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Goal Setting

After reading this chapter, you should be able to

1. define what goals are and identify major types of goals,
2. describe the latest research on and theory of goal setting,
3. describe goal-setting principles,
4. explain group goals and how to use them,
5. explain how to design a goal-setting system,
6. identify common problems in goal setting and how to overcome them, and
7. summarize the findings regarding coaches' goal-setting practices.

" If you don't know where you are going, you might wind up someplace else. "

—Hall of Fame baseball great Yogi Berra

" What keeps me going is goals. "

—Boxing great Muhammad Ali

" You don't have to be a fantastic hero to do certain things—to compete. You can be just an ordinary chap, sufficiently motivated to reach challenging goals. "

—Legendary mountaineer and first to reach the summit of Mount Everest, Sir Edmund Hillary

These quotes from outstanding athletes

tell us a great deal about the importance and power of goal setting. Goals provide us direction, help us stay motivated, and allow us to accomplish feats that we may not have believed were possible. And it's not just great athletes who tap into the power of goals and goal setting. People often set **goals** like these in sport and exercise activities:

- I want to lose 10 pounds.
- I want to fully recover from my injury by August 15.
- I want to make the starting lineup.
- I want to be able to bench press my own weight.
- I intend to improve my golf game and win the club tournament.
- My objective is to become a high school varsity basketball coach.

You may be wondering, then, why devote an entire chapter to goal setting if people already set goals on their own? The problem is not getting people to identify goals. It is getting them to set the right kind of goals—ones that provide direction and enhance motivation—and helping them learn how to stick to and achieve their goals. As most of us have learned from the New Year's resolutions we've made, it is much easier to set a goal than to follow through on it. Seldom are goals to lose weight or to exercise set realistically in terms of commitment, difficulty, evaluation

of progress, and specific strategies for achieving the goals. Most people do not need to be convinced that goals are important; they need instruction on setting effective goals and designing a program for achieving them.

Definition of Goals

People in sport and exercise have often looked at goals in terms of objective and subjective goals. **Objective goals** focus on "attaining a specific standard of proficiency on a task, usually within a specified time" (Locke & Latham, 2002, p. 705). Attempting to attain a specified level of weight loss within 3 months, aiming for a certain team win–loss record by the end of the season, and achieving a lower performance time by the next competition are all examples of objective goals. **Subjective goals**, on the other hand, are general statements of intent (e.g., "I want to do well"; "I want to have fun") that are not measurable or objective.

> **KEY POINT**   An objective goal is the desire to attain a specific standard of proficiency on a task, usually within a specified time.

Types of Goals

In the sport and exercise psychology literature, goals have been viewed as focused on outcome, performance, or process (Burton, Naylor, & Holliday, 2001; Hardy et al., 1996). We briefly review these types of goals.

• **Outcome goals** typically focus on a competitive result of an event, such as winning a race, earning a medal, or scoring more points than an opponent. Thus, achieving these goals depends not only on your own efforts but also on the ability and play of your opponent. You could play the best tennis match of your life and still lose, and thus you would fail to achieve your outcome goal of winning the match.

• **Performance goals** focus on achieving standards or performance objectives independently of other competitors, usually on the basis of comparisons with one's own previous performances. For this reason, performance goals tend to be more flexible and in your control. Running a mile in 6 minutes 21 seconds and improving the percentage of successful slice-first serves from 70% to 80% are examples of performance goals.

• **Process goals** focus on the actions an individual must engage in during performance to execute or

perform well. For example, a swimmer may set a goal of maintaining a long, stretched-out arm pull in her freestyle stroke, or a basketball player may set a goal of squaring up to the basket and releasing the ball at the peak of his jump. Interestingly, research by Kingston and Hardy (1997) has shown that process goals are particularly effective in positively influencing golfers' self-efficacy, cognitive anxiety, and confidence.

> **KEY POINT**   Outcome goals in sport focus on achieving a victory in a competitive contest, whereas performance goals focus on achieving standards based on one's own previous performances, not the performances of others.

