CHAPTER

4

The Motivational Climate, Motivation, and Implications for Empowering Athletes and the Promotion of the Quality of Sport Engagement

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With a defeat, when you lose, you get up, you make it better, you try again. That's what I do in life, when I get down, when I get sick, I don't want to just stop. I keep going and I try to do more. Everyone always says never give up but you really have to take that to heart and really do never definitely give up. Keep trying.

-Serena Williams, winner of 23 Grand Slam singles titles, four Olympic gold medals, and number one in the world for 319 weeks

Success is not an accident, success is actually a choice. Success is born out of faith, an undying passion, and a relentless drive.

-Stephen Curry, six-time NBA all-star, two-time NBA MVP, and player for the Golden State Warriors when winning three NBA championships

You can't put a limit on anything. The more you dream, the farther you get.

-Michael Phelps, American swimmer and the most decorated Olympian of all time, with a total of 22 medals

Serena Williams, Stephen Curry, and Michael Phelps speak to the very essence of why understanding motivation is of such interest to coaches, parents, sports psychology consultants, and athletes alike. Motivation is the foundation of sport performance and achievement. Without it, even the most talented

athlete is unlikely to reach his or her full potential. Motivation also is pertinent to how the athlete experiences and responds to sport. Whether or not sport contributes positively or negatively to athletes' welfare is linked to motivation-related factors. In spite of its significance in the athletic milieu,

however, motivation is one of the most misunderstood psychological constructs among sport participants and practitioners.

What is motivation, and how does an athlete or his or her coach optimize it? Some think that whether an athlete is high or low in motivation is somehow inherent in the athlete's personality—a relatively unchangeable characteristic of the person. Others believe coaches "motivate" athletes, perhaps in their pre-game pep talks or in the techniques they use in practice to foster their athletes' focus and intensity. There is perhaps some truth in each of these perspectives. However, sport motivation is more complex and multifaceted than either of them.

Contemporary research shows motivation to be dependent both on some malleable psychological tendencies of the athletes themselves and on aspects of the social environments in which they develop, train, and compete. In particular, variations in motivation are held to be a function of the diverse ways in which athletes interpret their sport-related experiences. These different ways of interpreting sport stem from individual dispositional differences between athletes and situational dynamics.

How do we decide if an athlete is motivated? Is good or poor performance the best or only indicator? In general, researchers suggest that motivation is inferred from variability in behavioral patterns. For example, John, a club tennis player, seeks out opponents who really challenge his game. Whether practicing or competing, John tries his hardest to get to every shot and to hit it well, even when down love-40 in a game or behind 1-5 in a set. John maximizes the tennis talent that he has. When an athlete such as John tries hard, seeks out challenge, persists in the face of adversity, and performs up to his ability level on a reasonably consistent basis, we typically conclude that this person is highly motivated. In contrast, if John were to hold back in training or a match and not give his best effort, prefer to play opponents or work on drills that are too easy or way beyond his capabilities, regularly experience

performance impairment or fail to live up to his potential, and contemplate dropping out or actually quitting tennis, we infer that motivational problems abound.

A number of factors need to be considered before we can determine the degree to and the way in which the participant is motivated. It is important to consider how much motivation the individual has (i.e., the *quantity* of motivation), as well as the *quality* of that motivation (Duda, 2001, 2005). Typically, the quantity of motivation is reflected in how "into" her or his sport the athlete is at the present time and how well she or he is currently performing. However, it is important to keep in mind that there are different reasons why an athlete may be "motivated" in the short term. There may be a high quantity of motivation at the moment, but what about the quality of that motivation?

The quality of motivation is inferred by the athlete's sustained, positive, and healthy engagement in the sport. This includes both the athlete's accomplishments and development over time as well as the degree of enjoyment and psychological and physical benefits associated with sport involvement. Variability in the quantity and quality of sport motivation is intricately linked with how athletes *think* before, during, and after their engagement in sport.

What thoughts appear critical to variations in motivation? Researchers (e.g., Ryan & Deci, 2002) have shown that individuals feel and act more motivated when they think they have the competence to meet the demands of the task at hand and believe they have some control, or autonomy, with regard to their participation. The assumption that perceptions of ability and autonomy are critical to motivational patterns is fundamental to a number of popular contemporary theories of motivated behavior. Two of those theoretical frameworks, which have provided a foundation for research and practice on sport motivation, will be reviewed here. These are the achievement goal frameworks and self-determination theory.

Achievement Goals: The Importance of How We Judge Our Competence

The principle is competing against yourself. It's about self-improvement, about being better than you were the day before.

-Steve Young, MVP Super Bowl XXIX

It's focusing on the small things and not living or dying by the results.

-Rory McIlroy, MBE, four-time Major Championship winner, one of only four players in history to win three championships by the age of 25

For me, losing a tennis match isn't failure, it's research.

-Billie Jean King, former number one women's professional tennis player, winner of 39 Grand Slam titles, including 12 singles, 16 women's doubles, and 11 mixed doubles titles

The larger psychology literature, as well as anecdotal experience, points to the relevance of feelings of competence to achievement striving in sport and other life domains. Our contemporary understanding of sport motivation recognizes, however, that adaptive versus problematic motivational patterns are not merely a function of whether an athlete has high or low perceptions of his or her ability. Rather, we also need to consider the criteria that athletes use to decide whether they are able or not. That is, how does the athlete define demonstrated competence, and what are the implications for how this athlete experiences and responds to sport?

To answer such questions, one area of work that we need to address is grounded in achievement goal frameworks. These frameworks assume that perceptions of **competence** (how able we think we are), as well as differences in **goal perspectives**, or the ways in which individuals judge their competence and perceive success, are the critical antecedents to quantity and particularly the quality of our motivation (Duda, 2001).

Fundamental to achievement goal models is that there are at least two central achievement goal perspectives (task and ego) that govern the way athletes think about achievement and guide subsequent decision making and action (Nicholls, 1989). According to Nicholls (1989), task and ego goal states entail distinct ways of processing an activity and can fluctuate throughout the course of an event. When task involved, an athlete's main purposes are to gain skill or knowledge, to exhibit effort, to perform at one's best, and to experience personal improvement. This athlete is focused on what he or she is doing and is thinking primarily about how to accomplish the task. If such purposes are achieved, the individual feels competent and successful. When ego involved, athletes are preoccupied with the adequacy of their ability and the demonstration of superior competence compared to others. Perceptions of competence and subjective achievement, in this case, entail social comparisons with others. High ability is demonstrated for the ego-involved athlete when his or her performance is perceived to exceed that of others or to be equivalent with less effort exerted. The athlete's focus is on whether he or she is good enough (if confidence is low) and how to prove (rather than improve) his or her high level of competence (if confidence is high).

