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Motivation and goal setting

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Confusion of goals and perfection of means seem, in my opinion, to characterize our age.
Albert Einstein

In sport and physical activity, we can manage our own motivation or motivation can be managed by others – parents, teachers, coaches, peers. One of the most powerful strategies for managing motivation and performance is the use of goal setting. But first, let us look at what is motivation. Motivation has often been confused with other constructs (e.g., arousal, positive thinking). The important assumption with which most contemporary theorists agree is that motivation is a process, and not an entity. To understand motivation and be able to enhance it in the context of sport, we must make an attempt to understand the process of motivation and the constructs that drive the process, and how goal setting becomes an integral part of the process.

Motivational processes can be defined by the psychological constructs that energize, direct, and regulate achievement behavior (cf., Roberts, 2001). First, motivation processes are qualities of the person and the person’s perception of the context. What are the criteria of success and failure for the person? These criteria are the central issue in understanding motivation in physical activities and other achievement arenas. Although motivation may be partially understood in terms of the context (e.g., the goals coaches or parents may have for athletes), it is the influence of the environment on personal assessments that is important. The environment has no motivational qualities unless it is perceived as such by the participant. Thus, motivation is a process that resides within the person and how the person assesses what is needed to succeed. Second, motivation processes help people anticipate and predict future events and potential consequences that are meaningful to them. These processes form the basis from which decisions are made about how much of personal resources (e.g., talent, money, time, effort) one is prepared to invest in the activity to reach the valued goal. Motivation prepares the individual to move forward to reach desired goals or to produce desired outcomes. Third, motivation processes are evaluative in character. These evaluations may be self-referenced or may involve pertinent others as criteria of reference. Motivation involves the person assessing whether to increase or decrease behavioral striving...
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to affect the desired outcome or goal. The outcome or goal, however, is subjectively defined and varies from person to person. What is success for one may not be success for another. Thus, one is seen to be motivated, or demotivated, through assessments of one’s competencies within the achievement context, by using self or other referenced criteria, and the meaning or value of the context to the person.

To be effective applied consultants we need to understand what goals individuals want to achieve, and their criteria for success in achieving those goals. Locke and colleagues (Locke, Shaw, Saari, & Latham, 1981) in their seminal work on goal setting defined a goal as “attaining a specific standard of proficiency on a task” (p. 145). Goal attainment is the demonstration of competence within a specified task. Locke and Latham (1990) viewed goals as direct motivational strategies because they direct action by focusing attention, increasing effort and intensity, encouraging persistence in the face of failure or adversity, and promoting the development of new task or problem-solving strategies. Embedded in the practice of goal setting are two specific characteristics of the goal, its content and its intensity. The content refers to the exact nature of the goal and what is to be accomplished, and goal intensity reflects the degree of difficulty and effort needed to reach the goal (Hall & Kerr, 2001).

Researchers (e.g., Roberts, Treasure, & Conroy, 2007) have argued for two types of goals because the demonstration of competence takes two forms: self-referenced competence, where one attempts to better one’s own previous performance; or other-referenced competence, where one tries to outperform relevant others. In motivation terms, these types are termed mastery (or task involved) goals and performance (or ego involved) goals (see Roberts et al., 2001). When athletes have mastery goals, they are concerned with demonstrating effort, learning, and getting better. When athletes have performance goals, they focus on being superior, winning, and beating others.

Some researchers describe outcome, performance, and process goals (e.g., Hardy, Jones, & Gould, 1996; Kingston & Wilson, 2009). What these researchers term performance goals are mastery goals as we define them in this chapter, and what are termed outcome goals are performance goals. We use the terms mastery and performance goals to be consistent with the vast literature on motivational goals, both within sport and other contexts. Process goals are defined (e.g., Gould, 2006) as procedures in which the performer engages during performance (e.g., a skier focusing on keeping his/her hands in front of him/her). Process goals, however, are inherent in both performance and mastery goals (e.g., an athlete with a performance goal who tries to win without apparently trying hard, because that demonstrates even greater competence; or an athlete with a mastery goal who concentrates on the dynamics of the skill because this tactic will assist learning). To be consistent with motivation theory, we make the distinction between mastery and performance goals and recognize that process goals are embedded within both mastery and performance goals. Motivation theory, then, has the potential to inform goal setting in sport.