Outcome, Performance, and Process Goals in Behavior Change

Athletes and exercisers should set outcome, performance, and process goals because all three play important roles in directing behavioral change (Burton et al., 2001). Outcome goals can facilitate short-term motivation away from the competition (e.g., thinking about how it felt to lose to an arch-rival may motivate one to train in the off-season). Focusing on outcome goals just before or during competition, however, often increases anxiety and irrelevant, distracting thoughts (e.g., worrying too much about the score of the game and not attending enough to the task at hand). Research by Mullen and Hardy (2010) showed that athletes who adopted holistic, process goals that helped them focus on the general feelings of the skills to be performed (e.g., *drive, spring,* or *smooth*) were most effective at helping highly capable but anxious athletes avoid the negative effects of anxiety on performance.

Performance and process goals are important because you usually can make much more precise adjustments to these goals (e.g., increase the goal from 80% to 82%) than you can to outcome goals, which often have fewer levels (i.e., you either win or lose a game). Achieving a performance or process goal also depends much less on your opponent's behavior. For these reasons, performance and process goals are particularly useful for athletes at the time of competition, although they should be used in practice as well.

Under special circumstances, too much emphasis on a specific performance goal (e.g., running a personal-best 5-minute mile) can create anxiety, although this is less likely to occur than with an outcome goal. In addition, it is often difficult to prioritize

✓ Prioritizing General Subjective Goals

Most sport psychology research concerns objective goals, but the importance of subjective goals must not be overlooked. In the popular or commercial literature about personal productivity and business management, for example, considerable attention has been paid to identifying and clarifying one's personal values and priorities and then using these general, subjective goals to formulate more specific goals that guide day-to-day behavior (Smith, 1994). The following case makes this point.

Kim is an undergraduate student majoring in exercise and sport science. Her goals are to graduate with excellent grades, get into graduate school, and become a physical therapist. Already a good student, she runs on the cross country team, works in the training room, holds a part-time job, participates in several campus social groups, and tries to get home to visit her family whenever she can. Kim has struggled lately because she has not been achieving her goals. After talking to the sport psychologist in the athletic department, Kim realizes that the problem is not with the specific goals she sets (e.g., get an A in biomechanics, run a specified time on the home cross country course) but with her global priorities or subjective goals. She is trying to do too much and needs to prioritize her activities. After considerable reflection, Kim develops the following list of governing values and then prioritizes each subjective goal using ratings of A (most important), B (somewhat important), and C (less important). She subsequently uses this list of general priorities each week to formulate more specific weekly goals, making sure she devotes most of her attention to achieving goals in the high-priority areas. This ensures that Kim spends most of her time accomplishing her highest-priority goals, not the ones that *seem* critical on a particular day but that in actuality aren't of highest priority.

Goal	Priority
Do well in school	A
Run cross country	B
Volunteer in the training room	B
Participate in campus social activities	C
Visit home	C
Work a part-time job	C

specific performance and process goals unless one also considers long-term outcome goals. For example, you would design quite a different fitness program if someone's outcome goal was to bulk up and gain 20 pounds than you would if someone wanted to lose 20 pounds. All three types of goals, then, have a purpose. The key is knowing when to focus on each type of goal and not to fall into the trap of placing all your attention on outcome goals.

Along these lines, a study by Filby, Maynard, and Graydon (1999) showed that using a combination of goal strategies (outcome, performance, process) produced significantly better performance than simply relying on one type of goal. It was concluded that performers need to prioritize their goals and that different types of goals may be more effective at different times (e.g., competition vs. practice). The authors highlighted this point in stating, "The benefits of adopting an outcome goal are realized only when the outcome goal is combined with the prioritization of a process orientation immediately before and during performance" (p. 242).

🔍 **DISCOVER** Activity 15.1 allows you to take a moment to examine your own goals.

Effectiveness of Goal Setting

Motivation depends on goal setting.