When task involvement is manifested, it is assumed that the athlete will think, act, and feel in a motivated manner, regardless of her or his level of perceived ability. A task-involved athlete is expected to possess high quality motivation. Ego involvement, too, can correspond to positive achievement patterns (e.g., high performance or persistence) and high quantity of motivation, as long as the athlete is quite certain that her or his ability is high. When an athlete is ego involved and thinks the possibility of demonstrating superior competence is "slim to none," the achievement-related cognitions, emotions, and behaviors displayed are far less than

optimal. That is, the *quantity* and, in particular, the *quality* of motivation are diminished.

Achievement goal theory states that an individual's goal perspective state—task or ego involvement—is the result of both individual differences and situational factors. With respect to the former, an athlete's proneness for task and ego involvement is assumed to be captured by his or her dispositional task and ego goal orientations. We will first discuss the nature and implications of these goal orientations in the athletic domain.

Significance of Goal Orientations

Achievement goal orientations are not bipolar opposites (Nicholls, 1989). Rather, they are independent dimensions. As a result, an athlete can be high ego/low task, high task/low ego, high task/high ego, or low task/low ego. From both a theoretical and an applied perspective, it is important to consider athletes' degree of proneness for both task and ego goals to get a more complete view of their motivational processes.

Findings from studies involving male and female athletes from a variety of competitive levels and age groups show that an adaptive achievement profile is one of high task and high ego orientation (Duda, 2001). But why might this be the case? Some researchers have suggested that a high task orientation might, to some degree, insulate highly ego-oriented individuals from the negative consequences of low perceived ability when they are performing poorly and thus be motivationally advantageous in the long run (Nicholls, 1989). Athletes who are high in both task and ego orientation have multiple sources for feeling successful and competent. They have the flexibility of focusing on either task or ego goals at different times in their training or competitions to enhance their motivation quantity (Duda, 2001). We should note that there are some questions regarding whether a high-task/high-ego orientation profile is most adaptive when the focus is on indexes of the *quality* of motivation (Duda, 2001). For example, research examining the subjective

well-being and moral functioning of athletes suggests that high-task/high-ego participants can be similar to their low-task/high-ego counterparts in expressing maladaptive views about and exhibiting negative responses to sport (Reinboth & Duda, 2006).

In general, a significant body of research has revealed that task and ego goal orientations are associated with qualitatively different behavioral, cognitive, and affective patterns in sport that are likely to have an impact not only on short-term performance but also on the quantity and quality of long-term participation. Researchers have found a task orientation to be related to positive motivational outcomes-for example, the belief that effort is a cause of success, the use of problem-solving and adaptive learning strategies, enjoyment, satisfaction, and intrinsic interest (Duda, 2001, 2005; Roberts, Treasure, & Kavussanu, 1997). Previous work has also revealed a task orientation to be associated with the belief that one's level of physical ability is changeable or malleable (Sarrazin, Biddle, Famose, Cury, Fox, & Durand, 1996). This is very important in the context of sport, because elite-level performers usually reach their potential only after years of training. If an athlete believed this commitment to training was not going to lead to increases in ability (i.e., given that she or he holds the view that sport ability is "fixed"), it is unlikely that the athlete would be optimally motivated to train over time.

In contrast, an ego orientation has been found to be associated with boredom, the belief that deception is a cause of success, and reported anxiety (Duda, 2001; Roberts et al., 1997). Ego orientation has also been found to be related to the belief that ability is an important determinant of success and the idea that sport competence is stable and a "gift" (Sarrazin et al., 1996). Such a belief system may lead an athlete who is questioning his or her ability not to be as motivated or committed to long-term training. These individuals believe that ultimately "You've either got it or you haven't," and the possession of "it" is deemed a prerequisite to sport achievement.

Achievement goal models state that individuals in a state of ego involvement who have high perceptions of perceived ability are likely to respond in a fashion similar to competitors who are task involved, regardless of whether their perceived competence is high or low. This has led a number of leading sport psychology researchers to contend that a high ego orientation may not be detrimental to performance. Indeed, it has been argued that it is hard to see how an individual could succeed, particularly at the elite level, without having a strong ego orientation. The assumption here is that elite athletes are primarily motivated by winning and outperforming others.

Although we would agree that it is likely that all elite-level athletes perceive success in an ego-involving fashion at certain times, we would caution those who want to promote ego orientation. Indeed, high levels of ego orientation may not be motivating at the elite level of sport, as even these athletes sometimes doubt their ability (e.g., due to injury, during a performance slump). At such times, a predominant ego orientation coupled especially with moderate or low task orientation puts individuals at jeopardy for feeling incompetent because their focus is primarily on their performance compared to others (Duda, 2001; Nicholls, 1989). Because of the social comparative nature of sport and the high demands placed on competitors, both in training and competition, athletes (particularly those who are elite) are involved in an activity that is designed to challenge the adequacy of their perceived ability on a day-to-day basis.

Pertinent to any debate of the advantages or disadvantages of an ego orientation in sport are contemporary extensions of achievement goal models (e.g., Elliot, 1999; Elliot & McGregor, 2001). That is, recently some researchers have called for a reconsideration of dichotomous task/ego approaches to achievement goals and have instead advocated consideration of approach and avoidance aspects of an ego goal focus. An athlete would be considered ego-approach oriented when he or

she is preoccupied with demonstrating superior ability compared to others. In contrast, an athlete emphasizing an ego-avoidance goal would be most concerned about not revealing his or her inferiority. For this athlete, the most important thing is to avoid showing that he or she does not possess adequate levels of ability. Central to this elaboration of the two-goal model of achievement goals (Nicholls, 1989) is the assumption that an ego-approach goal orientation would positively relate to achievement striving, whereas an ego-avoidance goal emphasis would be coupled with negative motivational outcomes.

