INTRODUCTION

Self-regulation, or systematic efforts to direct thoughts, feelings, and actions, toward the attainment of one's goals (Zimmerman, 2000), has assumed increasing importance in
the psychological and educational literatures. What began with research on self-control in therapeutic contexts has expanded to such diverse areas as education, health, sports, and careers (Bandura, 1997).

Most theories of self-regulation emphasize its inherent link with goals. A goal reflects one's purpose and refers to quantity, quality, or rate of performance (Locke & Latham, 1990). Goal setting involves establishing a standard or objective to serve as the aim of one's actions. Goals are involved across the different phases of self-regulation: forethought (setting a goal and deciding on goal strategies); performance control (employing goal-directed actions and monitoring performance); and self-reflection (evaluating one's goal progress and adjusting strategies to ensure success (Zimmerman, 1998).

This article addresses the operation of goals in self-regulation to include the influence of goal properties and other goal-related factors. Acquiring self-regulatory competence is an important developmental task and enhances human functioning across the life span (Bandura, 1997; Schunk & Zimmerman, 1997). By understanding the role of goals, counselors, teachers and other practitioners will be able to work with students and clients to assist them in learning effective ways to manage their lives.

THEORY AND RESEARCH EVIDENCE

Goals enhance self-regulation through their effects on motivation, learning, self-efficacy (perceived capabilities for learning or performing actions at given levels), and self-evaluations of progress (Bandura, 1997; Schunk, 1995). Initially people must make a commitment to attain a goal because it will not affect performance without this commitment (Locke & Latham, 1990). Goals motivate people to exert effort necessary to meet task demands and persist over time. Goals also direct individuals' attention to relevant task features, behaviors to be performed, and potential outcomes, and goals can affect how people process information. Goals help people focus on the task, select and apply appropriate strategies, and monitor goal progress.

As people work on a task they compare their current performance with the goal. Self-evaluations of progress strengthen self-efficacy and sustain motivation. A perceived discrepancy between present performance and the goal may create dissatisfaction, which can enhance effort. Although dissatisfaction can lead to quitting, this will not happen if people believe they can succeed such as by changing their strategy or seeking assistance. Goal attainment builds self-efficacy and leads people to select new, challenging goals.

Despite these benefits, goals do not automatically enhance self-regulation. Rather, the goal properties of specificity, proximity, and difficulty are critical.

Specificity. Goals that incorporate specific performance standards are more likely to enhance self-regulation and activate self-evaluations than are such general goals as "do
my best" or "try hard" (Locke & Latham, 1990). Specific goals raise performance because they specify the amount of effort required for success and boost self-efficacy by providing a clear standard against which to determine progress.

A wealth of evidence in various domains supports the preceding benefits of specific goals (Bandura, 1997; Boekaerts, Pintrich, & Zeidner, 2000; Locke & Latham, 1990). The one exception is when specific goals are overly easy to accomplish, in which case they are less effective than general but difficult goals (Locke & Latham, 1990).

Proximity. Goals are distinguished by how far they project into the future. Proximal, short-term goals are achieved more quickly, and result in higher motivation and better self-regulation than more temporally distant, long-term goals. As with specificity, there is evidence from various domains supporting this prediction (Bandura, 1997; Boekaerts et al., 2000; Locke & Latham, 1990).

At the same time, some research shows that proximal goals do not promote performance better than distant goals (Locke & Latham, 1990). One suggestion is that individuals working toward distant goals may subdivide them, which produces the benefits. Proximal goals strengthen self-efficacy because they allow clear and frequent self-evaluations of progress. It often is difficult to determine progress toward a distant goal (Schunk, 1995).

Difficulty. Unlike specificity and proximity, goal difficulty does not bear a linear relationship to performance. Overly easy goals do not motivate; neither are people motivated to attempt what they believe are impossible goals (Schunk, 1995). Assuming that people have the requisite skills, goals that are moderately difficult seem to have the best effects on motivation and self-regulated performance (Locke & Latham, 1990).

Self-set goals. Researchers have found that allowing individuals to set their goals enhances motivation and self-regulation, perhaps because self-set goals produce higher goal commitment (Schunk, 1995). Other research, however, has not substantiated this conclusion (Locke & Latham, 1990). When people accept the legitimacy of assigned goals and commit themselves to attaining them the benefits are as strong as when they set goals themselves.

In working with students and clients it may be necessary initially to assign goals while simultaneously teaching them goal-setting strategies. As people learn to set realistic goals we might expect that self-set goals would produce higher self-efficacy and better self-regulated performance than assigned goals because they will be committed to attaining their goals and feel efficacious about doing so.

Multiple goals. In recent years researchers have investigated how people deal with multiple goals. Individuals can accomplish more than one goal at a time assuming that they have the cognitive and physical capabilities to do so and the goals do not conflict
The situation becomes trickier when each goal alone is attainable but together cause conflict; for example, an adolescent who wants to be socially popular but also achieve well in school. More research is needed on this situation, but we might expect that goal importance would affect which goal is pursued more vigorously.

Learning and performance goals. Educational researchers have investigated the differences between mastery or learning goals, which involve learning skills or strategies, and ego or performance goals, which focus on performing well to avoid appearing incompetent (Dweck, 1999). Although performance goals can exert powerful motivational effects, learning goals are especially effective in enhancing self-efficacy and self-regulation (Schunk, 1995). Future research will help clarify their operation in educational and therapeutic settings.

**RECOMMENDATIONS**

Theory and research suggest a short list of ways to use goal setting effectively as a component of self-regulation. The following strategies are especially useful.

* Subdivide a long-term goal into proximal sub-goals. Help learners determine what sub-goals must be accomplished to attain their long-term goals.

* View the goals as reasonable and commit to attempt to attain them. Provide verbal encouragement (e.g., "You can do this.") to learners to help motivate them to accomplish their goals.

* Self-monitor progress. Students must learn how to gauge progress in learning or performance. Provide progress feedback on tasks where it is difficult for learners to gauge progress on their own.

* Use strategies for coping with difficulties. When progress is minimal students might seek help, attempt to determine a more effective strategy, or re-evaluate the goal and timelines.

* Self-evaluate capabilities. The perception of progress will strengthen self-efficacy, which is critical for continued motivation and self-regulation.

**CONCLUSION**

Goal setting is an integral component of self-regulation. Setting goals is a generic strategy that can be applied in various domains. Effective goal setting requires that people set a long-term goal, break it into short-term, attainable sub-goals, monitor progress and assess capabilities, adjust the strategy and goal as needed, and set a new goal when the present one is attained. This multi-step plan is a key to promoting...
healthier human functioning, higher motivation and perceived self-efficacy, and

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