategies described above. First, they worked on the goal of reducing self-discrepancy/increasing self-congruency, challenging M's belief that she was selfish. To this end, M was advised to interview her husband and a couple of close friends to check the accuracy of her belief. This exercise was particularly powerful for M, who reported that not only was she clearly in the minority with regard to her belief, but that others were impressed at the extent to which she set aside her own desires in order to care for others. Talking with others helped her to "recalibrate her gauge" regarding selfishness and to feel more justified in wanting time for personal pursuits. M's therapist also spent a considerable amount of time educating M about the importance of engaging in regular promotion-focused activities, like outings with her husband or friends, in order to decrease her generalized anxiety and feel energized and

confident when she was required to focus her attention on obligations and responsibilities.

In addition to addressing beliefs and standards around selfishness, M and her therapist spent much time examining M's goal of being a good daughter and the extraordinary effort required in order for her to attain this goal. M had noted that this standard was particularly important to her, and despite significant exploration she was unwilling to consider altering it. Therefore, the treatment focus was shifted to examining ways she could compensate for the amount of time/effort required to meet the standard (e.g., by enlisting her sister to attend to more of their mother's needs, by asking her husband for more assistance around the house).

Likewise, M and her therapist also examined her goal of building an excellent relationship with her new boss. Here the emphasis in treatment was on the attainability of this goal, as well as its emotional significance and the perceived negative consequences of failing to achieve it. Based on observations and discussions with coworkers, M gathered evidence that very few individuals enjoyed a satisfying relationship with that particular boss. M also found out that although he was notorious for giving only negative feedback, ultimately he was fair to his employees in terms of raises. With this knowledge, M and her therapist began work on reducing the importance of that particular goal, which involved training M to recognize when the "boss" standard had been activated, reminding herself that its achievement was unlikely and probably not worth the effort, and altering her response to be more adaptive.

The transformation phase included efforts to modify M's regulatory style. Specifically, M and her therapist addressed her typical unassertive approach to asking others for assistance, and through assigned readings and role-plays she was encouraged to take a more direct approach. When she tried out these skills with her husband, M was surprised to learn that he was quite willing to help more with household and family matters, but had given up trying years before because he felt unable to meet her perfectionistic standards. After this revelation, M's husband was invited to attend one therapy session. During that session, M, her husband, and the therapist identified ways in which her husband might help M. In addition, the therapist coached M to be noncritical and reinforcing of her husband (for instance, weighing the costs of having a job done less than perfectly against the benefits of having more time to pursue personal interests). M reported greater difficulty approaching her sister for assistance. However, after practicing for several sessions, M successfully obtained her sister's commitment to be available to their mother one additional evening per week, and to cover for M when an opportunity for socializing arose.

M's self-described perfectionism also was a target during the transformation phase. It was particularly helpful for M to recognize the diminishing returns of her perfectionistic style. In addition, M valued the observation that she did not have enough time to achieve perfection in all areas, and either needed to relax her standards in some areas or feel dissatisfied with her performance across a broad range of domains. Out-of-session exercises where M was directed to perform less than perfectly "in order to see how it feels" were useful in this context.

Finally, M and her therapist addressed relapse prevention and termination issues. They reviewed her initial self-regulatory difficulties and her progress in treatment, prepared her for possible setbacks in the future, and identified ways she could respond to these setbacks. It was agreed that she would engage in self-assessments every month to check for depressive symptoms, identify areas in which she was not meeting her goals, and consider how she might alter her expectations and/or her approaches in order to increase her chances of success. At her final session, M's BDI score was 4 and her HRSD score was 8.

SELECTING PATIENTS WHO ARE APPROPRIATE FOR SST

SST has been designed for individuals whose current depressive episodes and premorbid psychological functioning are characterized by ineffective self-regulation. How can such individuals be identified reliably? Two related approaches have been explored for distinguishing individuals experiencing self-regulation-based distress. The first uses self-report instruments derived from self-discrepancy theory (Higgins, 1987) to assess patterns of self-regulatory cognition, whereas the second uses a cognitive *priming* procedure to activate self-regulatory cognition and observe its affective consequences.

Self-Report Instruments

Selves Questionnaire. The Selves Questionnaire (SQ; Higgins et al., 1986) is a semistructured questionnaire consisting of a series of open-ended questions, each pertaining to a particular domain of the self. For example, the question "What are the attributes of the kind of person you believe

you actually are?" pertains to the actual self from the person's own standpoint (typically called the "self-concept"). Similarly, the question "What are the attributes of the kind of person you believe you ideally would like to be—your own sense of your ultimate goals and aspirations?" pertains to the ideal self, again from the person's own standpoint. The SQ asks individuals to describe, in their own words, the most important attributes from a series of self-domains. After the SQ is completed, a rater compares attributes in the actual-self list with the respondent's ideal and ought self-guides (both from her/his own point of view and that of her/his significant others) and identifies congruencies and discrepancies. The respondent's overall magnitude of self-discrepancy can be compared with scores from clinical samples. Numerous studies over the past 15 years have demonstrated the affective and motivational consequences of self-discrepancy (Higgins, 1997). Magnitude and type of self-discrepancy have been shown to be stable over several years (Strauman, 1996b).