Drawing from the existent research and similar to the findings of studies based on the dichotomous goal models, results regarding the presumed positive implications of ego-approach goals in sport-related settings have been equivocal (Adie, Duda, & Ntoumanis, 2008a; Nien & Duda, 2008). Our understanding of the nature, antecedents, and consequences of ego-avoidance goals, especially in contrast to an ego-approach goal perspective, is still in its infancy (Duda, 2005). An ego-avoidance perspective on sport achievement has been linked to greater fear of failure, stronger beliefs that sport ability is fixed or unchangeable, perceptions of an ego-involving climate, heightened anxiety, lower intrinsic motivation, and greater amotivation (Nien & Duda, 2008; Papaioannou, Zourbanos, Krommidas, & Ampatzoglou, 2012).

Regardless of skill level, or whether their ego-goal focus is approach or avoidance oriented, those who are particularly concerned about how they are doing compared to others (ego-involved athletes) are likely to become prime candidates for questioning their competence. This might be a regular occurrence for those of us who are less talented but can strike *any* athlete at *any* time. It is important at this point to remember that we are discussing *perceived* ability here, not *actual* ability. Although actual ability may not be altered during a game of tennis or a round of golf, athletes' perceptions of ability can and do change, often in a relatively short period, and are seldom stable over a long period. Indeed,

lab-based research by Nien and Duda (2006) found that, in contrast to those focused on a task goal, the performance and affective responses of study participants who emphasized ego-approach goals were no different than what was observed for participants geared toward ego-avoidance goals following competitive losses in cycling races. Whether approach or avoidance oriented, centering on ego goals translated into negative processes and outcomes when coupled with failure to demonstrate superiority. Such findings are not surprising when one considers that sport studies to date have found a strong positive correlation between ego-approach and ego-avoidance goal emphases (e.g., Nien & Duda, 2008). Moreover, aligned with theoretical expectations (Elliot, 1999), both ego-approach and ego-avoidance goals have been found to be tied to fear of failure in the sport domain (Nien & Duda, 2008).

How can ego involvement set the stage for performance impairment? Nicholls (1989) has suggested that the negative relationship between ego involvement and performance is instigated by the expectation an individual holds about looking incompetent. This expectation of looking low in ability can result in a decrease in performance in a number of ways. First, in an attempt to protect one's perceptions of competence, it may cause an athlete to select sport tasks that are too easy or too difficult. Although choosing to engage in less challenging tasks prevents the unhappy prospect of making errors and appearing to be less able, it simultaneously hinders an individual from developing a variety of sport skills to the maximum. Likewise, selecting tasks that are much too hard provides the athlete with a ready-made justification for the unsuccessful outcome, as he or she is able to state, "I failed, but so did everyone else." This strategy, however, will be costly for the athlete in terms of maintaining or enhancing his or her skill development over time.

Second, the expectation of looking incompetent can result in a lack of trying when failure is looming and when it looks like one will appear less able compared to others. For example, athletes who back off at the end of a race because the outcome is already determined (i.e., they won't be the winner) and coast to the finish line or athletes who begin to engage in inappropriate achievement strategies or unsportsperson-like behavior when it looks like they will not be the best on that day are unlikely to ever reach their full potential.

Finally, if the expectation of demonstrating low ability becomes chronic, it may lead to regular and high levels of anxiety and, eventually, a devaluing of, and loss of interest in, the activity. If this chain of events occurs, it is likely that these athletes may find themselves in a state of amotivation (Vallerand, 2001). At the very least, if such high-ego, approach-oriented athletes stay in sport, we might expect them to become strongly ego-avoidance goal oriented over time (Duda, 2005).

Elliot and McGregor (2001) also have distinguished between the approach and avoidance facets of task (or mastery-based) goals. This distinction has led to what is termed the 2×2 achievement goal framework. A task (or mastery) approach goal entails a focus on the development of personal competence and realization of task mastery. A task (or mastery) avoidance goal, on the other hand, centers on the avoidance of demonstrating self-referenced incompetence. To date, sport studies grounded in the 2×2 achievement goal model have pointed to the same advantages of a task-approach goal, as has been revealed in the multitude of studies based on dichotomous achievement goal frameworks (Duda, 2001, 2005; Dweck, 1999; Nicholls, 1989). Task-approach goals have been found to correspond positively to perceptions of a task-involving climate, intrinsic motivation, perceived competence, self-esteem, life satisfaction, and the belief that sport competence is an attribute that can be enhanced through training (e.g., Castillo, Duda, Alvarez, Merce, & Balaguer, 2011). Consonant with the predictions emanating from the 2 × 2 achievement goal model (Elliot & McGregor, 2001), task-avoidance goals have been linked to negative processes and outcomes such as amotivation,

& Duda, 2008). In a longitudinal study of young male soccer players, Adie, Duda, and Ntoumanis (2010) found task-approach goals to positively predict and task avoidance to negatively correspond to changes in an athlete's reported well-being over two competitive seasons. Research on young handball players participating in elite training centers found those young talented athletes emphasizing mastery avoidance goals at the beginning of the season had a higher risk of experiencing burnout symptoms at the season's end. In contrast, players endorsing task-approach goals at the beginning of the season exhibited less burnout when the season concluded.

Significance of the Sport Context

A key variable in determining the motivation of athletes is situational and relates to the salience of task- and ego-involving cues in the achievement context. The focus here is on how the *perceived* structure of the environment, often referred to as the **motivational climate** (Ames, 1992; Duda & Balaguer, 2007), can make it more or less likely that a particular goal state is manifested in training or competition. This perception of the motivational climate affects the achievement patterns of individuals through their view of what goals are reinforced in that setting (Treasure, 2001). In essence, perceptions of the goal perspectives emphasized in these social environments are assumed to be predictive of variability in motivational processes.

Sport research has shown that a perceived task-involving setting is characterized by the athletes' view that the coach does reinforce high effort, cooperation among team members, and learning and improvement, as well as the perception that everyone on the team (regardless of ability level) contributes to the team's achievements (Newton, Duda, & Zin, 2000). A perceived ego-involving team climate, in contrast, is marked by athletes perceiving that the coach punishes their mistakes, fosters rivalry among team members, and gives much of his or her attention to the most talented athletes on the team.