The setting of goals

Initiated by Locke and colleagues (Locke et al., 1981), goal setting has been applied to various laboratory, field, and real-world settings, using myriad tasks. Individuals who set specific and challenging goals perform better than people who set no goals or who are simply told to do their best. Goal setting is a popular basic sport psychology technique, and it is often the one first introduced when implementing mental training because, some authors
claim, it is fundamental for maximizing athletic potential (Hardy et al., 1996). Goal setting consistently facilitates performance and led Locke et al. to state that it was one of the most robust and replicable findings in psychology.

Goal setting is now so universally known that athletes often understand that goal setting is useful, but they may struggle on how best to set goals that will optimize their performances. Despite the general knowledge and understanding of how goals should be implemented and what type of goals to use, coaches and athletes frequently forget that many factors may affect the goal-setting process. Although practitioners use and recommend goal setting, researchers continue to investigate why, and how well, it works. What has troubled many are the inconsistencies in the findings within sport psychology (e.g., Hall & Kerr, 2001; Kingston & Wilson, 2009). The research in sport simply does not replicate the work of Locke and colleagues (1981) within the organizational psychology literature. Hall and Kerr argued that goal setting is a “double edged sword” and that it is “not so much a flawed methodology that renders goal-setting research in sport problematic but rather a conceptual narrowness that encourages a preoccupation with performance effects while largely ignoring how athletes who are striving for goals process performance information” (p. 185).

A search for theory

In one of the first studies in sport on goal setting, Burton (1984) applied motivation theory to goal setting. Burton looked at the effect of a goal-setting program on performance and certain cognitions of intercollegiate swimmers. Burton applied mastery goals (he called them performance goals) rather than performance goals (he labeled them outcome goals, and it is to this study that we can lay the blame for the subsequent mislabeling of the goals!) and found that those swimmers who focused on mastery goals had better performances and more positive cognitions (lower in anxiety, higher in self-confidence). Most of the subsequent research in sport has been atheoretical in that the studies applied specific goal-setting techniques (e.g., setting short-term, specific, discrete, and/or challenging goals) to sport tasks (see Burton, Naylor, & Holliday, 2001). The studies have shown that goal setting generally has positive performance outcomes (e.g., Kyllo & Landers, 1995), despite not replicating all the findings of the goal-setting literature in organizational psychology.

Most practitioners are interested simply in whether goal setting works, but some researchers also are interested in why it works. Burton and Naylor (2002) again used achievement goal theory to suggest that the type of goal affects the goal setting-performance relationship. Burton and Naylor argued that athletes holding mastery goals are best served by goal-setting programs. Consistent with the arguments of achievement goal theory (e.g., Roberts et al., 2007), athletes with performance goals may be affected by their perceptions of their own abilities. If athletes have performance goals and high perceptions of ability, then they believe they can achieve (i.e., they are success-oriented) and goal setting is effective, but not as effective as it is for athletes with mastery goals. If individuals have performance goals and low perceptions of ability, then they believe they have little likelihood of achieving (i.e., they are failure oriented) and therefore goal setting is less likely to work with these athletes.

Drawing on contemporary motivation theory, Hall and Kerr (2001) argued that there are beneficial aspects to understanding goal setting within an achievement goal theory perspective. First, researchers and practitioners would be able to understand better why athletes make the motivational choices that they do. As Hall and Kerr stated, understanding achievement goal theory will “enable us to go beyond noting that an athlete is energized to
achieve discrete goals, to explain why the athlete is energized and what the accompanying
cognitions might be” (p. 231). Second, motivation theory can help researchers understand
some of the idiosyncratic findings within the sport context. Athletes asked to “do their best”
often do as well as athletes given discrete goals, which is contrary to Locke et al.’s (1981)
findings. This finding makes sense if the athletes asked to do their best are mastery oriented
and already have the goal of doing their best. In other words, the meaning of achievement
within the context needs to be taken into account to understand goal setting. Finally, the
traditional goal-setting literature shows that researchers are preoccupied with performance
effects and have not appreciated that athletes’ achievement goals give meaning to the con-
text so that any feedback may have adaptive and maladaptive motivational effects. As an
example, the literature suggests that performance goals and public goals are more effective
for performance (e.g., Kyllo & Landers, 1995) than mastery goals. This finding is part of the
“double edged sword” syndrome in that it is known that performance goals are “fragile” over
the long term (e.g., Roberts et al., 2007). When the meaning and value of the context are
taken into consideration, then the ultimate effect of performance goals can be demotiva-
tional, especially if the perceived competence of the athlete is low. Therefore, only when
we consider goal-setting strategies with an understanding of what success and failure mean
to the athlete within a specific context will we be able to fully understand goal-setting
strategies, and practitioners be able to optimize the goal-setting strategies for that athlete.