❝ The coach must have goals. The team must have goals. Each tennis player must have goals; real vivid living goals . . . . Goals keep everyone on target. Goals commit me to the work, time, pain, and whatever else is part of the price of achieving success. ❞

—Top collegiate tennis player (cited in Weinberg, 1988, p. 145)

Individuals in sport and exercise have been setting goals for a long time, and the tennis player captures some of the key ingredients in goal setting. Psychologists (especially business psychologists) have also studied goal setting as a motivational technique for a long time (longer than sport scientists), looking at whether setting specific, difficult goals improves performance more than setting no goals, setting easy goals, or setting the general goal of simply doing your best. Most of these studies were designed to test the propositions of Locke's (1968) theory of goal setting. The reviewers (Burton & Weiss, 2008; Locke & Latham, 1990; Locke, Shaw, Saari, & Latham, 1981; Mento, Steel, & Karren, 1987) concluded that goal setting works extremely well. In fact, more than 90% of the general psychology studies (more than 500 in all) show that goal setting has a consistent and powerful effect on behavior, whether it's used with elementary school children or professional scientists and whether for brainstorming or for loading logs onto trucks. Moreover, goal-setting effects have remained consistent with more than 40,000 participants using more than 90 tasks and across 10 countries. Goal setting is a behavioral technique that most definitely works!

A meta-analysis (a statistical review of the literature that combines the results of independent studies and indicates whether results were significant across all the studies) of 36 studies in sport and exercise psychology presented a similar conclusion (Kyllo & Landers, 1995). More recently, Burton and Weiss (2008) found that 70 of 88 studies (80%) in sport and exercise demonstrated moderate to strong effects and concluded that goal setting works well in sport, although not quite as well as in business. Over the years the strength and consistency of goal-setting effects in sport and exercise have also increased, leading to the conclusion that goal setting is a successful technique for improving performance in sport and exercise as well as in business.

Researchers on goal setting have found that the following factors most consistently enhance the effectiveness of goal setting in sport and exercise environments: goals of moderate difficulty, both short- and long-term goals, the presence of feedback on progress toward goal attainment, specificity of goals, public acknowledgment of goals, commitment to goal attainment, participants' input in the goal-setting process, and use of a combination of different goals.

Even recreational athletes can benefit from setting goals.

Goal-Setting Research

Researchers have examined the relationship between various types of goals (e.g., specific or general, long-term or short-term, difficult or easy) and physical fitness tasks (e.g., the number of sit-ups performed in 3 minutes, performance times in a swimming event, free-throw shooting in basketball) (see Burton & Weiss [2008], Weinberg [1994, 2000, 2004], and Weinberg & Butt [2005] for detailed reviews). Results generally indicated that specific goals that were of both short- and long-term duration and were moderately to very difficult were associated with the best performances. In one study, college students in an 8-week basketball course set either specific or general goals for fundamental basketball skill tasks (e.g., defensive footwork, free-throw shooting, dribbling). Setting specific rather than general goals enhanced performance, although not on all tasks. Specifically, goal setting appeared to enhance performance on low-complexity tasks better than on high-complexity tasks (Burton, 1989a). In addition, a number of intervention studies using goal setting to help change performance and behavior over time in sport or exercise settings have consistently demonstrated the positive effect that goals can have on improving performance in such sports as lacrosse (Weinberg, Stitcher, Richardson, & Jackson, 1994), basketball (Swain & Jones, 1995), football (Ward & Carnes, 2002), ice hockey (Anderson, Crowell, Doman, & Howard, 1988), soccer (Brobst & Ward, 2002), swimming (Burton, 1989b), tennis (Galvan & Ward, 1998), and golf (Kingston & Hardy, 1997). Researchers are also starting to apply goal setting to physical education and exercise situations, finding that goal setting influences intrinsic motivation and exercise adherence (Wilson & Brookfield, 2009) as well as persistence and effort in physical education students (Guan, Xiang, McBride, & Bruene, 2006).

> **KEY POINT** Goal setting is an extremely powerful technique for enhancing performance, but it must be implemented correctly.