Research has shown a perceived task-involving climate to be associated with more adaptive motivational and affective patterns than perceptions of a performance or ego-involving climate in sport (Duda & Balaguer, 2007). For example, perceptions of task-involving, coach-created environments have corresponded to greater enjoyment, more adaptive coping strategies, perceived competence, greater team cohesion and more positive peer relationships, and higher levels of moral functioning. Studies also have shown perceptions of a task-involving climate to be negatively related to claimed self-handicapping behavior in elite-level sport (e.g., Kuczka & Treasure, 2005). Self-handicapping is evident when athletes who might be concerned about not performing well "set the stage" to provide an excuse, or "scapegoat," to explain their poor subsequent performance. In so doing, failure could be attributed to the "handicap" rather than any inadequacy in personal ability. Such a strategy also allows athletes to save face in front of others.

In contrast, perceptions of an ego-involving motivational climate have been linked to greater anxiety and performance-related worry, dropping out of sport, greater peer conflict, greater self-handicapping, and lower levels of moral functioning (Duda & Balaguer, 2007). Other work has found perceptions of an ego-involving climate to positively predict indexes of physical ill-being among athletes (e.g., reported physical exhaustion and symptoms; Reinboth & Duda, 2006). Moreover, the degree to which the sport environment is deemed ego-involving appears to have implications for athletes' level of self-esteem and the degree to which their self-worth is tied to athletic performance (Reinboth & Duda, 2006). When athletes train and compete in a highly ego-involving motivational climate and have some doubts about their sport competence, they also are more likely to question their worth as a person overall. When a highly ego-involving atmosphere is deemed to be operating on a team, athletes also perceive their coach to provide less social support and positive feedback and be more punishment oriented (Duda & Balaguer, 2007).

Consideration of situational criteria from within achievement goal theories would not be complete, particularly in the context of youth sport, without considering the influence peers (Vazou, Ntoumanis, & Duda, 2007) and parents (White, 1996) have in the development of children's and adolescents' achievement motivation. The majority of the work on the motivational climates created by such significant others in the sport setting has concentrated on parental influences. This research points to the benefits of task-involving parents and the negative implications of an ego-involving parental climate (Duda, 2001).

Implications for Practice

The existent research establishing links between task and ego goals (whether dispositional or situational in nature or approach or avoidance centered) and various motivational patterns has contributed to our understanding of motivational processes in sport. But how do we enhance motivation based on the research grounded in achievement goal frameworks? According to theoretical predictions and existing empirical findings, highego/low-task athletes are the most susceptible to motivational difficulties. The evidence suggests that a sport psychology consultant should try to enhance the dispositional task goal orientation for these athletes, perhaps by introducing taskinvolving, process- or performance-centered goalsetting (see Chapter 11; Roberts & Kristiansen, 2012) and/or self-regulation techniques (e.g., Duda, Cumming, & Balaguer, 2005; see Chapter 12). We should consider implementing strategies that encourage athletes to focus on gains in skill or knowledge, monitoring effort levels, and selfreferenced criteria for success. It may be very difficult in the ego-involving milieu of sport to reduce an athlete's ego orientation, and it is likely that many athletes and coaches will be unwilling to moderate what they believe is a vital ingredient in developing motivation in sport-namely, focusing on winning and being superior. A high-ego orientation is not

necessarily detrimental to achievement striving (at least from a quantity of motivation perspective; Duda, 2001), but it is especially problematic when coupled with low task orientation and low perceived competence and/or grounded in a fear of looking incompetent. All in all, techniques designed to increase task orientation are likely to be more readily accepted by practitioners in the sport world and probably will be a more effective strategy for an applied sports psychology consultant to pursue.

Focusing on the individual to enhance the quality of motivation by affecting his or her dispositional goal orientations may seem a viable option, but practically speaking, this strategy may be most suitable for an elite athlete who has access to a sports psychology consultant on a regular basis. Concentrating on individual change in dispositional tendencies may not be the most efficient and feasible alternative for a team or, especially, in the youth sport setting, where the goal should be the development of all players rather than the performance of a select few. However, in a relatively short period, a coach may be able to structure a context in such a way as to influence athletes' recognition that they participate in a more task-involving motivational climate. In so doing, the coach can have a positive impact on the quality of athletes' sport participation.

In addition to coaches, particularly youth coaches, interventions designed to enhance motivation should target the attitudes and behaviors of moms and dads and other significant people in the athletes' lives. By making certain types of goals and performance feedback salient, a parent can influence young athletes' views about themselves, perceptions of the sport activity per se, and the criteria they use to evaluate success and failure. For example, when a young sport participant returns from a weekly tennis game and a parent asks, "Did you win?," the athlete receives a rather clear message as to what the parent considers most important. This message may counter or compromise the efforts of a coach or sports psychology consultant to enhance

task involvement. We would suggest, therefore, that any intervention designed to promote task involvement in sport recognize the role parents and other significant adults (e.g., league officials) and peers (Vazou et al., 2007) may play in determining a young athlete's views on how to define sport success and the manner in which he or she tends to judge demonstrated competence.

To enhance motivation, coaches, parents, and sports psychology consultants should critically evaluate what they do and how they do it in terms of task and ego goals. For example, how do you define sport success for your players or children? Is it in terms of development and effort or winning and losing? As a coach, do you design practice sessions that optimally challenge your players, or do you repeat well-learned skills that may delay or stifle development even though they increase the probability of winning today or right now? How do you evaluate performance? What behaviors do you consider desirable? Do you congratulate players and your children when they win and outperform others, or when they try hard and improve? How do you react when the team, your athlete, or your child loses? If you feel that you coach, parent, or consult in a task-involving manner, then you are probably fostering the quality of athletes' motivation and promoting adaptive beliefs and positive achievement strategies. If your style of coaching, parenting, or consulting is ego-involving, you may be setting up more mature athletes or children, even those who are currently the most successful, for motivational difficulties in the future.

To assist the coach, parent, or sports psychology consultant in modifying the motivation-related atmosphere being created for athletes, Table 4-1 lists some suggestions on how to develop a task-involving motivational climate (Duda & Balaguer, 2007; Treasure, 2001). These suggestions have been organized around the task, authority, recognition, grouping, evaluation, and timing (TARGET) situational structures Epstein (1989) has argued make up the "basic building blocks" of the achievement environment.

Doing It for the Joy: The Determinants of Intrinsic Motivation and Self-Determination

Money is not a motivating factor. Money doesn't thrill me or make me play better because there are benefits to being wealthy. I'm just happy with a ball at my feet. My motivation comes from playing the game I love. If I wasn't paid to be a professional footballer I would willingly play for nothing.