Applying achievement goal theory

As we stated at the outset, when considering goal setting for motivation, we have two facets
of the equation. First, how can sport psychologists help coaches, teachers, and even parents
give motivational succor to athletes in their endeavors? We call this managing the motiva-
tion of others, versus aiding athletes to manage their own motivation. It is the latter to
which the vast majority of the goal-setting literature addresses itself.

Managing the motivation of others

One of the most fundamental aspects of achievement goals is the central role the situation
plays in the motivation process. The perceived criteria of success and failure coaches
(parents, teachers, sport psychologists) hold within an environment can make it more or
less likely that achievement behaviors, thoughts, and feelings associated with being
mastery- or performance-involved are adopted. The perceived criteria of success and failure
affect the achievement behaviors, cognitions, and affective responses through the percep-
tions of the participants of the behaviors necessary to achieve success. In other words,
athletes recognize what the coach believes is important to achieve success within that
context. This area of research recently has become popular in the sporting world with the
growing recognition that the way coaches coach affects not only the beliefs and perceptions
of athletes, but also the cognitive, behavioral, and affective outcomes of the competitive
experience (see Roberts et al., 2007).

The two dimensions, mastery and performance, are central to understanding achieve-
ment cognitions and behaviors in achievement contexts (i.e., motivational climate). Coaches
foster a mastery climate when they focus on learning and self-referenced improvement,
emphasize effort in the learning of new skills, and regard mistakes as an aspect of learning.
In such a climate, athletes are likely to perceive that success is achieved when effort is
displayed and mastery is demonstrated. Coaches promote a performance climate when they focus on interpersonal competition, publicly evaluate performance, provide normative feedback, punish mistakes, and temper reinforcement by the demonstration of normative competence. Here athletes perceive that success is achieved when superiority is displayed and normative competence demonstrated.

The focus on mastery as success is likely to result in athletes’ perceptions that effort and self-referenced accomplishment are valued and important. A focus on mastery also is likely to lead to positive outcomes such as intrinsically regulated motivation and autonomy in that the intrinsic value of the task is highlighted. In addition, athletes are likely to experience positive affect and positive consequences of participating in sport. The focus on performance as success is likely to deny players making the connection between effort and success, and may lead to the perception that to be worthy is to beat others. Also, a focus on performance is likely to lead to negative outcomes such as extrinsically regulated motivation, in that the extrinsic nature of evaluation is highlighted. In addition, players are likely to experience negative affect and negative consequences of participating in sport (Roberts et al., 2007).

Goal-setting procedures can be introduced to child and adolescent athletes as well as elite adult athletes. The important issue is how the sport psychologist or coach adapts the procedure to make sport training effective without taking out the fun element. Coaches can create stimulating environments that interest young athletes in what they do at training, and guide them to structure and take charge of their own training. Some intuitively use this means to enhance performance. Peter Shilton (1992; retired English goalkeeper) provided a good example of effective concrete mastery goals:

When I was 11, I would come home and do drawings of practice and training routines. I would also draw diagrams to work out the sort of angles I should be taking to stop shots and cut crosses. Then I’d take my studies down to the park and get my friends to help me put them into practice. Instead of just kicking the ball around and shooting, I would work on certain disciplines to attempt to improve my skills. You should not think that because you are still young you cannot work constructively on your game.

(p. 17)

Shilton found training meaningful when clear goals were set before practice, and this procedure gave him a head start in his professional career. But generally, young athletes are not so astute. Coaches need to help children and young adolescents develop their talents.

The superstars of child and adolescent sport programs are usually the physiologically mature. Yet it is the physiologically immature child athletes who may become the superstars of the adult athletic world. But coaches often make selections for advanced training regimens from the physiologically mature athletes, ignoring the rest. With young athletes, sport psychologists and coaches should take the long view and introduce goal-setting programs to keep all athletes interested and developing. Practitioners should take a developmental stance with children and young adolescents, adopt a mastery climate, and set mastery goals.