In addition to improving our understanding of what makes goals more effective, sport psychology researchers have learned a good deal about the *process* of goal setting, including how people set goals, what goals are most important to people, what barriers impede goal attainment, and how different types of individuals differ in their goal setting. Research using questionnaires and interviews with collegiate, Olym-

pic, and youth athletes (Weinberg, Burke, & Jackson, 1997; Weinberg, Burton, Yukelson, & Weigand, 1993, 2000) has revealed much about athletes' preferences and goal-setting strategies, including the following:

- Almost all athletes used some type of goal setting to enhance performance and found their goals to be moderately to highly effective.
- Improving performance (Olympic athletes), winning (collegiate athletes), and enjoyment (youth athletes) were the most important goals for athletes. These were the top three goals for each type of athlete, although the number one goal varied.
- Athletes commented that they preferred goals that were moderately difficult, difficult, and very difficult; these were, in order, the top three preferences for **goal difficulty**. However, great individual differences emerged concerning preference for goal difficulty.
- For collegiate athletes, major barriers to achieving goals included stress, fatigue, academic pressures, social relationships, and a lack of time. For Olympians, barriers were basically internal (e.g., lack of confidence, lack of goal feedback, too many goals or conflicting goals) or external (e.g., lack of time, work commitments, family and personal responsibilities).
- Females set goals more often and found them to be more effective than males did (except for outcome goals).
- Athletes did not systematically write down their goals, although they thought about them a great deal.
- The more experience athletes had with setting goals, the better they became in developing effective goal-setting strategies.
- The number one reason athletes gave for setting goals was to provide them direction and keep them focused on the task at hand.
- Athletes who used multiple goal strategies exhibited the best performance.
- Individual differences (e.g., goal orientation, locus of control) need to be considered when setting goals.

Although researchers in both general psychology and sport psychology have produced considerable evidence that goal setting is a powerful technique for

enhancing performance, it is not a foolproof method. It must be implemented with thought, understanding of the process, and planning. Systematic approaches and monitoring of the process are necessary if one is to be able to determine when and where goal setting is most effective in a program.

Why Goal Setting Works

Researchers have explained why goal setting works in two ways. Outcome, performance, and process goals influence behavior indirectly by affecting important psychological factors such as confidence and anxiety. This has been labeled the **indirect thought-process view** because goals lead to changes in psychological factors, which then influence performance. For instance, in an empirical study by Burton (1989b), swimmers learned the strategy of setting performance goals. Swimmers who were high in goal-setting ability demonstrated less anxiety, higher confidence, and improved performance compared with those who were low in goal-setting ability. In essence, goals were found to influence performance indirectly through effects on psychological states.

In a more recent study, Gano-Overway (2008) assigned athletes to either a task- or ego-involving condition and then had them perform motor tasks on which they received negative feedback. Findings revealed that the athletes involved in task-oriented conditions demonstrated better self-regulation—they more effectively monitored and evaluated their current performance and more often used planning strategies for dealing with setbacks. Creating environments that emphasize self-referenced process and performance goals helped participants better deal with failure.

In contrast is the more thoroughly researched **direct mechanistic view**, which specifies that goals influence performance in one of four direct ways (Locke & Latham, 2002):

1. Goals direct attention to important elements of the skill being performed.
2. Goals mobilize performer efforts.
3. Goals prolong performer persistence.
4. Goals foster the development of new learning strategies.

Goal-Setting Practices of High School and Collegiate Coaches

Most goal-setting research in sport or exercise has centered on the performer. However, research by Weinberg and colleagues (Weinberg, Butt, & Knight, 2001; Weinberg, Butt, Knight, & Perritt, 2001) addressed the goal-setting practices of coaches. The following are highlights of the findings:

- Virtually all coaches set goals for competition and practice (individual and team) as well as personal coaching-related goals.
- There was a good deal of variability in coaches' understanding of the principles of goal setting as well as in the frequency with which they used goals.
- Coaches reevaluated their goals, although how systematically and how often they did so varied greatly across coaches.
- Coaches dictated some goals and got input from the players about others.
- Although coaches used performance, process, and outcome goals, they tended to favor performance and process goals.
- The main reason for setting goals was to provide purpose and direction, followed by player improvement and fostering team cohesion (team goals).
- Goal barriers were seen as physical (e.g., injury), psychological (e.g., lack of confidence), and external (e.g., parental overinvolvement).
- The most important aspect of goal commitment was personal enjoyment.
- The only disadvantage to goal setting was seen when goals were set too high and produced consistent failure.
- Coaches set both short- and long-term goals but focused more on short-term goals that provided feedback on the progression toward meeting the long-term goals.
- Coaches were inconsistent in writing down their goals.