-Lionel Messi, five-time winner of FIFA's World Football Player of the Year award

Sport is an achievement activity. Therefore, knowing how competent athletes perceive themselves and being aware of the criteria by which these athletes define their competence is relevant to their motivation in sport. Also relevant to motivational patterns are the reasons why athletes decide to participate in their selected sport activity. The reasons for sport engagement can range from autonomous reasons (i.e., one participates because of a "love of the game" and/or because he or she personally values the benefits of participation) to more controlling reasons (i.e., one participates to obtain extrinsic rewards outside the activity itself and/or because he or she feels compelled to engage in sport).

Self-determination theory (SDT; Ryan & Deci, 2002) has become a very popular approach to understanding motivation and behavior in sport. Fundamentally, SDT distinguishes between behaviors that individuals perform freely or autonomously and those that they pursue for more or less extrinsic or controlled reasons. The theory examines why an individual acts (i.e., the level that their motivation is more or less self-determined), how various types of motivation lead to different outcomes, and what social conditions support or undermine optimal functioning and well-being via the satisfaction of basic psychological needs.

There are different types of autonomous and controlled motivation, and according to Deci and Ryan (2002), they vary along a self-determination

Table 4-1 Description of TARGET Structures and Strategies That Enhance Task Involvement

TARGET Structure	Strategies
Task. What athletes are asked to learn and what tasks they are given to complete (e.g., training activities, structure of practice conditions).	Provide the athlete with a variety of moderately demanding tasks that emphasize individual challenge and active involvement.
	Assist athletes in goal-setting.
	Create a developmentally appropriate training environment by individualizing the demands of the tasks set.
Authority. The kind and frequency of participation in the decision-making process (e.g., athlete involvement in decisions concerning training, the setting and enforcing of rules).	Encourage participation by your athletes in the decision-making process.
	Develop opportunities for leadership roles.
	Get athletes to take responsibility for their own sport development by teaching self-management and self-monitoring skills.
Recognition. Procedures and practices used to motivate and recognize athletes for their progress and achievement (e.g., reasons for recognition, distribution of rewards, and opportunities for rewards).	Use private meetings between coach and athlete to focus on individual progress.
	Recognize individual progress, effort, and improvement.
	Ensure equal opportunities for rewards to all.
Grouping. How athletes are brought together or kept apart in training and competition (e.g., the way in-groups are created during practice).	Use flexible and mixed ability grouping arrangements.
	Provide multiple grouping arrangements (i.e., individual, small group, and large group activities).
	Emphasize cooperative solutions to training problems set.
Evaluation. Standards set for athletes' learning and performance and the procedures for monitoring and judging attainment of these standards.	Develop evaluation criteria based on effort, improvement, persistence, and progress toward individual goals.
	Involve athletes in self-evaluation.
	Make evaluation meaningful. Be consistent.
Timing. Appropriateness of the time demands placed on learning and performance (e.g., pace of learning and development, management of time and training schedule).	Training programs should recognize that athletes, even at the elite level, do not train, learn, or develop at the same rate.
	Provide sufficient time before moving on to the next stage in skill development.
	Spend equal time with all athletes.
	Assist athletes in establishing training and competition schedules.

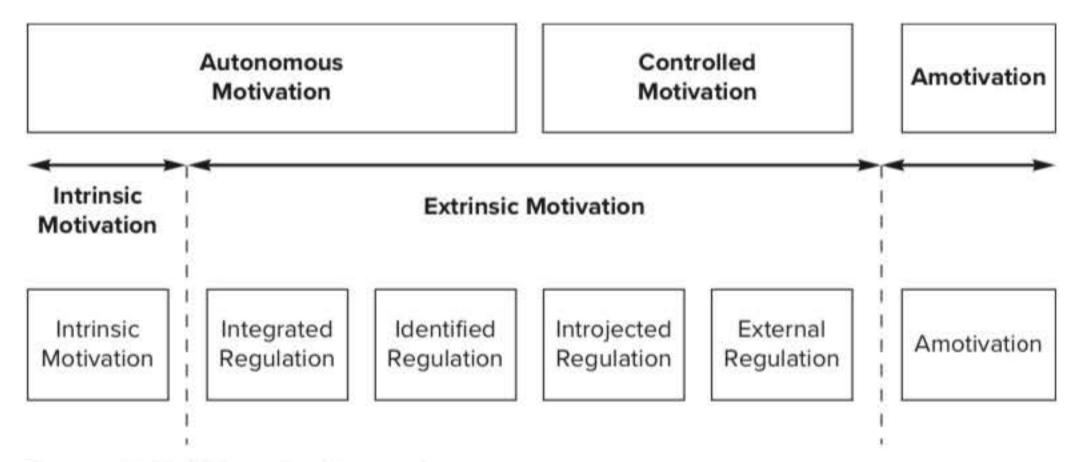


Figure 4-1 Self-determination continuum

Source: Deci & Ryan (2002).

continuum (Figure 4-1). We will start by describing the least self-determined types of motivation and move toward a portrayal of more autonomous motivational regulations (Vallerand, 2001). First are those athletes characterized by **amotivation**. These athletes have no sense of personal control with respect to their sport engagement, and there are no extrinsic (or intrinsic) reasons for doing the activity. Amotivated athletes are no longer sure of why they are playing their sport.

Next on the continuum come three forms of extrinsic motivation, with the least autonomous being external regulation. In this case, behavior is performed to satisfy an external demand or stems from the external rewards an athlete expects to secure. For example, an athlete might say, "I'm going to practice today but only because my scholarship depends on it." With the second form of extrinsic motivation, introjected regulation, athletes participate because they feel they have to play the sport. Such motivation is still extrinsic in nature; it only replaces the external source of control with an internalized contingency, for example, "I'm going to practice today because I can't deal with the guilt I will feel if I miss." With the third type of extrinsic motivation, identified regulation, the athlete does not engage in the behavior out of free choice, but as a means to an end (and in terms of some

personally endorsed value and benefit). For example, an athlete who has high identified motivation and wants to improve his fitness level chooses not to miss any sessions during off-season conditioning and preseason training. The athlete engages in this regular fitness training out of personal choice, even though the activity is very demanding and can be unpleasant.