Regulatory Focus Questionnaire. The Regulatory Focus Questionnaire (RFQ; Higgins et al., 2001) is a self-report rating scale designed to measure individual differences in orientation to promotion and prevention. In contrast to the SQ, which measures magnitude and type of self-discrepancy, the RFQ assesses the extent to which an individual construes situations in promotion and/or prevention terms, as well as the extent to which the respondent believes she/he has succeeded or failed in pursuing promotion and prevention goals.

From an etiological perspective, individuals whose depressive episodes are characterized by problematic self-regulation would be expected to manifest *both* a substantial degree of AI discrepancy (possibly in association with AO discrepancy) on the SQ and a strong promotion focus on the RFQ. Such an individual would be vulnerable to chronic high levels of dysphoric affect and associated symptoms because she/he was failing to meet important promotion (ideal) goals. By using both the SQ and RFQ in tandem, individuals meeting the hypothesized criteria for self-regulation-based depression may be identified.

Cognitive priming procedure. An alternative method for identifying depressed patients with problematic self-regulation is the use of cognitive techniques. *Priming* involves presenting a stimulus that is predicted to activate a particular knowledge structure in the respondent. By examining an individual's responses (e.g., verbal, behavioral, affective, physiological) to different priming stimuli, it is possible to test hypotheses regarding the emotional significance of the hypothesized underlying representations. Priming studies testing the predictions of self-discrepancy theory have used the strategy of exposing participants to their own problematic self-beliefs (e.g., ideal guides that are discrepant from the participant's actual-self beliefs) in a non-self-referential context so that participants are unlikely to identify consciously the personal significance of the priming stimuli. A series of studies examining a wide range of response variables has validated the prediction that priming self-discrepancies is associated with the involuntary induction of specific negative emotional states (e.g., Strauman, 1989, 1992; Strauman & Higgins, 1987).

Priming techniques have important advantages over self-report assessment methods. When properly administered, priming methods provide a means to investigate automatic or involuntary cognitive processes while reducing the potential for response biases (Persons & Miranda, 1995). In a recent article, we described how the self-discrepancy priming technique can be used to measure the effects of treatments for depression on self-regulatory cognition (Strauman et al., 2001). In addition, priming techniques are useful analogs for real-life situations in which everyday, incidental events or interactions activate self-regulatory cognitions. At present we prefer the priming-based method for SST patient selection, particularly since the priming technique is based in part on an individual's responses to the SQ. However, given the constraints of clinical settings, the combination of the SQ and RFQ may prove to be an acceptable alternative.

CONCLUSION

In this article we have introduced Self-System Therapy (SST), a brief, structured psychotherapy for depression. This new therapy was developed on the basis of nearly two decades of research on self-discrepancy as well as motivational and cognitive principles of self-regulation. SST is intended for individuals whose depression and premorbid functioning is characterized by persistent difficulties in self-regulation. Although SST includes techniques from current effective psychotherapies for depression, it is distinguished by the theoretical framework guiding these interventions.

To our knowledge, SST is among the first modern translational psychotherapies—that is, systems of psychotherapy that were developed on the basis of theory and research

from basic behavioral science. Regardless of the eventual findings concerning the efficacy and clinical utility of SST, we believe that its development already has made an important contribution: demonstrating that translating basic science into clinical interventions is both possible and worthwhile. We hope our experience with this translational process will play a role in developing more efficacious treatment approaches for depression and other disorders.

NOTES

1. Throughout this article the terms "goal" and "standard" are used interchangeably. Although their psychological characteristics are not identical, both represent criteria for self-evaluation and self-regulation.

2. In this discussion we use the terms "knowledge" and "belief" interchangeably. Research in social cognition indicates that what people "know" about themselves in domains relevant to self-regulation is properly construed as belief (e.g., "I know I'm a failure" invariably means "I *believe* that I'm a failure"). The pioneering clinical work of A. T. Beck has highlighted this critical issue.

3. There has been an extraordinary amount of research in the past two decades examining the cognitive correlates and precursors of depression. Nonetheless, that research was conducted in response to Beck's treatment model, whereas the SST treatment model was constructed on the basis of existing research in self-regulation.

4. PSA also resembles the functional/behavioral analysis employed in McCullough's (2000) Cognitive Behavioral Analysis System of Psychotherapy (CBASP). However, whereas the emphasis in CBASP is on teaching problem solving and relationship skills to chronically depressed individuals, SST analyzes specific interactions to develop an understanding of how the patient self-regulates and which aspects of the process are problematic.

5. A common misconception regarding cognitively focused therapies such as CT is that therapists are not trained to "go for the affect." In fact, both CT and SST use analysis of cognitive material—assumptions and beliefs in the case of CT, goals and self-beliefs in the case of SST—to identify and focus on the sources of the patient's distress. As such, the competent CT therapist—and SST therapist—indeed "go for the affect," but do so in ways consistent with the treatment itself.

6. The promotion/prevention model stipulates that the two classes of goals have different motivational characteristics and affective consequences. In the case of M, she expected that attaining prevention goals would lead to happiness and satisfaction. As we developed SST and obtained feedback from patients, we learned that understanding the differences between promotion and prevention goals (particularly the distinct emotional consequences of attaining or failing to attain them) was a particularly helpful aspect of the therapy.

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