Mastery goals are not only to be set at the beginning of a season; they need to be sustained throughout the season. We all have anecdotal experience with coaches “losing it” during important competitions. What coaches may not realize is how athletes perceive their actions.
An interview with a young athlete demonstrates the effect of a coach who apparently changed his goal focus at a major youth competition (Kristiansen & Roberts, 2010):

My coach totally changed focus as soon as we arrived in Belgrade. He told me that I had to reach the finals, “I had to prove that I deserved to be in [the event],” and he told me “you must win.” That totally blew it for me; usually he is such a good coach always focusing on the task ahead. But in major competitions he becomes another person, he takes off. His comments affected my results, everything went wrong, and it was hard to concentrate. It took me a few days to get the right task focus back.

(p. 692)

Normally, the coach was mastery goal oriented, but at the competitive venue, the coach suddenly became performance oriented. The National Governing Body (NGB) of his event had told the coach that future funding was dependent on the results of the competition. What the coach had done is transfer the performance goals of the NGB onto the athlete. The coach shifted the perceived motivational climate from mastery-based criteria of success to performance-based criteria of success. With young and inexperienced athletes, this shift may create serious problems of focus. With more mature athletes, it is less of a problem.

The “bottom line” of managing the motivation of others is to do one’s best to create a mastery motivational climate for the athletes in both practice sessions and competitive events. Even elite athletes prefer their coaches to have a mastery approach to performance because it helps to alleviate stress (Pensgaard & Roberts, 2002). But, for some elite athletes who are secure in their perceptions of competence, being performance oriented is acceptable, and even preferred.

Managing one’s own motivation

Individual goal setting became popular in sport because of the mounting evidence, and coaching folklore, that it facilitates performance. It is also a way to structure and organize daily training and frame the entire competitive season, and one characteristic of a highly successful athlete is the practice of setting clear daily practice goals. There are several goal-setting guidelines for effective goal setting. One of the best is Gould’s (2006) goal staircase model. The starting point is the present ability of the athlete. The staircase has a long-term mastery goal, and to get to that goal, the athlete follows several short-term mastery goals that increase in competence demands. This staircase is a coherent way of approaching goal setting for performance and for motivation. The short-term goals are for immediate improvement and motivation to work harder for the long-term goals. The long-term goals give achievement meaning for the athlete.

Short-term goals need to be specific and measurable. Researchers, over the last 40 years, have advocated these types of goals rather than “do-your-best” goals (see Locke et al., 1981) that are almost impossible to measure and are not in accord with the theoretical claim of relevance to progress. The short-term goals should be moderately difficult and realistic (Kyllö & Landers, 1995). A goal should require some effort to be achieved, but be in accordance with the athlete’s view of his/her own capacity to achieve the goal. Having demands that consistently exceed competence may lead to anxiety, stress, and in the worst cases, burnout.

Goal setting can become complicated because it is pertinent to have performance goals as part of a goal-setting staircase. For example, the long-term goal may be to become an Olympic athlete: The short-term goals become steps in that process of becoming an
Olympic athlete. The important point is that the performance goals are not to be considered ends in themselves, but are a means by which the athlete can observe progress relative to others. It is at this point that a coach or sport psychologist should help the athlete interpret the performance goals as steps in the process. Target days for reaching the different short- and long-term goals may be advantageous. Intense training periods, the timing of different events, and the end of a season are dates that help structure training and motivation enhancement. In a goal staircase, goals for training and competition should be set and implemented by the sport psychologist, the coach, and athlete together.

**Make goal setting a coach–athlete project**

Efficient goal setting is mostly a result of identifying the needs of the athlete, planning the goals, and then splitting them into short-term goals that prepare the athlete for the long-term goals with the present capacity of the athlete in mind. Both coaches and teams/athletes have to be committed to the goals and work hard to reach them. Hall and Kerr (2001) have identified two moderators of goal-setting performance in sport: commitment and feedback. No matter how well-structured the planning process, if the coaches and athletes are not committed to the goals and do not evaluate progress, or lack of progress, then the likelihood of success is reduced. Feedback should be given in ways that will assist athletes to continue with their mastery goals, and should be provided to show performance in relation to these goals (Locke et al., 1981). The feedback system is one way of trying to avoid problems in goal setting. Experienced coaches, and coaches being advised by sport psychologists, may easily detect problems such as setting too many goals too soon, and revise general and unrealistic goals. When first introducing this mental skill, some neophyte practitioners think they can change every bad habit simultaneously. Prioritization and moving on as one progresses is the best advice (Gould, 2006). Nevertheless, an experienced athlete may handle a larger number of goals.