At the opposite end of the self-determination continuum is the classic state of **intrinsic motivation**, in which an athlete participates in an activity for its own sake and because he or she personally chooses to do so. It is highly autonomous and represents the quintessential state of self-determination (Ryan & Deci, 2002).

Interviews with elite Australian track and field athletes (Mallett & Hanrahan, 2004) offer support for Deci and Ryan's (1985) multidimensional conceptualization of extrinsic motivation. Mallett and Hanrahan found that in addition to excitement, enjoyment, a love for competing at the highest level, and a sense of relatedness with fellow athletes, less self-determined motives for participation emerged. Specifically, these elite-level athletes identified money and social recognition as motives, while others spoke to the job aspect of the sport. The data showed, however, that the athletes had successfully managed to internalize and integrate the more

self-determined extrinsic motivation regulations into their personal values as elite-level performers. This is an important finding, as motivation-related differences between athletes who engage in sport for more or less self-determined reasons are likely to be great.

A fundamental tenet of self-determination theory is that autonomous motivation is quality motivation. Individuals engaged in an activity by choice and for intrinsic reasons will experience better consequences than those whose participation is less autonomous. Research has found a positive relationship between autonomous motivation and higher levels of task perseverance and psychological well-being and found it to be negatively related to feelings of stress, anxiety, and self-criticism in sport (e.g., Gagné, Ryan, & Bargmann, 2003; Krane, Greenleaf, & Snow, 1997). Consistent with this line of inquiry, recent studies have suggested that SDT may provide a useful framework to understand burnout in sport. In a sample of elite-level swimmers, Lemyre, Treasure, and Roberts (2006) found that over the course of a competitive swimming season, susceptibility to burnout was more likely to occur when an athlete's reasons for participating shift to a more extrinsic motivation regulation. Aligned with the findings of Lemyre and colleagues, a study by Cresswell and Eklund (2005) on burnout among top amateur rugby union players showed intrinsic motivation to be negatively associated, amotivation positively associated, and extrinsic regulation not related to reported burnout.

According to SDT, whether or not an athlete has more or less self-determined reasons for engaging in sport is dependent on his or her degree of basic need satisfaction. More specifically, Ryan and Deci (2002) propose that all of us, athletes and nonathletes alike, need to feel **competent** (i.e., feel sufficiently efficacious to interact effectively with the environment), **autonomous** (i.e., perceive we are acting according to our own volition and have options and choices), and **connected** with others (i.e., view relationships with important individuals as being supportive and respectful)

within our various life domains. When the sport environment meets these three basic needs, we expect to witness greater self-determination, investment, and well-being in the athletic setting (Adie, Duda, & Ntoumanis, 2008b, 2012; Alvarez, Balaguer, Castillo & Duda, 2009; Reinboth, Duda, & Ntoumanis, 2004) and reduced indicators of athlete ill-being (Adie, Duda, & Ntoumanis, 2008b; Reinboth, Duda, & Ntoumanis, 2004).

Understanding the social contexts that facilitate athletes' motivation, performance, and well-being via the satisfaction of these needs is an important line of inquiry. To this end, research in youth (e.g., Reinboth et al., 2004) and amateur, as well as elite sport (e.g., Adie et al., 2008b, 2012; Balaguer, Castillo, & Duda, 2008; Reinboth & Duda, 2006; Treasure, Lemyre, Kuczka, & Standage, 2007), has shown that perceptions of autonomy support (and the degree of involvement or social support offered) from the coach positively predict the satisfaction of the participants' needs for competence, relatedness, and autonomy. Coaches who are autonomy supportive solicit their athletes' input, offer meaningful choices, provide a rationale for their requests, and downplay the presence of or potential motivating impact of extrinsic rewards. Socially supportive coaches are there to help when needed and indicate they care and respect their athletes (even if they are not performing well!).

More recently, SDT-based research in the sport domain has considered the implications of autonomy-supportive and -controlling coach behaviors on need satisfaction, as well as the thwarting of athletes' basic needs for competence, autonomy, and relatedness (Bartholomew, Ntoumanis, & Thogersen-Ntoumani, 2011). Highly controlling coaches tend to intimidate their athletes, run their team in an autocratic fashion, and use extrinsic rewards to control the behavior of the players on their team. When athletes' needs are thwarted by a coach, there is an active attempt to have athletes feel incompetent, "like a pawn on a chessboard," and disconnected from the coach (and potentially their own teammates). In their research on young

male soccer players across a competitive season, Balaguer and colleagues found changes in coaches' autonomy-supportive behaviors to correspond to the athletes feeling greater need satisfaction and reporting less need thwarting over time. When the players felt more competence, autonomous, and related over the season, they also experienced greater vitality (i.e., feelings of energy) and reported fewer burnout symptoms. On the other hand, changes in the players' perceptions of a controlling coach-created environment corresponded to players reporting greater need thwarting across the season. Need thwarting was positively associated with increases in player burnout.

Intrinsic Motivation in the Often Extrinsic World of Sport

At all competitive levels, some athletes play sport for intrinsic reasons. The sources of that intrinsic interest may vary. It may be the continuous learning that sport affords, the possibility of personal accomplishment and mastery, or the opportunity to experience pleasant sensations whether they be sensory or aesthetic (Vallerand, 2001). All in all, intrinsically motivated athletes find sport pleasurable in and of itself and are maximally motivated both quantitatively and qualitatively. Indeed, we would argue that it is most unlikely that athletes, even multimillionaires, would be able to sustain high levels of motivation and commitment throughout their careers if they did not have high levels of intrinsic motivation for engaging in their sport, particularly during periods of adversity, duress, and poor performance.

From youth sport onward, competitive athletics is dominated by extrinsic reinforcements. One can win medals and trophies. Fame and fortune may be the consequences of sport involvement for some. Talented college athletes in the United States may be rewarded with scholarships. Athletes at the professional level are paid for their sport achievements. An interesting question therefore is: What is the effect of extrinsic rewards on intrinsic motivation? The answer to this question is, "It depends."

Athletes who are intrinsically motivated and receive extrinsic rewards are not necessarily more motivated. Indeed, research has indicated that extrinsic rewards can diminish intrinsic interest (Deci & Ryan, 1985). Rewards, however, also can foster intrinsic motivation. What seems to be critical in sport is to consider how extrinsic reinforcements are interpreted by individual athletes. That is, what do these rewards mean to the athlete?

Extrinsic rewards have a controlling aspect. The use of extrinsic reinforcements by coaches and parents can provide athletes with a sense of "who is pulling the strings" in terms of their sport involvement. Rewards are detrimental to intrinsic motivation when they take away from athletes' sense of self-determination. Consider how a coach might refer to an intercollegiate athlete's scholarship and the resulting impact on that athlete's intrinsic interest in the sport. Perhaps during the recruitment process the coach repeatedly used the scholarship to coax the athlete to come play for his or her team. In this case, the athlete's decision to play for this coach might be more likely to be perceived as contingent on this external reward rather than being self-determined. When that athlete performs poorly, if the coach says, "How can you play like that? We're paying you to perform!," the athlete might think of his or her participation as more like work and less like an inherently enjoyable activity, which may lead to motivational difficulties.

It is important to keep in mind that sometimes rewards inform us about our level of competence and worth. When receiving the reward is contingent on personally controllable aspects of performance and an athlete obtains the reward, this should increase his or her perceived ability while not undermining self-determination. As a result, it should foster intrinsic motivation. The social environment that surrounds athletes (which is created by coaches, parents, sports psychology consultants, peers, the media, and fans) has a huge impact on the meaning of extrinsic rewards. Whether extrinsic reinforcements are likely to be viewed as controlling or informational regarding one's ability is a function

of the characteristics of these environments. In sport situations that allow athletes little autonomy, the rewards are more likely to be interpreted in a controlling manner.

Implications for Practice

The literature on intrinsic motivation and selfdetermination in sport provides another rationale for cultivating perceived competence, as well as perceived personal control and feelings of connection among sport participants. In essence, this research indicates that perceived adequate ability, feelings of autonomy, and feeling that one is cared for and respected in the sport setting are the fuel that fires athletes' intrinsic motivation. Caution in the use (and especially the overuse) of extrinsic reinforcements in athletic settings is required. Extrinsic rewards must be salient to the athletes to have any influence, positive or negative, and should be used sparingly so that athletes are less likely to construct a behavior-reward contingency (i.e., "If I do this, I will get that"). This can promote an external locus of control in the athlete's sport involvement. The goals cooperatively set among coach, sports psychology consultant, and athlete (see Chapter 12) should be performance rather than primarily outcome based, more task involving (Roberts & Kristiansen, 2012), and intrinsic in nature (Deci & Ryan, 2002). They also should be realistic, that is, optimally challenging with the exertion of effort. Achieving these goals will enhance perceptions of competence, and these goals are more within the athlete's personal control than goals tied to competitive outcomes.

Finally, coaches and other significant people in athletes' lives can foster their self-determination (Reinboth et al., 2004) in other ways. We have already discussed the motivational significance of a task- versus ego-involving sport environment. Drawing from the SDT literature, it is important to try to make the athletic environment as *autonomy supportive* as possible. Considering the athletes' perspective and allowing them to make choices in training and competition events should cultivate

a greater sense of personal autonomy. SDT and related research also points to the relevance of socially supportive sport environments (Reinboth et al., 2004). Socially supportive coaches are there to assist athletes when they need help and convey that they care about their athletes as people rather than only as sport performers. Committed and compatible coach-athlete relationships (Olympiou, Jowett, & Duda, 2008) and the fostering of positive social exchanges between and cooperation among team members should also lead to an enhanced sense of relatedness and social support.

Pulling It Together: Toward More Empowering Sport Engagement

Recently, a conceptualization of the motivational climate that pulls together principles and concepts cutting across achievement goal theory (AGT) and SDT was proposed by Duda (2013; Duda & Appleton, 2016; see Figure 4-2). This conceptualization holds that the motivational climate is multidimensional as well as hierarchical and could be considered more or less empowering and disempowering, depending on the most prominently emphasized psychological features. An empowering environment is one that is more task-involving, autonomy supportive, and socially supportive. In contrast, a disempowering environment would be highly ego-involving and controlling. Duda's conceptualization also considers the mechanisms by which more or less empowering and disempowering coach behaviors can lead to differential responses in their athletes. That is, it is assumed that more or less empowering and disempowering coach-created climates hold implications for sport participants' goal orientations and the degree to which their needs for competence, autonomy, and relatedness are satisfied or thwarted. Pulling from Nicholls (1989) and tenets of AGT, the competence embedded in this conceptualization is one that is based on task-involved criteria. Specifically, when creating a more empowering motivational climate, the