How coaches and sport psychologists choose to use goal setting with their teams or individual athletes will depend on personal preferences, but we recommend introducing routines within a *mastery climate*. The recording of daily training results and goals before sharing them with the coach (and/or sport psychologist) seems to be common practice in many sports, and it is a great measure of personal progress and a tool to help keep athletes focused on their own progress.

**Practical advice**

Choosing a mastery approach is not about not wanting to win, but it is the most efficacious way of taking a long-term dream goal and focusing on the steps (short-term mastery goals) toward achieving that goal. As the first author likes to say to his clients when they are faced with impending competitive contests, “all you can do is to simply focus on your role and strategies in the contest and take care of business.” To illustrate how elite athletes “take care of business,” we conclude with two pieces of advice.

The first piece of advice is to stick to your goals. For example, in one of the premier elite divisions of European professional football during 2008, one of the teams had agreed among themselves to focus on mastery goals and to take one game at a time. They concentrated on the tasks within their specific roles on the team for each match. And they did well, much
We did so well before the summer, and we started to aim for the top … which was possible as we were number 6 [in the league standings] for a while. But I think we started to aim too high, and that caused them to become despondent. They had to fight to prevent being relegated from the Elite Division by the end of the season. It was not what the coach said that changed the goal; the players spontaneously changed their group goal. If the team had had a sport psychologist working with them (they did not), or a more knowledgeable coach, then it might have been possible to intervene and ask the players to continue to stay focused on one game at a time.

Finally, our second piece of advice is that athletes should be careful about stating their performance goals in public to opponents or the media. They can divulge this information to the sport psychologist, who is bound by the ethics of confidentiality, but keep dream (performance and long-term) goals private! Previous research has suggested that performance improvements will be greater with public goals than with private ones (Kyllö & Landers, 1995), but such a suggestion is inconsistent with what we know about achievement goals. When performance goals become public, then the media and the sporting public are able to evaluate progress (or lack of progress), creating a performance-oriented motivational climate. Having publicly stated performance goals puts performance pressure on the athlete. Instead, athletes should talk about the short-term mastery goals if asked to comment upon their hopes for the upcoming event or when goals are to be stated in a public forum.

**Conclusions**

In this chapter, we advocate that sport psychologists and coaches use goal-setting procedures within the framework of contemporary motivation theory. Our goal-setting strategies are conceptually coherent and consistent because the theory provides a base from which our strategies emanate. By using motivation concepts, we give meaning to the short-term goals, and more importantly, reflect the long-term achievement goals of the athletes. The theory gives a framework within which practitioners can work. The evidence in favor of goal-setting strategies based on achievement goal theory is overwhelming, in both sport and academic contexts. And the evidence is clear: Motivation is better served with mastery-based short- and long-term goals. As professionals, it is incumbent on us to use the extant evidence in our field to inform our applied practice. As responsible professionals, we must use evidence-based mental skill strategies. When motivation is the issue, use motivation theory and evidence to inform your mental skills strategies. See Box 51.1 for some practical suggestions from this chapter.
Box 51.1

Practical goal-setting suggestions

- Mastery goals are preferable to performance goals, especially for younger athletes.
- Long-term goals should be achieved through a series of short-term mastery goals in a staircase model.
- Short-term goals should be broken down into daily practice goals.
- With children and young adolescents, use mastery goals in a developmental model. Teach children mastery goal setting as soon as possible.
- Especially during the adolescent growth spurt, give young athletes mastery and persistence goal-setting feedback.
- The most crucial people in the goal-setting paradigm are the coaches. Their role is not simply to coach the sport and advocate winning, but to maintain and enhance the motivation of athletes to persist and develop competence. To do this, the setting of goals should be done in a mastery framework.

References