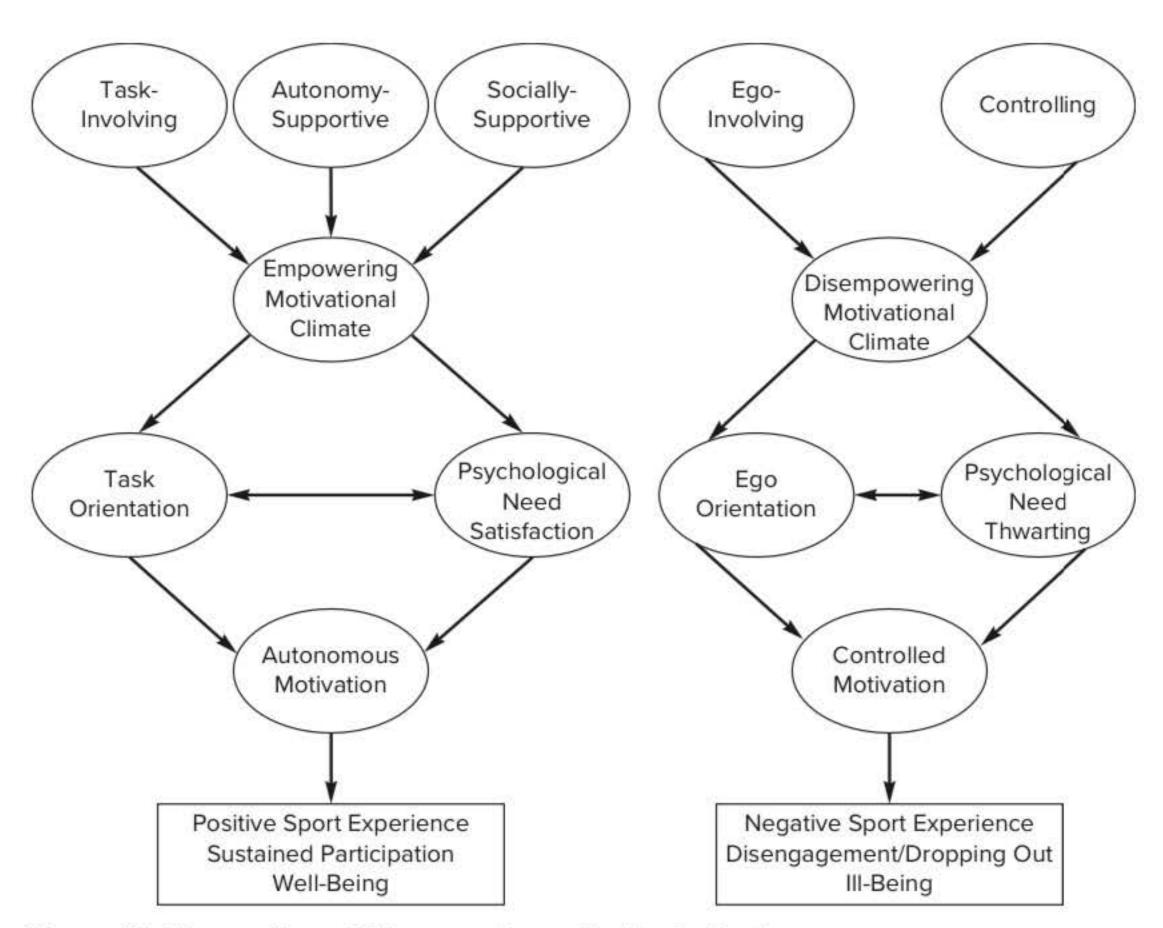


Figure 4-2 Empowering and disempowering motivational climates

assumption is that coaches would aim to promote the competence of their athletes by enhancing their task orientation and having them recognize competence gains based on improvement, mastery, and appropriately centered effort.

When athletes' feelings of autonomy, relatedness, and task-involved competence are satisfied and they are strongly task oriented, autonomous motivation should be encouraged. When sport participants have greater autonomous motivation (as suggested by SDT), positive outcomes are expected. In contrast, when the needs for autonomy, relatedness, and a more mastery-grounded sense of competence are not satisfied and/or are actively opposed by the coach and the athletes's ego orientation is pronounced, compromised functioning and ill-being should result.

Summary

Research and the wisdom gleaned from practice suggest motivation is a key ingredient in athletes' success, and we need to recognize that the quantity and quality of athletes' motivation is inferred from a constellation of behaviors, emotions, and cognitive variables—not from competitive sport performance alone. Athletes are more likely to exhibit an adaptive form of motivation when they perceive they have the necessary capabilities to match the psychological and physical challenges of the sport in question, have a sense of personal autonomy, and feel connected to others with regard to their sport involvement.

Motivation deficits appear when an athlete doesn't think he or she "has what it takes," perceives himself or herself to be like "a pawn on a chessboard," and/or feels disenfranchised from or not respected by relevant others in the sport setting. In other words, understanding variations in sport motivation implies that we pay attention to athletes' thoughts regarding issues of competence, personal control, and connectedness to others.

When sport participants feel competent and in charge of their own destiny, their motivation to participate is more likely to be more internalized. When athletes play sport for the love of the game and other self-determined reasons, they do not need external rewards to encourage or legitimize their involvement. As a consequence, coaches, sports psychology consultants, and other significant social agents in athletes' lives need to be careful when considering the use of extrinsic reinforcements as a means to increase motivation so that they do not diminish intrinsic interest. External reward contingencies can lead to self-determination if they inform athletes about their gains in competence, are not employed in overabundance, and are provided in an autonomy-supportive manner. Otherwise, they may cause more harm than good.

Research on achievement goals has indicated that how athletes judge their competence level is also critical to motivational processes and outcomes. A focus on task involvement in the athletic setting has several advantages, including that the source of subjective success is more within the athlete's direct influence and is less likely to result in feelings of incompetence. Defining sport competence in terms of self-referenced effort or task mastery criteria repeatedly stokes the motivation fire. A positive approach to sport (and the motivation to participate in sport) is more likely when athletes maintain a strong task orientation and continually try to improve in some aspect of the technical, strategic, and/or mental part of their "game."

An emphasis on ego involvement can advance an athlete's desire to excel too, but it can also have its motivational costs. First, a strong ego focus, whether approach or avoidance oriented, leads athletes to perceive opponents and teammates as primarily reference points for feeling more or less competent, rather than as cohorts with whom we learn, collaborate to improve individually and collectively, or cooperate in competition. Thus, an emphasis on ego goals can jeopardize an athlete's sense of connectedness in the sport environment.

Second, when aiming to reach ego-centered goals, the criteria for success (showing superiority or avoiding the demonstration of inferiority) are less within the athlete's control, which endangers her or his sense of autonomy. Finally, no matter the degree of athletic prowess or the competitive level of the athlete, emphasizing ego goals can prove detrimental if that individual's confidence starts to

waver and she or he possesses a weak task orientation. In this instance, the athlete desperately wants to be the best, fears he or she will not be, and has no other meaningful way of redefining her or his goals and sense of competence to feel good about the performance. Because the world of sport is competitive, challenging, and conducive to competence questioning, coaches, parents, and sports psychology consultants should encourage robust task involvement in an attempt to optimize sport motivation.

Study Questions

- 1. What are the behavioral characteristics that reflect whether an athlete's motivation is high or low?
- 2. What is the difference between the quantity and quality of motivation among athletes?
- 3. How do task- and ego-involved athletes differ in the way they judge their competence and perceive success in sport?
- 4. What are the distinctions between and consequences of being more ego-approach or ego-avoidance goal oriented?
- 5. Define and give an example of a task (or mastery)-approach and task-avoidance goal focus.
- 6. Illustrate how being primarily oriented to ego goals can set the stage for performance impairment and motivational difficulties.
- 7. What do we mean when we say that an athlete is intrinsically motivated in contrast to extrinsically motivated?
- 8. Describe the process by which external rewards can influence the intrinsic motivation of athletes.
- 9. What are ways in which we can make a sport environment more autonomy supportive and less controlling?
- 10. Pulling from AGT and SDT, what are the characteristics of an "empowering" coach? Provide specific examples of disempowering coaching behaviors.

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